



## ÅRSREGNSKAPET FOR REGNSKAPSÅRET 2016 - GENERELL INFORMASJON

### Enheten

Organisasjonsnummer: 959 499 934  
Organisasjonsform: Aksjeselskap  
Foretaksnavn: FREUDENBERG OIL & GAS TECHNOLOGIES AS  
Forretningsadresse: Tollbugata 49  
3044 DRAMMEN

### Regnskapsår

Årsregnskapets periode: 01.01.2016 - 31.12.2016

### Konsern

Morselskap i konsern: Ja  
Konsernregnskap lagt ved: Ja

### Regnskapsregler

Regler for små foretak benyttet: Nei  
Benyttet ved utarbeidelsen av årsregnskapet til selskapet: Regnskapslovens alminnelige regler  
Benyttet ved utarbeidelsen av årsregnskapet til konsernet: -

### Årsregnskapet fastsatt av kompetent organ

Bekreftet av representant for selskapet: Richard Thomas Schmidt  
Dato for fastsettelse av årsregnskapet: 20.06.2017

### Grunnlag for avgivelse

År 2016: Årsregnskapet er elektronisk innlevert  
År 2015: Tall er hentet fra elektronisk innlevert årsregnskap fra 2016

*Det er ikke krav til at årsregnskapet m.v. som sendes til Regnskapsregisteret er undertegnet. Kontrollen på at dette er utført ligger hos revisor/enhetens øverste organ. Sikkerheten ivaretas ved at innsender har rolle/rettighet for innsending av årsregnskapet via Altinn, og ved at det bekreftes at årsregnskapet er fastsatt av kompetent organ.*

Brønnøysundregistrene, 29.04.2021



### Resultatregnskap

Beløp i: NOK	Note	2016	2015
<b>RESULTATREGNSKAP</b>			
<b>Inntekter</b>			
Salgsinntekt	2, 11	101 318 963	123 224 034
Annen driftsinntekt		7 700	230 000
<b>Sum inntekter</b>		<b>101 326 663</b>	<b>123 454 034</b>
<b>Kostnader</b>			
Varekostnad		55 288 265	56 258 973
Lønnskostnad	3	28 531 220	42 364 850
Avskrivning	8	408 782	804 935
Annen driftskostnad	3	10 916 678	10 747 046
<b>Sum kostnader</b>		<b>95 144 945</b>	<b>110 175 804</b>
<b>Driftsresultat</b>		<b>6 181 718</b>	<b>13 278 230</b>
<b>Finansinntekter og finanskostnader</b>			
Renteinntekt fra foretak i samme konsern		320 238	300 111
Annen finansinntekt	4	684 290	6 573 936
<b>Sum finansinntekter</b>		<b>1 004 528</b>	<b>6 874 047</b>
Rentekostnad til foretak i samme konsern	4	887 140	37 630
Annen finanskostnad	4	6 217 770	7 361 390
<b>Sum finanskostnader</b>		<b>7 104 910</b>	<b>7 399 020</b>
<b>Netto finans</b>		<b>-6 100 382</b>	<b>-524 973</b>
<b>Ordinært resultat før skattekostnad</b>		<b>81 336</b>	<b>12 753 257</b>
Skattekostnad på ordinært resultat	9	173 026	3 845 108
<b>Ordinært resultat etter skattekostnad</b>		<b>-91 690</b>	<b>8 908 149</b>
<b>Årsresultat</b>		<b>-91 690</b>	<b>8 908 149</b>
<b>Overføringer og disponeringer</b>			
Utbytte	12	160 000 000	
Konsernbidrag	12		364 161
Overføringer annen egenkapital	12	-160 091 690	8 543 988



## Resultatregnskap

<b>Beløp i: NOK</b>	<b>Note</b>	<b>2016</b>	<b>2015</b>
Sum overføringer og disponeringer		-91 690	8 908 149



## Balanse

Beløp i: NOK	Note	2016	2015
<b>BALANSE - EIENDELER</b>			
<b>Anleggsmidler</b>			
<b>Immaterielle eiendeler</b>			
Konsesjoner, patenter, lisenser, varemerker			80 450
Utsatt skattefordel	9	4 626 764	4 799 790
<b>Sum immaterielle eiendeler</b>		<b>4 626 764</b>	<b>4 880 240</b>
<b>Varige driftsmidler</b>			
Driftsløsøre, inventar, verktøy, kontormaskiner ol	8	102 939	431 271
<b>Sum varige driftsmidler</b>		<b>102 939</b>	<b>431 271</b>
<b>Finansielle anleggsmidler</b>			
Investering i datterselskap	10	194 750 000	
Andre fordringer		15 830	34 826
<b>Sum finansielle anleggsmidler</b>		<b>194 765 830</b>	<b>34 826</b>
<b>Sum anleggsmidler</b>		<b>199 495 533</b>	<b>5 346 337</b>
<b>Omløpsmidler</b>			
<b>Varer</b>			
Varer	6	7 520 984	16 748 507
<b>Sum varer</b>	6	<b>7 520 984</b>	<b>16 748 507</b>
<b>Fordringer</b>			
Kundefordringer	7	23 985 530	22 420 475
Andre fordringer		1 545 514	6 613 902
Konsernfordringer	7	19 365 266	40 366 145
<b>Sum fordringer</b>	7	<b>44 896 310</b>	<b>69 400 522</b>
<b>Bankinnskudd, kontanter og lignende</b>			
Bankinnskudd	5	2 160 522	2 784 530
<b>Sum bankinnskudd, kontanter og lignende</b>	5	<b>2 160 522</b>	<b>2 784 530</b>
<b>Sum omløpsmidler</b>		<b>54 577 816</b>	<b>88 933 559</b>
<b>SUM EIENDELER</b>		<b>254 073 349</b>	<b>94 279 896</b>



## Balanse

Beløp i: NOK	Note	2016	2015
<b>BALANSE - EGENKAPITAL OG GJELD</b>			
<b>Egenkapital</b>			
<b>Innskutt egenkapital</b>			
Aksjekapital	12, 13	4 165 000	4 165 000
Overkurs	12	73 663 802	41 460 670
<b>Sum innskutt egenkapital</b>		<b>77 828 802</b>	<b>45 625 670</b>
<b>Opptjent egenkapital</b>			
Annen egenkapital	12		22 978 789
<b>Sum opptjent egenkapital</b>			<b>22 978 789</b>
<b>Sum egenkapital</b>		<b>77 828 802</b>	<b>68 604 459</b>
<b>Sum langsiktig gjeld</b>		<b>0</b>	<b>0</b>
<b>Kortsiktig gjeld</b>			
Leverandørgjeld	7	8 425 606	11 917 168
Skyldige offentlige avgifter	5	2 364 786	2 655 452
Annen kortsiktig gjeld	7	165 454 155	11 102 817
<b>Sum kortsiktig gjeld</b>		<b>176 244 547</b>	<b>25 675 437</b>
<b>Sum gjeld</b>		<b>176 244 547</b>	<b>25 675 437</b>
<b>SUM EGENKAPITAL OG GJELD</b>		<b>254 073 349</b>	<b>94 279 896</b>



## Skattedirektoratet

1 0 APR 2013

Saksbehandler Torstein Kinden Helleland	Deres dato 03.04.2013	Vår dato 08.04.2013
Telefon 22078139	Deres referanse John E. Larsen	Vår referanse 2013/239789

VECTOR AS  
Postboks 2176  
3003 DRAMMEN

## Tillatelse til å utarbeide årsregnskap og årsberetning på engelsk språk for Vector AS, org. nr. 959 499 934

Det vises til deres brev av 3. april 2013 der det søkes om dispensasjon fra kravet til å utarbeide årsregnskap og årsberetning på norsk språk for Vector AS.

Skattedirektoratet gir på bakgrunn av en konkret helhetsvurdering Vector AS dispensasjon fra kravet til å utarbeide årsregnskap og årsberetning på norsk språk, jf. regnskapsloven § 3-4 tredje ledd.

Dispensasjonen forutsetter at engelsk språk benyttes i stedet ved utarbeidelsen, og at øvrige opplysninger som vedtaket baserer seg på, heller ikke endres vesentlig.

### Bakgrunn

Vector AS er eiet av Vector Technology Group AS som i vedtak (2011/1150170) av 8. desember 2011 fikk dispensasjon fra kravet til norsk språk. Morselskapet er et holdingselskap og er eier av Vector AS, Vector International UK Ltd. (UK) og Vector Group Inc (USA). Vector Technology Group AS ble i januar 2013 solgt til det tyske industriselskapet Freudenberg & Co. Vector AS leverer varer hovedsakelig til utenlandske kunder og opererer således i en bransje av sterk internasjonal karakter. Alle sentrale aktører og samarbeidspartnere innen denne bransjen behersker og benytter engelsk. Selskapet benytter også engelsk som arbeidsspråk. Den norske versjonen utarbeides kun for å tilfredsstille regnskapsloven.

### Skattedirektoratets vurdering

Etter regnskapsloven § 3-4 tredje ledd skal "årsregnskapet og årsberetningen ... være på norsk. Departementet kan ved ... enkeltvedtak bestemme at årsregnskapet og/eller årsberetningen kan være på et annet språk."

I Ot. prp. nr. 42 (1997-1998) Om lov om årsregnskap m.v., er det uttalt følgende om regnskapslovens formål, jf. pkt. 1.1:

*"Regjeringen har som siktemål at regnskapsloven skal bidra til informative regnskaper for ulike grupper av regnskapsbrukere. Regnskapsbrukerne er dels investorer og kreditorer som tilfører kapital til foretakene, og dels andre grupper som har interesse av å vite hvordan foretaket drives, f.eks. de ansatte og lokalsamfunnet. Informasjonen til kapitalmarkedet skal*

Postadresse Postboks 9200 Grønland 0134 Oslo For elektronisk henvendelse se <a href="http://www.skatteetaten.no">www.skatteetaten.no</a>	Besøksadresse: Se <a href="http://www.skatteetaten.no">www.skatteetaten.no</a> Org.nr: 996250318	Sentralbord 800 80 000 Telefaks 22 17 08 60
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*gi grunnlag for riktigprising av finansielle objekter. Riktig prisdannelse på aksjer er en forutsetning for at ressursbruken i samfunnsøkonomien skal bli best mulig. Gode regnskaper vil også gjøre det vanskeligere for markedsdeltakere å ta ut spekulasjonsgevinster med basis i skjevt fordelt informasjon.”*

Det fremgår således at et av hovedformålene med regnskapsloven er å bidra til “*informative regnskaper for ulike grupper av regnskapsbrukere*”. Regnskapsbrukere vil omfatte, jf. uttalelsen i proposisjonen, blant andre investorer, kreditorer, ansatte og lokalsamfunnet.

Det er etter Skattedirektoratets vurdering derfor avgjørende ved vurdering av om dispensasjon fra kravet til å utarbeide årsregnskap og/eller årsberetning på norsk kan gis, at det ikke foreligger mulige brukere av regnskapsinformasjon som blir vesentlig berørt negativt ved en eventuell dispensasjon.

Som nevnt ovenfor er det særlig hensynet til brukerne av regnskapsinformasjon som skal vurderes ved en dispensasjonssøknad. I denne vurderingen har Skattedirektoratet lagt vekt på at selskapet indirekte er eiet av et utenlandsk selskap og all rapportering gjøres på engelsk. Selskapet benytter engelsk som arbeidsspråk og opererer i en internasjonal bransje. Videre er det vektlagt at det norske morselskapet tidligere har fått dispensasjon fra kravet til norsk språk.

Vennligst oppgi vår referanse ved henvendelser i saken.

Med hilsen

Rune Tystad

seniorrådgiver

Rettsavdelingen, foretaksskatt

Skattedirektoratet

Torstein Kinden Helleland



**Freudenberg Oil & Gas Technologies AS**

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## **Annual report 2016**

**Board of directors' report**

**Annual accounts**

- **Income statement**
- **Balance sheet**
- **Cash flow statement**
- **Notes**

**Auditors' report**



Annual Report Freudenberg Oil & Gas Technologies AS

## BOARD OF DIRECTORS REPORT 2016 Freudenberg Oil & Gas Technologies AS

### **BUSINESS ACTIVITIES and PLACE OF BUSINESS**

The company's business activities include development, production and sale of compact flanges (SPO) and connectors for the oil & gas, chemical, petro-chemical industries and other industries worldwide. The highly qualified employees also deliver engineering jobs within specific areas for the oil & gas industry.

The Company has its place of business in Drammen, Norway.

### **GOING CONCERN**

In accordance to the Norwegian Accounting Act, the Board confirms that the requirements for going concern are present, and the accounts are presented under this assumption. Financial forecasts for 2017 and the Group's equity and liquidity position provides the basis for this assessment.

The Board considers the financial situation of the Company to be satisfactory and the financial statement gives a true and fair view of the financial situation as of 31.12.2016 and of the results and the cash flow for the period.

### **RESEARCH & DEVELOPMENT**

The Company has some activities related to testing and patenting of technology in relation to its products.

### **FINANCIAL / OPERATIONAL**

2016 has been a satisfactory year for the Company despite of the drop in the oil and Gas market. Total revenue for the Company was MNOK 101.3 compared to 123.5 in 2015. Profit before tax from continuing operations was MNOK 0.08 (2015 MNOK 12.8), while profit after tax was MNOK -141.8 (2015 MNOK 8,9).

Net cash flow from operations was MNOK 3.8. Cash flow from investment activities was MNOK 0.

The total cash as of 31.12.2016 was MNOK 2.2. The company is included in the group's cash pool. This is classified as other receivables. The short-term liabilities in the Company as of 31.12.2016 were 100 % of total liabilities, compared to 100 % as of 31.12.2015.

The Company's total equity and liabilities at the end of the year were MNOK 254.0 compared to MNOK 94.5 as of 31.12.2015.

### **FINANCIAL RISKS**

#### *Market risk*

The Company is exposed to changes in exchange rates, in particular in EUR, USD and GBP as 72% of the Company's revenues are in foreign currencies. Currency exposure is managed at company level. EURO (11.5 %) is included in the cash pool in Freudenberg Oil & Gas GmbH. For the currencies GBP and USD, we mainly use natural hedging.



The Company's main activities are primarily related to changes in the oil price which impacts investments and maintenance in the oil & gas industry. In addition to oil price the activities of the Company are impacted by political stability, economic growth, and other macroeconomic conditions.

*Credit risk*

The Company has, as a part of its normal business activity, outstanding receivables of a certain value. However, the risk of the counterparties not being able to comply with their commitments towards the Company has been evaluated as relatively small. During 2016 the Company has continued the focus on working capital with an increased emphasis on accounts receivables. The main focus areas have been improving contract content, execution of projects and follow up of past dues. This focus will continue into 2017. There are no agreements of set-off of other financial instruments in place to reduce the credit risk of the Company.

*Liquidity risk*

The Company's liquidity is satisfactory. Focus on improved working capital management will continue in 2017. The Company is included in the Freudenberg Oil & Gas GmbH cash pool, which has secure access to liquidity.

**EMPLOYEES and ENVIRONMENT**


At the end of the year the Company had 31 employees of which 13 were female. Compensation and positions are determined based on qualifications and experience. There shall be no unfair treatment with respect to gender, age, race, ethnic background, handicaps and sexual orientation with respect to compensation, promotion or recognition. The Company has a satisfactory balance between men and women, but will aim for more females in leading positions. The Board considers the working environment to be good.

During the year, the Company had absenteeism of 11.7%, of which the short-term absenteeism (1-16 days) was 2.7%. The Company had no in-house incidents in 2016. The Company's activities do not pollute the environment. No particular procedures have thus been implemented.

**THE FUTURE**

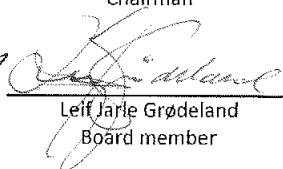
The market outlook for 2017: It is expected an increasing in activities towards the end of 2017 in the geographical markets where the Company operates. It is not expected to have any influence on the company for the year 2017.

Drammen, 20<sup>th</sup> of June 2017

  
Craig Thomas Barnhart  
Board member

  
Richard Thomas Schmidt  
Chairman

  
Lars Axel Kummeneje  
Board member

  
Leif Jarle Grødeland  
Board member



## Freudenberg Oil & Gas Technologies AS

### Income statement

	Note	2016	2015
<b>Revenue</b>			
Sales revenue	2, 11	101 318 963	123 224 034
Other operating income		7 700	230 000
Total revenue		<u>101 326 663</u>	<u>123 454 034</u>
<b>Operating expenses</b>			
Cost of stocks		55 288 265	56 258 973
Payroll expenses	3	28 531 220	42 364 850
Depreciation of tangible and intangible fixed assets	8	408 782	804 935
Other operating expenses	3	10 916 678	10 747 046
Total operating expenses		<u>95 144 945</u>	<u>110 175 804</u>
Operating result		<u>6 181 718</u>	<u>13 278 230</u>
<b>Financial income and expenses</b>			
Interest income from group companies		320 238	300 111
Other financial income	4	684 290	6 573 936
Interest paid to group companies	4	887 140	37 630
Other financial expenses	4	6 217 770	7 361 390
Net financial items		<u>-6 100 382</u>	<u>-524 973</u>
Ordinary result before tax		<u>81 336</u>	<u>12 753 257</u>
Tax on ordinary result	9	<u>173 026</u>	<u>3 845 108</u>
<b>Net profit or loss for the year</b>		<u><b>-91 690</b></u>	<u><b>8 908 149</b></u>
<b>Allocated as follows</b>			
Proposed dividends	12	160 000 000	0
Group contribution	12	0	364 161
Transferred from (/to) other equity	12	-160 091 690	8 543 988
Total allocations		<u>-91 690</u>	<u>8 908 149</u>



## Freudenberg Oil & Gas Technologies AS

### Balance sheet as of December 31

	Note	2016	2015
<b>Fixed assets</b>			
<i>Intangible assets</i>			
Concessions, patents, licences, trade marks and similar rights		0	80 450
Deferred tax asset	9	4 626 764	4 799 790
Total intangible assets		<u>4 626 764</u>	<u>4 880 240</u>
<i>Tangible assets</i>			
Fixtures and fittings, tools, office machinery etc.	8	102 939	431 271
Total tangible assets		<u>102 939</u>	<u>431 271</u>
<i>Financial assets</i>			
Investments in subsidiaries	10	194 750 000	0
Other receivables		15 830	34 826
Total financial assets		<u>194 765 830</u>	<u>34 826</u>
Total fixed assets		<u>199 495 533</u>	<u>5 346 337</u>
<b>Current assets</b>			
Inventories	6	<u>7 520 984</u>	<u>16 748 507</u>
<i>Receivables</i>			
Trade receivables	7	23 985 530	22 420 475
Other receivables from companies in the same group	7	19 365 266	40 366 145
Other receivables		1 545 514	6 613 902
Total accounts receivable		<u>44 896 310</u>	<u>69 400 522</u>
Cash and cash equivalents	5	<u>2 160 522</u>	<u>2 784 530</u>
Total current assets		<u>54 577 816</u>	<u>88 933 559</u>
Total assets		<u>254 073 349</u>	<u>94 279 896</u>



Freudenberg Oil & Gas Technologies AS

Balance sheet as of December 31

	Note	2016	2015
<b>Equity</b>			
<i>Paid-in capital</i>			
Share capital	12, 13	4 165 000	4 165 000
Share premium reserve	12	73 663 802	41 460 670
Total paid-in capital		<u>77 828 802</u>	<u>45 625 670</u>
<i>Retained earnings</i>			
Other equity	12	0	22 978 789
Total retained earnings		<u>0</u>	<u>22 978 789</u>
Total equity		<u>77 828 802</u>	<u>68 604 459</u>
<b>Liabilities</b>			
<i>Current liabilities</i>			
Trade creditors	7	8 425 606	11 917 168
Public duties payable	5	2 364 786	2 655 452
Other short-term liabilities	7	165 454 155	11 102 817
Total current liabilities		<u>176 244 547</u>	<u>25 675 437</u>
Total liabilities		<u>176 244 547</u>	<u>25 675 437</u>
Total equity and liabilities		<u>254 073 349</u>	<u>94 279 896</u>

31. december 2016  
Drammen, 20. June 2017

  
\_\_\_\_\_  
Craig Thomas Børnhart  
Board member

  
\_\_\_\_\_  
Lars Axel Kummeneje  
Board member

  
\_\_\_\_\_  
Richard Thomas Schmidt  
Chairman

  
\_\_\_\_\_  
Leif-Jarle Grødeland  
Board member



**Freudenberg Oil & Gas Technologies AS**

**Cash flow statement**

	2016	2015
<b>Cash flow from operating activities</b>		
Profit before income taxes	81 336	12 753 257
Taxes paid	0	-7 944 553
Profit on sale of fixed assets	0	-230 000
Depreciation and amortisation expenses	408 782	804 935
Changes in inventories	9 227 523	7 333 196
Changes in accounts receivables	-1 565 055	62 197 595
Changes in accounts payable	-3 491 562	-12 370 211
Changes in other accruals	-851 944	-8 589 379
Net cash flow from operating activities	<u>3 809 080</u>	<u>53 954 840</u>
<b>Cash flow from investing activities</b>		
Proceeds from sale of investments in shares and joint ventures	0	230 000
Net cash flow from investing activities	<u>0</u>	<u>230 000</u>
<b>Cash flow from financing activities</b>		
Repayment of long term loans	0	-17 668
Change in cash pool	-4 433 088	-26 652 053
Group contribution received/paid	0	-26 500 000
Net cash flow from financing activities	<u>-4 433 088</u>	<u>-53 169 721</u>
Net change in cash and cash equivalents	-624 008	1 015 119
Cash and cash equivalents at 01.01	<u>2 784 530</u>	<u>1 769 410</u>
Cash and cash equivalents at 31.12	<u>2 160 522</u>	<u>2 784 529</u>



## Freudenberg Oil & Gas Technologies AS

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### Notes to the accounts for 2016

#### Note - 1 Accounting Principles

The annual report is prepared according to the Norwegian Accounting Act 1998 and generally accepted accounting principles.

##### *Subsidiaries and investment in associate*

Subsidiaries and investments in associate are valued by the cost method in the company accounts. The investment is valued as cost of acquiring shares in the subsidiary, providing that write down is not required. Write down to fair value will be carried out if the reduction in value is caused by circumstances which may not be regarded as incidental, and deemed necessary by generally accepted accounting principles. Write downs are reversed when the cause of the initial write down are no longer present.

Dividends and other distributions are recognized in the same year as appropriated in the subsidiary accounts. If dividends exceed withheld profits after acquisition, the exceeding amount represents reimbursement of invested capital, and the distribution will be subtracted from the value of the acquisition in the balance sheet.

##### *Sales revenue*

Sales revenues are recognized at the time of delivery. Revenue from services are recognized at execution. The share of sales revenue associated with future services are recorded in the balance sheet as deferred sales revenue, and are recognized at the time of execution.

##### *Balance sheet classification*

Net current assets comprise creditors due within one year, and entries related to goods circulation. Other entries are classified as fixed assets and/or long term creditors.

Current assets are valued at the lower of acquisition cost and fair value. Short term creditors are recognized at nominal value.

Fixed assets are valued by the cost of acquisition, in the case of non incidental reduction in value the asset will be written down to the fair value amount. Long term creditors are recognized at nominal value.

##### *Trade and other receivables*

Trade receivables and other current receivables are recorded in the balance sheet at nominal value less provisions for doubtful debts. Provisions for doubtful debts are calculated on the basis of individual assessments. In addition, for the remainder of accounts receivables outstanding balances, a general provision is carried out based on expected loss.

##### *Inventories*

Inventories are valued at the lower of cost or market value. Cost is estimated using the FIFO method. Finished goods and work in progress are valued at full production cost. Write-downs are carried out for foreseeable obsolescence.

##### *Foreign currency translation*

Foreign currency transactions are translated using the year end exchange rates.

##### *Property, plant and equipment*

Property, plant and equipment is capitalized and depreciated over the estimated useful economic life. Direct maintenance costs are expensed as incurred, whereas improvements and upgrading are assigned to the acquisition cost and depreciated along with the asset. If carrying value of a non current asset exceeds the estimated recoverable amount, the asset is written down to the recoverable amount. The recoverable amount is the greater of the net selling price and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value.



## Freudenberg Oil & Gas Technologies AS

### Notes to the accounts for 2016

#### *Income tax*

Tax expenses in the profit and loss account comprise both tax payable for the accounting period and changes in deferred tax. Deferred tax is calculated at 24 percent on the basis of existing temporary differences between accounting profit and taxable profit together with tax deductible deficits at the year end.

Temporary differences both positive and negative, are balance out within the same period. Deferred tax assets are recorded in the balance sheet to the extent it is more likely than not that the tax assets will be utilized.

To what extent group contribution not is registered in the profit and loss, the tax effect of group contribution is posted directly against the investment in the balance.

#### *Cash flow statement*

The cash flow statement is presented using the indirect method. Cash and cash equivalents includes cash, bank deposits and other short term highly liquid placement with original maturities of three months or less.

#### *Use of estimates*

The preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts in the profit and loss statement, the measurement of assets and liabilities and the disclosure of contingent assets and liabilities on the balance sheet date. Actual results can differ from these estimates.

Contingent losses that are probable and quantifiable is expensed as occurred.

### Note 2 - Sales of goods

	2016	2015
<i>Geographical distribution</i>		
Norway	25 842 002	48 969 412
Great Britain	38 448 383	32 690 557
Other EU-Countries	19 869 021	16 626 084
USA	1 393 918	5 591 718
Australia	2 362 279	3 461 623
Singapore	1 486 744	746 940
Other	11 924 316	15 367 700
	<u>101 326 663</u>	<u>123 454 034</u>



## Freudenberg Oil & Gas Technologies AS

### Notes to the accounts for 2016

#### Note 3 - Wage costs, number of employees, remuneration, loans to employees and auditor's fee

<i>Wage costs</i>	2016	2015
Salaries	22 981 279	33 875 493
Payroll tax	3 442 896	5 394 664
Pension costs	1 243 377	1 733 457
Other payments	863 669	1 361 235
Total	<u>28 531 221</u>	<u>42 364 849</u>

The average number of employees 31 51

#### *Management remuneration*

	Salary	Pension expenses	Other remuneration
General manager	1 184 985	65 628	143 509

The acting general manager is employed and paid from our sister company Freudenberg Oil & gas Ltd in UK and the company has been charged through management fee.

<i>Auditor fee has been divided as follows</i>	2016	2015
Audit fee	283 500	253 000

VAT is not included in the figures of auditor's fee.

#### Note 4 - Items consisting of consolidated amounts

	2016	2015
<i>Other financial income</i>		
Interest income	11 336	51 762
Agio	665 654	6 522 172
	<u>676 990</u>	<u>6 573 934</u>
<i>Other financial expenses</i>		
Interest charges	4 701	-70 851
Disagio	-6 222 471	-7 290 539
	<u>-6 217 770</u>	<u>-7 361 390</u>

#### Note 5 - Bank deposit

	2016
Bank account for employment tax	1 090 220



**Freudenberg Oil & Gas Technologies AS**

**Notes to the accounts for 2016**

**Note 6 - Inventories**

	<b>2016</b>	<b>2015</b>
Raw materials	153 273	9 305 973
Work in progress	6 420	1 340 125
Finished goods	15 529 284	11 694 029
Goods purchased for sale	707 007	708 380
Allowance for obsolete inventory	-8 875 000	-6 300 000
Total	<u>7 520 984</u>	<u>16 748 507</u>

**Note 7 - Intercompany balance group company and associate**

<i>Receivables</i>	<b>2016</b>	<b>2015</b>
Accounts receivables	167 480	1 661 534
Other receivables Group included cash pool	19 365 265	40 366 145
Total	<u>19 532 745</u>	<u>42 027 679</u>

<i>Payables</i>	<b>2016</b>	<b>2015</b>
Trade creditors	-6 705 653	-1 814 386
Other short term payables (Group Contribution)	0	-498 851
Total	<u>-6 705 653</u>	<u>-2 313 237</u>

**Note 8 - Tangible assets**

	Land, buildings and other property	Machinery and plant etc.	Total
Acquisition cost 01.01.	1 367 803	8 408 790	9 776 593
Acquisition cost 31.12.	1 367 803	8 408 790	9 776 593
Acc.depreciation 31.12.	-1 359 367	-8 314 287	-9 673 654
Net carrying amount at 31.12.	<u>8 436</u>	<u>94 503</u>	<u>102 939</u>
Depreciation for the year	41 519	286 813	328 332
Useful economic life	5 years	3-5 years	
Amortization plan	Linear	Linear	



## Freudenberg Oil & Gas Technologies AS

### Notes to the accounts for 2016

#### Note 9 - Income taxes

<i>Income tax expenses</i>	2016	2015
Tax payable	0	134 690
This years tax effect of change in tax rate	192 782	
Change in deferred tax	173 026	3 710 418
Total income tax expense	<u>365 808</u>	<u>3 845 108</u>

<i>Tax base estimation</i>	2016	2015
Ordinary result before tax	81 336	12 753 257
Permanent differences	-1 288	65 724
Change in temporary differences	-8 356 595	-12 320 130
General income	-8 276 547	498 851
Group contribution	0	-498 851
Tax base	<u>-8 276 547</u>	<u>0</u>

<i>Temporary differences outlined</i>	2016	2015
Fixed assets	-1 167 973	-1 140 484
Inventories	-8 875 000	-6 300 000
Receivables	-1 000 000	-11 258 675
Provisions not taxable enabled	0	-500 000
Total	<u>-11 042 973</u>	<u>-19 199 159</u>
	<u>-8 235 209</u>	<u>0</u>
	<u>-19 278 182</u>	<u>-19 199 159</u>

Deferred income tax liability (24 % this year, 25 % last year) -4 626 764 -4 799 790

#### Note 10 - Investment in subsidiaries and associate

<b>Company</b>	<b>Acquisition year</b>	<b>Location</b>	<b>Share owners</b>
Freudenberg Oil & Gas tech. Ltd	2012	UK	100 %
Vector Technology DO	2016	Brasil	100 %



## Freudenberg Oil & Gas Technologies AS

### Notes to the accounts for 2016

#### Note 11 - Transactions with related parties

All transactions with related parties have been carried out as part of the ordinary operations and arm-length prices. The most significant transactions are as follows:

Sales to:	2016	2015
GB Freudenberg Oil & Gas tech. Ltd	9 136 343	2 124 146
US Freudenberg Oil & Gas LLC	817 633	5 475 863
MY Freudenberg Oil & Gas Malaysia	147 281	787 566
NO Vestpak AS	987 848	0
Total	<u>11 089 105</u>	<u>8 387 575</u>

#### Note 12 - Owners equity

	Share capital	Share premium reserve	Other equity	Total
Owners equity 01.01.	4 165 000	41 460 670	22 978 789	68 604 459
Profit for the year	0	0	-91 690	-91 690
Issued capital	0	134 280 521	35 035 512	169 316 033
Proposed dividends	0	-102 077 389	-57 922 611	-160 000 000
Owners equity 31.12.	<u>4 165 000</u>	<u>73 663 802</u>	<u>0</u>	<u>77 828 802</u>

Issued capital: Freudenberg Oil & Gas AS and Vector Technology Group AS merged in 2016. The merger was accounted for in accordance with continuity principle.

#### Note 13 - Share capital and shareholder information

Share capital:

	Number of shares	Face value	Book value
Ordinære aksjer	8 330	500 kr	4 165 000

Shareholders per 31.12:

	Ordinary shares	Ownership share	Voting rights
Freudenberg Oil & Gas Technology GmbH, Germany	8 330	100 %	100 %

#### Note 14 - Consolidated Financial Statement

Freudenberg Oil & Gas Technologies AS is a subsidiary of Freudenberg Oil & Gas Technologies GMBH. Consolidated financial statements are prepared by the parent company, and can be accessed at Tollbugata 49, 3044 Drammen, Norway.



Statsautoriserte revisorer  
Ernst & Young AS

Engene 22, NO-3015 Drammen  
Postboks 560 Brakerøya, NO-3002 Drammen

Foretaksregisteret: NO 976 389 387 MVA  
Tlf: +47 32 83 88 90  
Fax:  
www.ey.no  
Medlemmer av Den norske revisorforening

## INDEPENDENT AUDITOR'S REPORT

To the Annual Shareholders' Meeting of Freudenberg Oil and Gas Technologies AS

### Report on the audit of the financial statements

#### Opinion

We have audited the financial statements of Freudenberg Oil and Gas Technologies AS, which comprise the balance sheet as at 31 December 2016, the income statement and statements of cash flows and changes in equity for the year then ended and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements have been prepared in accordance with laws and regulations and present fairly, in all material respects, the financial position of the Company as at 31 December 2016 and its financial performance for the year then ended in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway.

#### Basis for opinion

We conducted our audit in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Norway, and we have fulfilled our ethical responsibilities as required by law and regulations. We have also complied with our other ethical obligations in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Other information

Other information consists of the information included in the Company's annual report other than the financial statements and our auditor's report thereon. The Board of Directors (management) are responsible for the other information. Our opinion on the audit of the financial statements does not cover the other information, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information, and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

#### Responsibilities of management for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the Norwegian Accounting Act and accounting standards and practices generally accepted in Norway, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.



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## Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with laws, regulations, and auditing standards and practices generally accepted in Norway, including International Standards on Auditing (ISAs) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with law, regulations and generally accepted auditing principles in Norway, including ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- ▶ identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- ▶ obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;
- ▶ evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management;
- ▶ conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern;
- ▶ evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

## Report on other legal and regulatory requirements

### Opinion on the Board of Directors' report

Based on our audit of the financial statements as described above, it is our opinion that the information presented in the Board of Directors' report concerning the financial statements and the going concern assumption is consistent with the financial statements and complies with the law and regulations.

Independent auditor's report - Freudenberg Oil and Gas Technologies AS

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### **Opinion on registration and documentation**

Based on our audit of the financial statements as described above, and control procedures we have considered necessary in accordance with the International Standard on Assurance Engagements (ISAE) 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, it is our opinion that management has fulfilled its duty to ensure that the Company's accounting information is properly recorded and documented as required by law and bookkeeping standards and practices accepted in Norway.

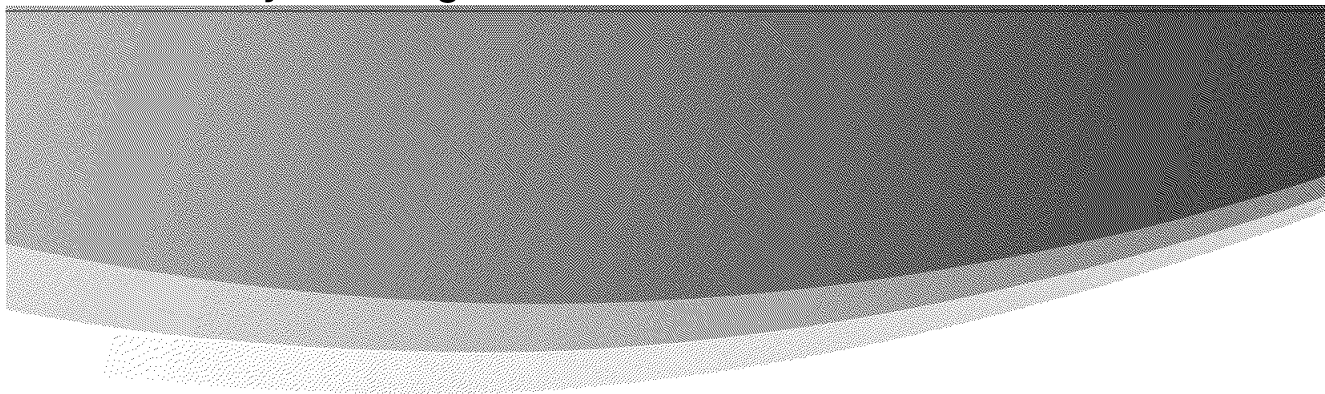
Drammen, 30 June 2017  
ERNST & YOUNG AS

Marius Nergaard  
State Authorised Public Accountant (Norway)



2016 ANNUAL REPORT  
**FREUDENBERG GROUP**





The Freudenberg Group is inspired by technology and innovation. Together with customers and research partners, Freudenberg employees develop leading-edge technologies, products, solutions and services. The innovative strength of Freudenberg has many facets. Having pioneered innovation throughout its history – from chrome tanning and the development of the Simmerring to sophisticated and high-tech medical devices – the company is an innovation

champion. For Freudenberg, striving together for solutions that support global sustainability is both motivation as well as the concept for success. It enables the Group to provide its customers with solutions and answers to tomorrow's questions, today. The company slogan "Innovating Together" embodies the Group's identity. This Annual Report brings you many examples of what makes Freudenberg so unique and different.



## HIGHLIGHTS

FREUDENBERG GROUP	EXTERNAL REPORTING			INTERNAL REPORTING		
	At-equity 2014	At-equity 2015	At-equity 2016 <sup>1</sup>	Pro-rata 2014	Pro-rata 2015	Pro-rata 2016 <sup>2</sup>
<b>Sales [€ million]</b>						
Germany	1,087	1,116	1,269	1,975	2,084	2,631
EU (excluding Germany)	1,657	1,700	2,094	1,681	1,725	1,780
Other European countries	334	308	314	336	310	299
North America	1,383	1,668	2,093	1,390	1,678	1,806
South/Central America	296	274	281	296	275	250
Asia	1,089	1,204	1,700	1,224	1,358	1,685
Africa/Australia	136	141	149	137	142	139
<b>Total sales</b>	<b>5,982</b>	<b>6,411</b>	<b>7,900</b>	<b>7,039</b>	<b>7,572</b>	<b>8,590</b>
Consolidated profit	478	521	1,087	478	522	1,095
Cash flow from operating activities	618	763	945	712	734	973
Cash flow from investing activities	-339	-429	-1,510	-407	-504	-1,431
Balance sheet total	6,667	7,238	10,224	7,113	7,811	10,275
Equity	3,211	3,700	4,603	3,224	3,714	4,607
Equity ratio	48 %	51 %	45 %	45 %	48 %	45 %
Workforce (as at Dec. 31)	34,030	34,007	46,266	40,456	40,474	48,010
Workforce (annual average)	34,094	34,312	40,951	40,614	40,982	45,061

Whilst 50:50 joint ventures are consolidated using the equity method in external reporting, the pro-rata consolidation method, i.e. 50 percent, is used in internal reporting as a tool for steering the Group. As a result of the acquisitions effected during the financial year, the difference between the pro-rata consolidation and at-equity measurement has become insignificant. For this reason, the external reporting method will be used for steering the Group as of 2017.

<sup>1</sup>See also the comments on acquisitions and disinvestments and discontinued operations in the Group Management Report.

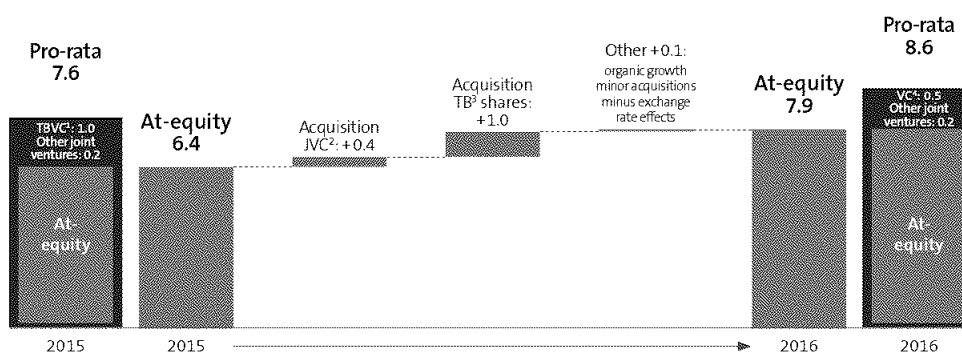
## SALES DEVELOPMENT

The acquisition of Japan Vilene Company (JVC) in April 2016 (€+0.4 billion) and the acquisition of Trelleborg's (TB) 50 percent share in the Vibracoustic (VC) joint venture (€+1.0 billion) in July 2016 accounted for a significant portion of sales development. Organic growth and sales increases from minor acquisitions were offset by negative exchange rate effects (€-0.2 billion)

– these developments are summarized under "Other" (€+0.1 billion).

Also included are 50 percent of the sales of the Vibracoustic Group for the first half-year based on the pro-rata consolidation (€+0.5 billion) and full-year sales of further joint venture companies in proportion to the shareholdings (€+0.2 billion).

[€ billion]



TBVC¹: TrelleborgVibracoustic joint venture; sales only included in pro-rata consolidation

JVC²: Japan Vilene Company; fully consolidated as of April 1, 2016

TB³: Trelleborg; Freudenberg acquired the Trelleborg shares in the former TrelleborgVibracoustic joint venture effective July 5, 2016

VC⁴: Vibracoustic; sales prior to acquisition of all shares only included in pro-rata consolidation



# 2016 ANNUAL REPORT FREUDENBERG GROUP

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## COMPANY BOARDS

### SUPERVISORY BOARD



From left: Kuhlich, Pott, Kammüller, Kurz, Freudenberg-Beetz, Schildhauer, Wentzler, Schücking, Towfigh, Freudenberg, Kairisto and Thielen

**Martin Wentzler, Großhesselohe**

Chairman of the Supervisory Board of Freudenberg SE  
Attorney

**Professor Dr. Dieter Kurz, Lindau**

Deputy Chairman of the Supervisory Board of  
Freudenberg SE  
Chairman of the Shareholder Council of the Carl Zeiss  
Foundation

**Martin Freudenberg, Heidelberg**

Managing Director of  
Jumag Dampferzeuger GmbH

**Dr. Maria Freudenberg-Beetz, Weinheim**

Biologist

**Essimari Kairisto, Korschenbroich**

MA Business Management

**Dr. Mathias Kammüller, Ditzingen**

Managing Director of  
TRUMPF GmbH + Co. KG

**Maeva Kuhlich, Chichilianne, France**

Project Manager in Supply Chain Management  
at Becton Dickinson France S.A.S.

**Dr. Richard Pott, Leverkusen**

Chairman of the Supervisory Board of  
Covestro AG

**Walter Schildhauer, Stuttgart**

Managing Partner of  
speedwave GmbH

**Dr. Christoph Schücking, Frankfurt am Main**

Attorney and Notary Public

**Mathias Thielen, Zürich, Switzerland**

Managing Director of Credit Suisse AG

**Professor Dr. Emanuel V. Towfigh, Bonn**

Chair in Public Law, Empirical Legal Research and  
Law & Economics EBS University Law School

as at December 31, 2016



## BOARD OF MANAGEMENT



From left: Krauch, Sohi and Krieger

**Dr. Mohsen Sohi, Frankfurt am Main**  
Chief Executive Officer

**Dr. Tilman Krauch, Heidelberg**  
Member of the Board, CTO

**Dr. Ralf Krieger, St. Leon-Rot**  
Member of the Board, CFO

as at December 31, 2016



## EXECUTIVE COUNCIL

Members	Business Groups
Claus Möhlenkamp (CEO)	Freudenberg Sealing Technologies
Frank Müller (CEO)	Vibracoustic
Bruce R. Olson (CEO)	Freudenberg Performance Materials
Dr. Klaus Peter Meier (CEO)	Freudenberg Home and Cleaning Solutions
Hanno D. Wentzler (CEO) and the Board of Management	Freudenberg Chemical Specialities

Membership of the above-mentioned 5 CEOs in the Executive Council lends greater weight to the perspectives of the Business Groups with regard to overarching issues.

as at December 31, 2016



## MANAGEMENT OF THE BUSINESS GROUPS

Management	Business Groups
Claus Möhlenkamp (CEO and Member of the Executive Council), Dr. Theodore Duclos (CTO), Ludger Neuwinger-Heimes (CFO), Dieter Schäfer (COO)	Freudenberg Sealing Technologies
Richard Schmidt (CEO and President), Craig Barnhart (CFO)	Freudenberg Oil & Gas Technologies
Dr. Andreas Raps (CEO), Michael Stomberg (COO), Dr. Sebastian Weiss (CFO)	EagleBurgmann
Dr. Max Gisbert Kley (CEO), Michael A. Hawkins (CFO), Mitch Moeller (President of Minimally Invasive Solutions)	Freudenberg Medical
Frank Müller (CEO and Member of the Executive Council), Dr. Jörg Böcking (CTO), Stefan Eck (CFO)	Vibracoustic
Bruce R. Olson (CEO and Member of the Executive Council), Dr. Frank Heislitz (CTO), Richard Shaw (COO), Dr. René Wollert (CFO)	Freudenberg Performance Materials
Dr. Andreas Kreuter (CEO), Thomas Herr (CFO), Dr. Jörg Sievert (COO)	Freudenberg Filtration Technologies
Satoshi Kawamura (CEO and President), Toshio Yoshida (Chairman)	Japan Vilene Company
Dr. Klaus Peter Meier (CEO and Member of the Executive Council), Dr. Arman Barimani (CTO), Karin Overbeck (CMO), Frank Reuther (CFO)	Freudenberg Home and Cleaning Solutions
Hanno D. Wentzler (CEO and Member of the Executive Council), Dr. Jörg Matthias Großmann (CFO)	Freudenberg Chemical Specialities
Horst Reichardt (CEO), Wolfgang Schneider (CFO)	Freudenberg IT

as at December 31, 2016

## REPORT OF THE SUPERVISORY BOARD



Martin Wentzler (Chairman)

In 2016, the Board of Management and the Supervisory Board held regular and detailed discussions on the progress of the Group and major individual business transactions on the basis of oral and written reports. Business policy was agreed in consultation between the Board of Management and the Supervisory Board and updated where necessary in joint deliberations. In addition, the Supervisory Board advised the Board of Management in its management of the company, and supervised and monitored the conduct of business. The Chairman of the Supervisory Board held regular discussions with the members of the Board of Management on current business developments. Furthermore, there were regular exchanges between the Chairman of the Supervisory Board, the Chairman of the Audit Committee and the Board of Management Member responsible for Finance.

5 meetings of the Supervisory Board were held in the year under review. These meetings addressed a detailed analysis of markets, sales and earnings development, liquidity status and the risk situation of the Freudenberg Group. The agenda also included strategy issues, the portfolio structure and major special projects.

Matters of particular relevance for the Supervisory Board included a future project which examines business opportunities for Freudenberg in 2050, the "Sustainability" project, and the realignment of the Innovation Corporate Function. There were also intensive discussions on the effects of technological megatrends such as electro-mobility and autonomous driving on the portfolio structure. In addition, the Group addressed its past based on the findings of the academic study by Professor Dr. Joachim Scholtzsek entitled "Freudenberg. Ein Familienunternehmen in Kaiserreich, Demokratie und Diktatur."

Furthermore, the Supervisory Board consulted on several acquisitions during the year under review and their integration in the Freudenberg Group. Examples included the acquisition of Japan Vilene Company Ltd., Tokyo, Japan, by Freudenberg and the partner Toray Industries, Inc., Tokyo, Japan, the acquisition of the 50 percent shareholding of Trelleborg Holding AB, Trelleborg, Sweden, in the joint venture Vibracoustic GmbH, Darmstadt, Germany, and the purchase of the laundry care specialist Gimi S.p.A., Monselice, Italy.

The Audit Committee met 4 times in the year under review. It consulted closely on the work of the auditors and their findings, beginning with the audit results for the 2015 financial year and subsequently moving on to preparations for the 2016 audit, addressing in particular the effects of the increase in the shareholdings in Japan Vilene Company Ltd. and Vibracoustic GmbH on the annual financial statements and the consolidated financial statements.

The Audit Committee also consulted on further issues such as the impact of the changes in the Group's structure on accounting, the applicable principles of the German Corporate Governance Code, and ongoing reporting by the internal auditing unit, as well as the risk management and compliance structure of the Group. The Supervisory Board was regularly informed of the issues addressed by the



Audit Committee and of the outcomes of the Committee's deliberations.

The Personnel Committee met 4 times during the year under review. It consulted on matters such as leadership development, the talent management process, succession planning in the key bodies of the Freudenberg Group, and remuneration systems.

The annual financial statements, the consolidated financial statements drawn up pursuant to IFRS, the consolidated management report and the dependent company report of Freudenberg SE for 2016 were audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Mannheim, Germany, and were approved without reservation. The members of the Supervisory Board were provided with the documentation relating to the annual financial statements and the audit reports in good time. Following intensive consultation with the auditors on all relevant findings, the Supervisory Board approved the consolidated financial statements and the consolidated management report, and the annual financial statements of Freudenberg SE, and following examination, concurred with the auditor's findings. The annual financial statements of Freudenberg SE as at December 31, 2016 are therefore adopted.

The report on relations with affiliated companies (dependent company report) in accordance with Section 312 of the German Stock Corporation Act (AktG) submitted by the Board of Management of Freudenberg SE was audited by the auditors, who issued the following opinion: "We render this report in accordance with the provisions of Section 313 AktG and conclude that the report of the Board of Management of Freudenberg SE, Weinheim, Germany, on relations with affiliated companies for the financial year from January 1 to December 31, 2016 attached as Appendix 1 complies with the provisions of Section 312 AktG. The Board of Management provided us with all the explanations and supporting documents requested. The dependent company report complies with the principles of a true and fair view. The company is a micro company as defined by Section 267 of the German Commercial Code (HGB), and therefore pursuant to Section 264, paragraph 3, sentence 1 HGB, the preparation of a management report is not required. The concluding statement of the dependent company report has therefore been included in the appendix.

Based on the results of our audit, the dependent company report does not give rise to any reservations. We have therefore issued the following audit opinion:

Based on our audit and assessment, which were carried out in accordance with professional standards, we confirm that

1. the factual statements made in the report are correct,
2. the payments made by the company in connection with legal transactions detailed in the report were not unreasonably high,
3. there are no circumstances in favor of a significantly different assessment than that made by the Board of Management in regard to the measures listed in the report."

The Supervisory Board examined and approved the report on relations with affiliated companies (dependent company report) and took note of the auditor's report. The examination of the dependent company report by the Supervisory Board did not result in any objections to the concluding declaration by the Board of Management in the dependent company report.

On June 25, 2016, Dr. Maria Freudenberg-Beetz, Professor Dr. Emanuel V. Towfigh, and Martin Wentzler were reelected to the Supervisory Board of Freudenberg SE. Furthermore, Dr. Ralf Krieger was reelected as a member of the Board of Management of Freudenberg SE for a further term of 5 years effective July 1, 2017.

The Supervisory Board expresses its thanks to all employees, Business Group managing bodies and the Board of Management. Their great personal commitment made an important contribution to the success of the Group in a demanding year.

Weinheim, March 23, 2017  
For the Supervisory Board

Martin Wentzler  
Chairman

## FOREWORD OF THE BOARD OF MANAGEMENT

2016 was a successful year for the Freudenberg Group. In a challenging macroeconomic environment, we set ourselves ambitious targets and met them. There was further growth in our sales and consolidated profit. Our strategic projects are running to plan. We made excellent progress in becoming one of the most innovative broadly diversified global technology groups. This success is the result of the hard work and excellent performance of our more than 48,000 employees worldwide.



Dr. Mohsen Sohi (CEO)

Under the IFRS reporting rules, joint ventures must be consolidated using the equity method. Based on these standards, sales in 2016 amounted to €7,900.1 million (previous year: €6,410.9 million), €1,489.2 million or 23.2 percent higher than the previous year.

Profit before income taxes amounted to €1,265.1 million (previous year: €667.6 million). This 89.5 percent improvement is above all attributable to increased sales, efficiency improvements and special effects resulting from acquisitions. Free cash flow amounted to €-565.3 million (previous year: €333.5 million).

With an equity ratio of 45.0 percent (previous year: 51.1 percent) Freudenberg continues to hold a healthy equity base. Liquid funds at year-end amounted to €960.7 million (previous year: €1,055.7 million).

The rating agency Moody's Deutschland GmbH, Frankfurt am Main, Germany, upgraded its credit rating of Freudenberg SE by one notch to A3 in the year under review. This gives the Group a single A rating. The outlook for the rating is stable.

In 2016 we once again completed important strategic projects crucial to the long-term success of the Group.

A central element of the strategy is the continuous evolution of existing business through product and process innovations with a view to achieving profitable growth in existing business areas at a pace significantly faster than the market. In this context, some 30 young leaders elaborated answers during the year under review to the question as to how the world might look in 2050 – and what business opportunities could be generated for Freudenberg. The project findings are being integrated in the strategy process and will culminate in new, long-term innovation initiatives.

Innovation is the most important pillar of our corporate success. Consequently, Freudenberg re-aligned the strategy, content and organization of the Innovation Corporate Function during the year under review. There is now an even stronger focus on long-term research activities, and collaboration with the Business Groups has been further strengthened.

The Business Groups' innovation activities benefit from our materials competence, which is being constantly expanded, among other things via technology platforms. We focus on the main overarching technologies of relevance to several Business Groups. They reinforce our innovative strength. Freudenberg concentrated on the following technology platforms in the 2016 financial year: Nonwovens, Sealing Technology, Molding, Friction/Wear and Lubrication, Surface Technologies, Polymers, Reactions & Mixtures. These platforms serve knowledge transfer and enable us to create synergies.

We invested €371.9 million (previous year: €315.3 million) in innovation, more than ever before. We have steadily increased our investments in research and development in recent years and thus further strengthened Freudenberg's innovation capability. Freudenberg measures the effectiveness



In its internal reporting, Freudenberg applies the pro-rata consolidation method for joint ventures as a tool for managing operating activities. Sales ran at €8,590.1 million (previous year: €7,571.6 million), a year-on-year increase of 13.5 percent. The rise in sales is attributable to acquisitions, the market success of our innovative products, and the high level of our customer orientation and flexibility. Consolidated profit totaled €1,095.1 million (previous year: €522.0 million). The sustained high earnings strength is a result of our systematic measures to increase productivity and efficiency and includes the special effect resulting from the acquisition of all the shares in Vibracoustic GmbH, Darmstadt, Germany.

of research and development activities as the share of new products (products less than 4 years old) in total sales. This share rose to 30.4 percent (previous year: 26.0 percent).

At the “Global Innovation Forum” (GIF), an internal event held in Weinheim in October 2016, 260 specialists exchanged innovation best practices and addressed how sustainability can be an innovation driver. This issue was subsequently addressed in more detail at local level in “post-GIF” events held in North and South America, China and India. The Freudenberg Innovation Award, the highest internal award for innovation, was presented for the second time. It was won by a team from Freudenberg Sealing Technologies for a development called Levitex – a virtually frictionless sealing technology.

We achieved further success in optimizing our production processes through the use of our lean and Six Sigma methods in 2016. We lowered administration costs by standardizing processes in finance and accounting – and by generating economies of scale in purchasing. Lower administration costs allow us to invest more in innovations.

Freudenberg continued to improve its compliance structures in line with legislation and our own standards. Our Code of Conduct was introduced throughout the Freudenberg Group.

Under the Group strategy, the portfolio is to be developed through selectively targeted acquisitions in all Business Groups, thereby adding targeted new technologies and accessing new markets.

The aim is to continue the successful buy-and-build strategy in the defined growth areas and leverage options to acquire new areas of business that complement existing business. In the medium term we are aiming for a strategically balanced portfolio

of cyclical and anti-cyclical business – with sales evenly distributed among the Americas, Europe and Asia.

We therefore further expanded our portfolio in the year under review, and made the following major acquisitions:

Japan Vilene Company became a new Business Group in the Nonwovens and Filtration Business Area effective April 1, 2016. The shareholders are Freudenberg SE, Weinheim, Germany (75 percent) and Toray Industries, Inc. (Toray), Tokyo, Japan (25 percent). In 2015, Freudenberg SE and Toray acquired all the shares held by independent shareholders in Japan Vilene Company Ltd., Tokyo, Japan, via a joint public tender. Japan Vilene Company Ltd. was subsequently delisted from the stock market on December 25, 2015. The integration of the new Business Group is progressing very well.

In early July, Freudenberg acquired the 50-percent stake in Vibracoustic GmbH, Darmstadt, Germany held by the joint venture partner Trelleborg Holding AB, Trelleborg, Sweden. The Vibracoustic Group is the worldwide market and technology leader for antivibration components and modules for the global automotive industry. As the sole shareholder we have greater flexibility to further develop the Vibracoustic Group strategically.

In August, Freudenberg acquired the laundry care specialist Gimi S.p.A. headquartered in Monselice, Italy. With its process know-how and its product range, Gimi ideally complements the portfolio of Freudenberg Home and Cleaning Solutions.

In early October, the business of Freudenberg Schwab Vibration Control was sold to Trelleborg Holdings Germany GmbH, Stuttgart, Germany. In this environment, the company has long-term prospects to continue to grow and expand globally.



In addition to these acquisitions, we again invested vigorously in machinery, plant and equipment in the year under review. For example, Freudenberg Sealing Technologies expanded production capacity in Oberwihl, Germany, Bursa, Turkey, and Kecskemét, Hungary. Furthermore, Freudenberg Chemical Specialities commenced construction of a European logistics center for Klüber Lubrication, Chem-Trend and OKS in Maisach, Germany. Japan Vilene Company began construction work on a new production plant in Aguascalientes, Mexico. In Weinheim, a large administration building in the Industrial Park was handed over ready for occupation by the tenants at the end of the year under review.

The Freudenberg global brand was implemented across the Group as scheduled during the year under review. The brand offers an opportunity to raise the Group's international visibility and generate a competitive edge in the market.

In its pursuit of excellence, Freudenberg further expanded its talent management. One goal is to foster diversity in the company in order to recruit and retain the best employees.

As a values-oriented, family-owned technology group, success for Freudenberg is financial success as well as fulfilling our responsibility for society. These two goals are inseparably linked and have been anchored in our company's values for more than 165 years.

Sustainability – in products and processes – is one way Freudenberg puts its responsibility for society into practice. During the year under review the company addressed the issue of sustainability from a strategic viewpoint, drafting a sustainability strategy for the whole company. As a global technology group, there are two dimensions to sustainability at Freudenberg: the first is concerned with how to design its own processes and utilize its own plant to conserve resources (footprint). The second relates to the numerous products and services offered by Freudenberg that enable customers to increase the efficiency or sustainability of their own manufacturing processes or to make their own products more resource-efficient (handprint). Freudenberg identified 3 main themes – material efficiency, energy efficiency and emissions. All 3 play an important role throughout the Group and work on

defining key performance indicators commenced. Furthermore, the groundwork was laid to make sustainability a systematic component of the strategy process.

Occupational health and safety and environmental protection are firmly anchored at Freudenberg. The safety of our employees at the workplace is of paramount importance. Despite all efforts, the LDIFR (Lost Day Incident Frequency Rate – this rate measures all incidents at work involving at least one day's absence per million working hours) based on the pro-rata consolidation of the joint ventures was 1.7 (previous year: 1.3) during the year under review. We are deeply concerned by the 4 fatal accidents that occurred in 2016. Experts from our company and the competent authorities analyzed the causes of these accidents very carefully. The consequences are being intensively discussed and possible changes introduced. We will be devoting particular attention to this issue in 2017 because the safety of our employees is a priority concern for my Board of Management colleagues and me personally.

For Freudenberg, commitment to social responsibility goes beyond the value chain. In 2015, Freudenberg introduced the "e" (education and environment) international program to strengthen commitment to social responsibility. The objective is to give people access to education and work and to encourage environmental protection. Freudenberg is making a total of €12 million available over 6 years. During the year under review, support was provided for a broad range of projects from small projects to major education programs in the direct neighborhood of Freudenberg sites.

Our aid initiative for refugees also reflects our global responsibility for society. In 2015, employees and Partners participated in a fundraising project for refugees; the company tripled the value of the sum raised, bringing the grand total to €1.6 million, which the company then increased by a further €1 million. Freudenberg supported some 70 aid and integration projects with this money in the year under review.

We can look back with pride on the progress we made in 2016. We have become more efficient, we have expanded our excellence and leveraged further Group potential.



### Outlook:

The challenging macroeconomic situation will persist in 2017 – most particularly in South America and Russia, but also in China because of lower growth. No less demanding are the geopolitical hot spots alongside developments in the oil and gas business. At the same time, new technological developments call for new solutions – from e-mobility and the demands of autonomous driving in the automotive sector to viable concepts for renewable energies and the implementation of Industry 4.0. The pace at which customer requirements are changing is getting faster and faster as technology progresses. This also impacts the industrial and medical sectors as well as the consumer goods business. We anticipate overall growth of 1.0 to 3.0 percent in the markets of relevance to Freudenberg. However, apart from economic and technological factors, this will also depend strongly on developments in the current geopolitical hot spots.

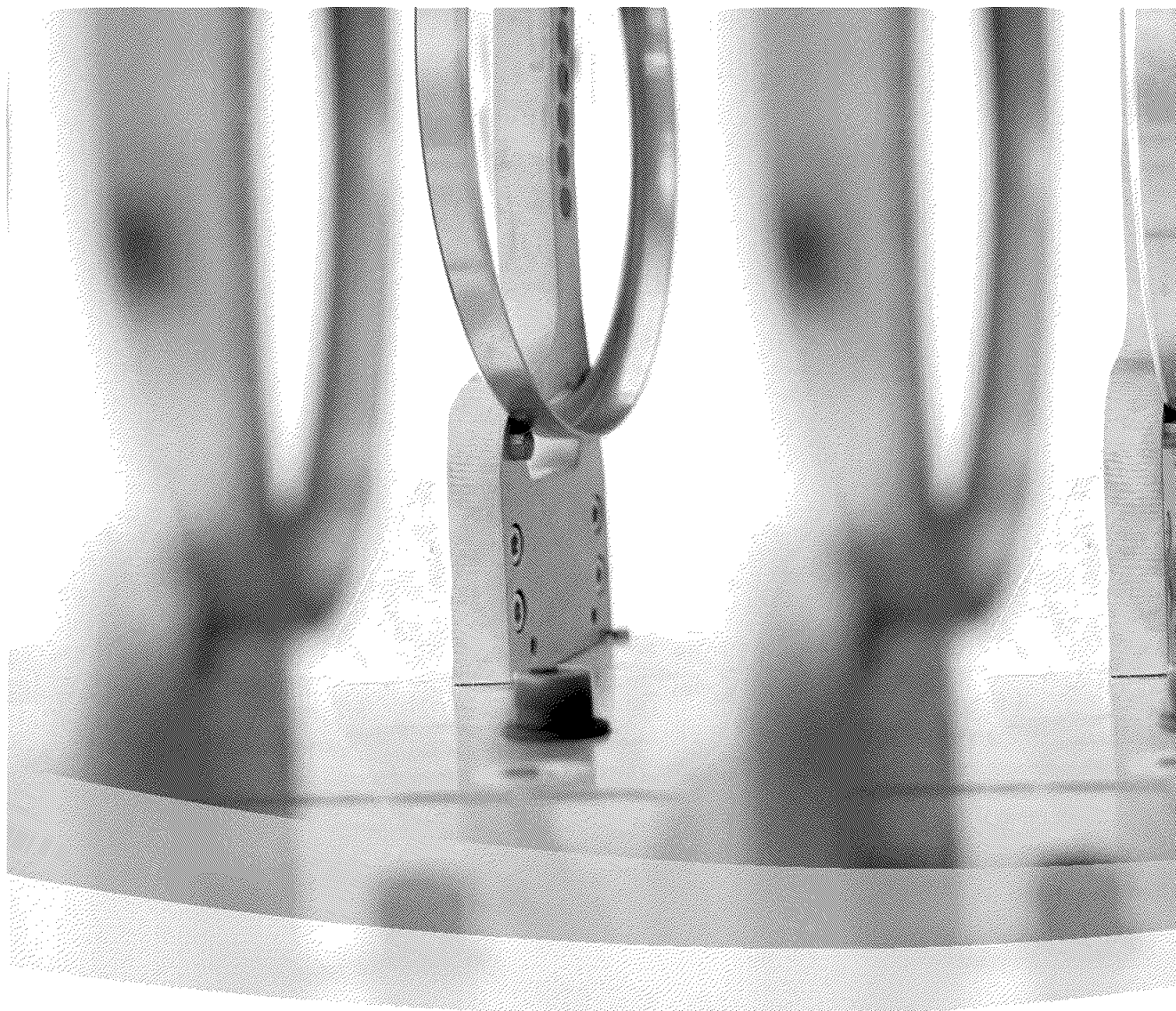
### Thanks:

“Innovating Together” – our company slogan drove our success across all departments, Business Groups and continents in 2016. The motivation and commitment of our employees will help to make our company even more successful in 2017. We would like to thank our employees for their dedication and their ideas. We would also like to extend our appreciation to all customers and business partners for their trust and good cooperation. Our unique portfolio and our long-term strategy offer countless possibilities for us to contribute to the benefit of our customers and society in future, too.

Weinheim, March 23, 2017

For the Board of Management

Dr. Mohsen Sohi  
CEO



**A LEADING TECHNOLOGY GROUP**



Freudenberg employees are inspired by technology and innovation. Together with customers and research partners, they develop cutting-edge products, solutions and services. They are experts in their fields and contribute their knowledge to develop excellent solutions for over 30 different market segments and thousands of applications.

Thanks to leading technological materials and process expertise Freudenberg can deliver leading-edge innovations that help ensure the ongoing success of customers.

The Group leads in its business segments – providing products, solutions and services for mobility and transport, industry and manufacturing, energy and resources, household and textiles, healthcare and the food industry as well as services.



## GROUP MANAGEMENT REPORT

In the 2016 financial year the Freudenberg Group generated sales of €7,900.1 million (previous year: €6,410.9 million) based on the equity consolidation method for joint ventures. Consolidated profit ran at €1,086.9 million (previous year: €520.8 million). At December 31, 2016, the Freudenberg Group workforce totaled 46,266 employees (previous year: 34,007 employees).

### FUNDAMENTAL INFORMATION

#### BUSINESS MODEL

##### **Organizational structure**

Freudenberg is a global technology group that strengthens its customers and society long-term through forward-looking innovations.

At year-end 2016, the number of companies in the Freudenberg Group totaled 496 located in 57 countries. 453 of these companies were included in the consolidation. 427 companies, including 166 production and 164 sales companies, were fully consolidated. The remaining companies were holding or management companies.

Together with partners, customers and the world of science, the 11 Business Groups (previous year: 10 Business Groups) of the Freudenberg Group

develop leading-edge products, excellent solutions and services for more than 30 market segments and for thousands of applications: seals, vibration control components, nonwovens, filters, specialty chemicals, medical products, IT services and the most modern cleaning products.

Freudenberg builds on lasting and reliable relationships with customers and partners. The partnership with NOK Corporation, Tokyo, Japan, for example, already spans more than 50 years. Numerous activities in the USA, Asia (China and India) and in Europe have been jointly established during the decades-long partnership.

Freudenberg and NOK Corporation jointly hold shares in several companies, 7 of which, including Freudenberg-NOK General Partnership, Plymouth, USA, are fully consolidated. The companies grouped together in NOK-Freudenberg Asia Holding are consolidated according to the equity method.

NOK-Freudenberg Asia Holding is a 50:50 joint venture between the Japanese NOK Corporation and Freudenberg SE, Weinheim, Germany, with the objective of serving the high-growth markets in China and India with both locally-produced and imported sealing technology products. The NOK Group manufactures and supplies sealing products, flexible printed circuits, roll products for office equipment and further products such as specialty lubricants.



Group Management Report – Business Model

Across the globe, the Freudenberg Group's products and services make a valuable contribution to the success of its customers – rarely visible, but always indispensable in the spirit of the new positioning which states that "Freudenberg is a values-based technology group that best serves its customers and society". Without Freudenberg, for example, indoor air would not be as clean, cars would not drive, suits would not sit properly on shoulders and wounds would not heal as quickly.

Freudenberg offers its customers in the passenger car and commercial vehicle industry, mechanical and plant

engineering, textile and apparel, construction, mining and heavy industry, energy, chemical, and the oil and gas sectors excellent innovative technological products and services. In the year under review the customer base also included companies in the medical technology, civil aviation, and rail vehicles sectors.

Innovation strength, strong customer orientation and close collaboration as well as diversity and team spirit are the cornerstones of the Group. Commitment to excellence, reliability and pro-active, responsible action belong to the company's core values lived for more than 165 years.

STRATEGIC MANAGEMENT PARENT COMPANY FREUDENBERG & CO. KOMMANDITGESELLSCHAFT			
BUSINESS OPERATIONS PARENT COMPANY FREUDENBERG SE			
Seals and Vibration Control Technology Business Area	Nonwovens and Filtration Business Area	Household Products Business Area	Specialties and Others Business Area
<b>Business Groups</b>	<b>Business Groups</b>	<b>Business Group</b>	<b>Business Groups</b>
Freudenberg Sealing Technologies	Freudenberg Performance Materials	Freudenberg Home and Cleaning Solutions	Freudenberg Chemical Specialities
Freudenberg Oil & Gas Technologies	Freudenberg Filtration Technologies		Freudenberg IT
EagleBurgmann			<b>Divisions</b>
Freudenberg Medical	Japan Vilene Company		Freudenberg Business Services
Vibracoustic			Freudenberg Service



Freudenberg sees itself as an enterprise of entrepreneurs. Operational business is in the hands of independent companies whose management conducts business under their own responsibility. These individual companies in turn belong to Business Groups.

Freudenberg has 2 parent companies: Freudenberg & Co. Kommanditgesellschaft (Freudenberg & Co. KG), Weinheim, Germany, is the strategic parent company, Freudenberg SE, Weinheim, Germany, is the parent company with responsibility for managing business operations. The corporate bodies of Freudenberg & Co. KG are the Management Board, the Board of Partners and the General Meeting.

The corporate bodies of Freudenberg SE are the Board of Management, the Supervisory Board and the Shareholder's Meeting. The Management Board of Freudenberg & Co. KG and the Board of Management of Freudenberg SE have the same members. This also applies to the Board of Partners of Freudenberg & Co. KG and the Supervisory Board of Freudenberg SE.

Freudenberg is a family company and is currently owned by some 320 heirs to the founding father Carl Johann Freudenberg.

For further information on the Business Groups, please refer to the chapter "Review of Operations by Business Area" (page 50).

<b>BUSINESS AREAS<sup>1</sup></b>		
	<b>Pro-rata 2015</b>	<b>Pro-rata 2016</b>
<b>Total sales [€ million]</b>	<b>7,572</b>	<b>8,590</b>
Seals and Vibration Control Technology <sup>2</sup>	4,331	4,879
Nonwovens and Filtration <sup>2</sup>	1,371	1,812
Household Products <sup>2</sup>	809	859
Specialties and Others <sup>2</sup>	1,235	1,271
<b>Workforce (as at Dec. 31)</b>	<b>40,474</b>	<b>48,010</b>
Seals and Vibration Control Technology	27,351	32,162
Nonwovens and Filtration	6,074	8,334
Household Products	2,637	2,962
Specialties and Others	4,412	4,552

<sup>1</sup> The figures for the Business Areas are presented in line with internal reporting procedures under which the joint ventures are consolidated on a pro-rata basis.

<sup>2</sup> Including intra-company sales



## Group Management Report – Business Model

### Implementation of the global brand

The Group presented the new positioning of the Freudenberg global brand – from the company slogan “Innovating Together” and the new logo through to the redesigned brand architecture – at DIALOG, the internal senior management conference held in Detroit in July 2015. This triggered a complex change process within the Freudenberg Group integrating every single employee and bringing the strategic positioning to life: “Freudenberg is a values-based technology group that best serves its customers and society.”

With this positioning, Freudenberg lays claim to technological leadership and to delivering best-quality products, processes and services for the success of its customers. Furthermore, the positioning underpins the company's values orientation and the quest to improve living conditions all over the world through its products and services as well as fostering social interaction.

Implementation of the global brand in all Business Groups proceeded as planned in the year under review.

### Organizational changes

In order to reinforce the innovation strength of the entire Freudenberg Group, the company realigned the strategy, content and organization of the Innovation Corporate Function during the year under review. There is now an even stronger focus on long-term research activities, and collaboration with the Business Groups has been further strengthened.

For further information on the sites of the Freudenberg Group, please refer to the chapter “Review of Operations by Business Area” (page 50 ff.)

### Business processes

During the year under review, Freudenberg continued to improve its compliance structures in line with legislation and the company's own standards. The Freudenberg Code of Conduct was introduced throughout the Group and discussed intensively with all employees.

Sustainability – in products and processes – is actively practiced at Freudenberg. During the year under review the company addressed the issue of sustainability from a strategy viewpoint in a special project, drafting a sustainability strategy for the whole company. As a global technology group, there are 2 dimensions to sustainability at Freudenberg: the first is concerned with how to design the Group's own processes and utilize the Group's own plant to conserve resources (footprint).

The second relates to the numerous products and services offered by Freudenberg that enable customers to increase the efficiency or sustainability of their own manufacturing processes or to make their own products more resource-efficient (handprint). Freudenberg identified 3 main themes – material efficiency, energy efficiency and emissions. All 3 play an important role throughout the Group and work on defining key performance indicators commenced. Furthermore, the groundwork was laid to make sustainability a systematic component of the strategy process.

The Freudenberg Group further improved the efficiency of administrative processes in the year under review. In addition, further success in optimizing production processes and improving productivity was achieved through the use of lean and Six Sigma methods in 2016.

Numerous Business Groups continued to work on responding to customer needs even more effectively and on optimizing business processes. Further details can be found in the chapter “Review of Operations by Business Area” (page 50 ff.).



## Internal control and risk management system (referred to the Group financial reporting process)

The Group internal control and risk management system for the financial reporting process at Freudenberg is tasked with ensuring the functionality, compliance and effectiveness of financial reporting in the Group. The internal control system includes measures intended to ensure the complete, accurate and timely transmission and presentation of information of relevance for the preparation of the consolidated financial statements and the consolidated management report of the Freudenberg Group.

The Board of Management of the Freudenberg Group bears overall responsibility for the internal control system. The Corporate Controlling & Accounting function is responsible for preparing the consolidated financial statements and the consolidated management report of the Freudenberg Group. It defines minimum requirements regarding reporting content submitted by the companies, controls and monitors the time frame and process requirements. Corporate Controlling & Accounting is also responsible for the central administration of the shareholding structures and updates the list of companies included in the Freudenberg Group consolidation as appropriate. The standards for IFRS reporting as regularly updated form the basis for compiling the IFRS reporting packages of the parent company and of all domestic and foreign subsidiaries included in the consolidation. The necessary information concerning the coordinated and timely compilation of the consolidated financial statements in compliance with the relevant accounting laws and standards is available to all Freudenberg employees involved in this process via the Freudenberg intranet. There are binding instructions for Group-wide internal coordination and other preparatory work for the financial statements.

Freudenberg uses a standard software tool for the Group financial reporting process. This tool is used throughout the company worldwide and clearly defines user rights observing the principle of the separation of functions. The system covers both

reporting by Freudenberg companies and the consolidated financial statements. Additional controls are implemented in the consolidation process.

The consolidation process is also supported by a software tool for the automatic reconciliation of balances throughout the Group. The individual companies have a local internal control system which is the responsibility of the respective Business Group and which must comply with uniform minimum requirements applicable throughout the Group. If Shared Service Centers are responsible for the financial processes, then the internal control system of the Shared Service Centers also applies.

Corporate Controlling & Accounting provides support for local contact partners throughout the entire reporting process. The corporate function organizes seminars for employees involved in this process in the event of important changes in financial reporting procedures and IT applications, thereby guaranteeing a consistently high standard of reporting. Some sections of the Health, Safety and Environment reporting process are integrated in the central reporting system. Actuarial reports and evaluations are compiled by specialist service providers.

There is a clear demarcation of tasks between Corporate Controlling & Accounting and the companies. The segregation of functions and the dual control principle are systematically applied. It is standard procedure for the Group auditor and the auditors of the consolidated companies to review the functionality and compliance of the Group's reporting processes. Suggestions for improvements are regularly discussed and optimized in coordination with the relevant specialist departments and corporate bodies.

In addition, the functionality and compliance of processes of relevance to financial reporting are reviewed regularly under an internal auditing process. The complete package of processes, systems and controls adequately ensures that the Group's reporting process is in accordance with IFRS and other regulations and laws of relevance to financial reporting and is reliable.



### **Acquisitions and disinvestments and discontinued operations**

Freudenberg SE, Weinheim, Germany, and Toray Industries Inc. (Toray), Tokyo, Japan, successfully made a joint public tender in 2015 to acquire all the shares in Japan Vilene Company Ltd. (Japan Vilene), Tokyo, Japan, held by independent shareholders. Japan Vilene was delisted from the stock market on December 25, 2015. The remaining shareholders of Japan Vilene are Freudenberg SE and Toray. In January 2016, the EU anti-trust authority granted permission for the acquisition of the shares, which had still been outstanding. Furthermore, in February 2016 a joint venture agreement between Freudenberg SE and Toray under which Freudenberg gained control of Japan Vilene effective April 1, 2016 was signed by both partners. Japan Vilene Company became a new Business Group within Freudenberg's Nonwovens and Filtration Business Area and operates independently in the marketplace.

Effective July 5, 2016, Freudenberg acquired the 50-percent stake in Vibracoustic GmbH, Darmstadt, Germany held by the joint venture partner Trelleborg Holding AB (Trelleborg), Trelleborg, Sweden. The Vibracoustic Group is the worldwide market and technology leader for antivibration components and modules for the global automotive industry. As the sole shareholder, Freudenberg has greater flexibility to steer the further development of the Vibracoustic Group.

Effective August 31, 2016, Freudenberg acquired the laundry care specialist Gimi S.p.A., Monselice, Italy. With its process know-how and its product range, Gimi ideally complements the portfolio of Freudenberg Home and Cleaning Solutions.

Effective October 1, 2016, the business of Freudenberg Schwab Vibration Control was sold to Trelleborg Holdings Germany GmbH, Stuttgart, Germany. In this environment, the company has long-term prospects to continue to grow and expand globally.



## RESEARCH AND DEVELOPMENT

The significance of innovation for Freudenberg is embodied among other things in the values and principles, in the brand positioning with the benefit statement "Freudenberg is a values-based technology group that best serves its customers and society", as well as in the company slogan "Innovating Together". As a leading technology group and innovative partner, Freudenberg works together with customers to develop excellent products, solutions and services that help ensure their ongoing success.

In 2016, the Freudenberg Group conducted research and development activities in the amount of €371.9 million (previous year: €315.3 million) based on the pro-rata consolidation of the joint ventures. This represents 4.3 percent of sales (previous year: 4.2 percent). Based on the equity consolidation method for joint ventures, research and development activities in the amount of €335.1 million (previous year: €252.7 million) were conducted. This represents 4.2 percent of sales (previous year: 4.0 percent).

During the year under review, an average of 3,105 employees (previous year: 2,772 employees) were employed in research and development (R&D) throughout the Freudenberg Group based on the pro-rata consolidation of the joint ventures, with the regional focus in Germany, where 1,618 employees (previous year: 1,573 employees) were employed. Based on the equity consolidation method for joint ventures, this figure was 2,751 employees (previous year: 2,160 employees). Here, too, the regional focus was in Germany, where 1,414 employees (previous year: 1,176 employees) were employed.

Based on the equity method for the consolidation of joint ventures, development expenses in the amount of €29.6 million were capitalized at year-end. Amortization amounting to €1.3 million was effected in the year under review.

Activities within the Business Groups account for the largest share of funds for R&D. They work on customer-oriented technology and product developments in their market segments. Within the Business Groups there is close cooperation between technical sales, development centers and the R&D functions – in line with the respective business model and business strategy. Products and technologies are developed systematically in multi-stage processes.

The objective of all innovation activities is to constantly expand and renew the product portfolio. Freudenberg measures the effectiveness of R&D activities as the share of new products (product less than 4 years old) in total sales. This share rose to 30.4 percent (previous year: 26.0 percent) based on the pro-rata consolidation of the joint ventures. Based on the equity consolidation method for joint venture, this share was 33.1 percent (previous year: 23.6 percent).

### **Creating long-term values and further strengthening cooperation**

Freudenberg realigned the strategy, content and organization of the Innovation Corporate Function during the year under review. There is now an even stronger focus on long-term research activities, and collaboration with the Business Groups has been further strengthened.

With its positioning as a key technology enabler the mission of the Innovation Corporate Function is to develop advanced key technologies for the Business Groups. Collaboration with universities and research institutions that represent the best-in-class worldwide in their specific fields will be expanded in the spirit of the company slogan "Innovating Together".

## Group Management Report – Research and Development

As a result of this realignment Freudenberg has also pooled the personnel and functions of the Corporate Innovation and Freudenberg New Technologies organizational units. **Freudenberg Technology Innovation** is the new name of this organizational unit; its units and tasks are as follows:

- *Future Technologies* defines future key technologies and strengthens the image of Freudenberg as a developer of groundbreaking innovations.
- *Technology Assessment* evaluates the feasibility of new key technologies.
- *Research & Development* makes available the latest research results that can be used as a basis for marketable solutions.
- *Labs & Services* provides high-quality research and development support at competitive prices.
- *Intellectual Property* safeguards the Freudenberg Group's intellectual property assets.

The **Freudenberg Innovation Council** is a platform for exchange among the Business Group CTOs with the aim of further strengthening the Group's innovation and technology performance. The Council also drives forward the Freudenberg Group's innovation strategy based in particular on the Business Groups' technology roadmaps. Furthermore, the Council fosters the development of young technical talent.

Technological innovations have been and still are the driving force behind Freudenberg's success. The **technology platforms** established for the Group as a whole are designed to further develop materials, process and system competence across Business Group boundaries.

In 2016, 2 further technology platforms (Polymers and Reactions & Mixtures) were added to the 5 technology platforms of Nonwovens, Sealing Technology, Molding, Friction/Wear and Lubrication, and Surface Technologies set up in 2015. All of these platforms serve knowledge transfer and the creation of know-how synergies among the Business Groups.



2016 Freudenberg Innovation Award finalist: the "Better care for chronic wounds" project from Freudenberg Performance Materials



## Awards

Innovations have been the basis of the Group's success for 167 years. They have many facets and always originate in teams. The 2016 Freudenberg Innovation Award projects show how Freudenberg lives the company slogan "Innovating Together". The Award is the Freudenberg Group's highest internal accolade that honors Freudenberg employees' outstanding innovation achievements. The Award was presented in October 2016 for the second time. 17 teams with 99 members from 28 sites in 11 countries submitted their projects. The 5 finalist projects were:

- *"Levitex – Sealing minus the friction" from Freudenberg Sealing Technologies (in collaboration with EagleBurgmann); Awardee:* Levitex is the first virtually frictionless crankshaft seal. Levitex reduces friction by up to 90 percent compared to a conventional radial shaft seal. That means less fuel consumption, less wear and a longer service life. There are also environmental benefits: if every car in Germany were equipped with the Levitex technology, more than 440,000 tonnes of carbon dioxide would be saved each year.
- *"Better care for chronic wounds" from Freudenberg Performance Materials:* Wounds need a moist environment for an accelerated and complication-free healing process. To achieve that, wound dressings must not only be able to absorb fluids such as exudates, but must also retain their stability when moist. One example is the gelling fiber nonwoven developed by Freudenberg Performance Materials in cooperation with a key customer from the medical technology sector. What is special about the dressing is that it retains the wound exudate. And that accelerates the healing process.
- *"Gas phase filtration for corrosion protection" from Freudenberg Filtration Technologies:* Sulfur, chlorine or nitrogen compounds in ambient air cause corrosion of electronic components in motor control rooms of industrial plants. This leads to increased maintenance cost, downtime and even uncontrolled shutdowns of operations. The Viledon ChemControl filtration systems protect sensitive and critical equipment and ensure safe operation of industrial plants.
- *"No Dust Broom – the clean grass broom" from Freudenberg Home and Cleaning Solutions:* Traditional Indian brooms are made from natural fibers. Tiny seed pods caught in the stalks of grass detach during sweeping, creating more dust and dirt. Not only that, the grass brooms have to be replaced on average every 3 months. And that is not all: these natural brooms cannot be rinsed. The technicians and product developers at Freudenberg decided to see whether they could come up with an alternative that would do away with all these disadvantages. The result: the No Dust Broom. The high-tech version of this traditional broom has bristles made of polymer fibers that last much longer and are also rinsable.
- *"Environmentally-friendly chrome plating" from Freudenberg Chemical Specialities:* Chromium-plated products and components are chic and robust. Nonetheless, chromium(VI) will vanish from the market in the medium term because working with hexavalent chromium brings serious health risks. Trivalent chromium plating, on the other hand, is completely harmless. Researchers and technicians from the Freudenberg subsidiary SurTec in Tokyo and Zwingenberg have succeeded in scaling up chromium(III) plating processes to real-life conditions in practical plating lines.



## Group Management Report – Research and Development

The **Karl Freudenberg Prize**, an external prize in natural sciences awarded by Freudenberg, went to Dr. Max Martin Hansmann for the scientific research findings in his doctoral theses on “Correlating the Reactivity of Gold and Boron Electrophiles”.

### **Innovation and technology: Key drivers for sustainability**

Developing sustainable solutions is one ambition of the Freudenberg Group. The Group’s portfolio contains many solutions aimed at sustainability. It takes a powerful overarching research and development organization, long-term investments in basic research, strong cooperation with the Business Groups, and a greater regional presence to drive further innovations forward.

At the **Global Innovation Forum (GIF)** held in Weinheim in mid-October, 260 specialists from all Business Groups exchanged views on innovation best

practices, and discussed how sustainability can be an innovation driver and how, at the same time, innovation results in more sustainable processes and products. They interact with each other and the one drives the other. This issue was subsequently addressed in more detail at local level in “post-GIF” events held in North and South America, China and India.

Freudenberg also journeyed to the future, to 2050, when the world will probably be 75 to 80 percent less dependent on fossil fuels. Some 30 young leaders analyzed what business opportunities that could generate for Freudenberg. The project findings are being integrated in the strategy process and will culminate in new, long-term innovation initiatives, which will be driven forward by Freudenberg Technology Innovation, also in collaboration with the Business Groups. The development of ground-breaking and sustainable solutions for better living conditions not only contributes to the company’s business success, but also ensures that Freudenberg fulfils its responsibility for society.

## REPORT ON ECONOMIC CONDITIONS

### MACROECONOMIC ENVIRONMENT

In 2016, the global economy, and therefore the markets of relevance to Freudenberg, recorded growth on a par with the prior-year level. While growth in the industrialized nations, particularly North America and the eurozone, was overcast, the emerging economies made up ground, although growth there was below the long-term average. The Freudenberg Group achieved moderate organic growth by marketing innovative products, a high degree of customer orientation and flexibility, as well as structured expansion in attractive markets and strategic areas of business. In addition, the cost price of key raw materials, including the oil price which settled at around US\$50 per barrel, stabilized.

Regional developments in the Freudenberg Group's business were mixed. Growth in Europe was roughly on a par with the previous year. The UK's decision in favor of Brexit did not yet have any significant impact for the Freudenberg Group overall. The same applied for the referendum in Italy. The German economy picked up slightly year-on-year. The economic situation in Russia continued to deteriorate and had an effect on neighboring countries in Eastern Europe.

Overall, North America continued the good economic development of the previous year, even though the oil and gas industry reported the worst year in its recent past. The economic problems in South American markets, particularly Brazil and Argentina, persisted, although some indicators may point to a turnaround out of recession. In Mexico, the most surprising development at the end of the year was the sharp devaluation of the peso triggered by the election of the new President in the USA. In Asia, particularly China, growth was slower than in previous years, but nevertheless remained strongly positive.

Overall, the macroeconomic situation for Freudenberg remained challenging.

#### Global economic situation

In 2016, gross domestic product grew worldwide by 2.3 percent (Source: World Bank).

While there was a slight increase in Germany compared with the previous year, structural deficits dampened growth in the eurozone, where the European Central Bank continued its expansionary monetary policy.

Economic output in the USA grew at a slower pace than in the previous year, with unemployment and inflation at low levels. There is as yet no clear indication of the new administration's guidelines for economic policy. The Federal Reserve Bank decided on a further slight rise in the interest rate towards the end of 2016.

In Japan, there was no perceptible acceleration in economic momentum in spite of numerous measures. The Chinese government also intervened extensively in the country's economic processes, and thus managed to stabilize ebbing momentum. India was once again the growth champion, with the first courageous actions on the part of the India government, particularly as regards VAT reforms, possibly marking the end of the long-standing reform backlog.

The deep recession continued in Brazil. Russia was able to decelerate the downswing, but also remained in recession in 2016.



## Group Management Report – Macroeconomic Environment

EUROPE		
Region	GDP growth 2015	GDP growth 2016
Eurozone	1.9 %	1.7 %
Germany	1.7 %	1.9 %
France	1.2 %	1.1 %
Italy	0.7 %	0.9 %
Spain	3.2 %	3.2 %
Portugal	1.6 %	0.9 %
Ireland	26.3 %	4.5 %
Greece	-0.2 %	-0.3 %
United Kingdom	2.2 %	2.0 %

Sources: Consensus, European Commission, International Monetary Fund  
2016 GDP growth as at February 2016

WORLD REGIONS		
Region	GDP growth 2015	GDP growth 2016
USA	2.6 %	1.6 %
Mexico	2.6 %	2.0 %
Brazil	-3.8 %	-3.4 %
Argentina	2.5 %	-2.3 %
Japan	1.2 %	1.0 %
Russia	-3.8 %	-0.6 %
China	6.9 %	6.7 %
Taiwan	0.7 %	1.4 %
India	7.6 %	7.0 %

Sources: Consensus, European Commission, International Monetary Fund  
2016 GDP growth as at February 2016

Most of the Freudenberg Group's key sales markets again recorded slight growth in 2016. The global **automotive industry** remained very robust. A total of just under 91 million cars were produced worldwide, 5 percent more than the previous year.

China was the regional leader in terms of vehicles produced (27 million), production growth (14 percent) and the increase in new registrations (12.7 percent). In North America (USA, Canada and Mexico), automobile production rose by 1.9 percent to 18 million, with demand increasing by 1.8 percent. The recovery continued in Europe – with production rising by 3.4 percent to 20 million vehicles and new registrations up 6.2 percent (Source: Information Handling Services).

The industry increasingly focused its research and development efforts on e-mobility, although internal combustion engines will remain a key drive technology for several decades to come.

Subdued economic development and the associated lower investment activity impacted the **mechanical engineering** sector in Germany (stagnation: 0 percent), the USA (decline of just under 3 percent), and Japan (decline of 1 percent). China recorded 6 percent growth (Source: national statistical offices).

In the **textile and apparel industry** production by the world market leader China grew 5.5 percent. In the USA growth was 1 percent, while production in Europe stagnated (0 percent) (Source: national statistical offices).

Developments in the **global construction industry** remained very mixed and the sector lost some momentum compared with the previous year. Growth in the USA was 4 percent, developments in China were characterized by high volatility with average annual growth running at 7 percent, and the European Union recorded growth of 1 percent (Source: national statistical offices).

In the **medical technology** sector the USA, the world market leader, added a further 6 percent to production in 2016. At just under 4 percent, the increase in the European Union was slightly smaller, with Germany recording an increase of just under 3 percent (Source: national statistical offices).

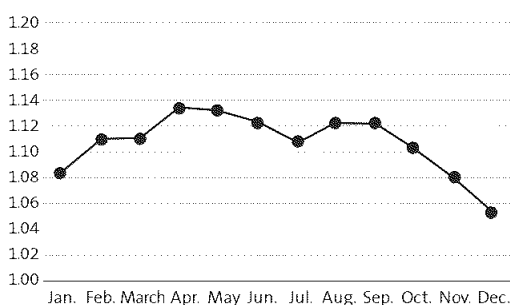
**Private consumption** in many regions benefited from low unemployment and low energy prices.

Following the dramatic drop at the beginning of 2016, the **oil price** stayed at a low level with slight fluctuations. The annual average price for Brent crude/barrel was just under US\$50. However, the oil

price rose again slightly at the end of the year (Source: Handelsblatt).

There was a significant rise in the value of the **euro** versus the dollar until May of the year under review, when the currency then fluctuated around the 1.12 mark for several months, subsequently rising again quite significantly following the US Presidential election and the announcement that the Federal Reserve Bank was increasing the interest rate. The annual average exchange rate was US\$1.107 per euro. That represents a decrease of 0.2 percent (Source: European Central Bank).

EURO EXCHANGE RATE DEVELOPMENT IN 2016  
US dollar per euro



Source: European Central Bank; average monthly data

## BUSINESS DEVELOPMENT AND POSITION

FREUDENBERG GROUP		
	At-equity 2015	At-equity 2016
Sales [€ million]	6,410.9	7,900.1
Profit before income taxes [€ million]	667.6	1,265.1
Consolidated profit [€ million]	520.8	1,086.9
Workforce	34,007	46,266

The Freudenberg technology group continued its good business development in 2016. In established regional markets, growth was in line with expectations. Freudenberg's growth in emerging markets was dynamic, but mixed. Overall, the impact of relatively stable raw material procurement prices on business and result was neutral. However, business was influenced by negative exchange rate effects.

The operating result key performance indicator describes profit before income tax without special effects (for example, significant restructuring expenses), the profit or loss on disposals of assets, impairment of goodwill, results of associated companies, or changes as a result of amendments to International Financial Reporting Standards.

The Freudenberg Group yet again reported increased sales and consolidated profit in 2016. All Business Areas contributed to this increase through the marketing of innovative products, a high degree of customer orientation and flexibility, and structured expansion in attractive markets and strategic fields of business.

Sales and profit grew, both on the basis of pro-rata consolidation and at-equity consolidation of the joint-venture companies. The acquisition of Japan Vilene Company in April 2016 and the Vibracoustic Group in July 2016, both of which now operate as independent Business Groups, had a significant impact, as did the acquisition of Gimi S.p.A., Monselice, Italy, by Freudenberg Home and Cleaning Solutions. Since



## Group Management Report – Macroeconomic Environment Business Development and Position

October 1, 2016, the sales of the Freudenberg Schwab Vibration Control Group, with headquarters in Velten, Germany, were no longer consolidated, as this business has been sold.

Furthermore, the Freudenberg Group maintained its high earning power through the systematic

implementation of measures to increase productivity and efficiency, both in production and in administration.

After adjustment for exchange rate effects and acquisitions, the sales and operating result forecasts were exceeded.

FORECAST/ACTUAL COMPARISON FREUDENBERG GROUP <sup>1</sup>				
	ACTUAL 2015	Forecast for 2016	Change	ACTUAL 2016
Sales <sup>2</sup> [€ million]	7,571.6	between 1 and 3 percent	+13.5 %	8,590.1
Operating result <sup>2</sup> [€ million]	685.5	slight increase	+15.9 %	794.8
Return on sales <sup>2</sup> [percent]	9.1	stable development	+0.2 % points	9.3
LDIFR <sup>3</sup>	1.3	slight reduction	+30.8 %	1.7

<sup>1</sup> For internal reporting, the Freudenberg Group key performance indicators are determined based on the pro-rata consolidation of the joint ventures.

<sup>2</sup> Sales and the result were mainly boosted by the acquisitions made in 2016.

<sup>3</sup> For further information on the Lost Day Incident Frequency Rate please refer to the chapter on "Responsibility for Society".

### Earnings position

The Freudenberg Group uses sales and operating result as **key financial indicators** for the management of operating business; these figures are taken from internal reporting and are based on the pro-rata consolidation of the joint ventures. This provides a more comprehensive presentation of business performance since it also includes the activities of the joint ventures not controlled by the Group. The 9.3 percent return on sales is determined from the two performance indicators of sales and operating result and represents a further key indicator of operating performance. These indicators are regularly made available to the Board of Management on a monthly basis to assist in the timely identification of trends and changes.

The key financial performance indicators are targeted towards sustainable earnings-oriented growth and a continuous increase in enterprise value. As a result of the acquisitions of Japan Vilene Company and the Vibracoustic Group effected during the financial year, the difference between pro-rata consolidation and at-equity measurement has become insignificant. For this reason, the performance indicators relevant for the Freudenberg Group were reported to the Board of Management on the basis of the at-equity consolidation of joint ventures on a monthly basis for the first time from the beginning of 2017.

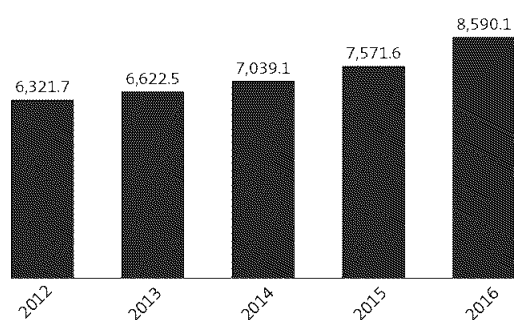
Order levels at the beginning of the new year rose slightly in line with the market environment.



Applying the pro-rata consolidation for joint ventures, the Freudenberg Group generated **sales** of €8,590.1 million (previous year: €7,571.6 million), thus again setting a new record. Overall, sales increased by 13.5 percent or €1,018.5 million compared with the previous year. Adjusted for the effects of acquisitions, amounting to €967.3 million, and disinvestments, amounting to €14.6 million, as well as exchange rate effects, sales were 3.7 percent or €282.6 million higher than the previous year. Sales increased in all Business Areas.

Applying the pro-rata consolidation to joint ventures, **operating result** for the year under review amounted to €794.8 million, €109.3 million higher than the previous year. This was attributable to higher sales, productivity improvements, acquisitions during the reporting year and cost-saving programs as well as favorable sectoral developments.

SALES DEVELOPMENT [€ million]  
Pro-rata

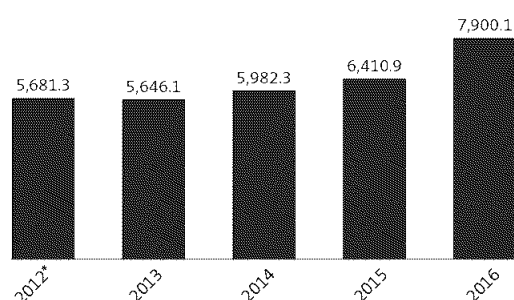


Joint ventures are consolidated on a pro-rata basis in line with internal reporting.

## Group Management Report – Business Development and Position

Under the IFRS financial reporting rules, joint ventures must be consolidated using the equity method. According to this method, sales during the year under review amounted to €7,900.1 million (previous year: €6,410.9 million). On this basis, sales were €1,489.2 million or 23.2 percent higher than the previous year. Adjusted for the effects of acquisitions, amounting to €1,491.8 million, and disinvestments, amounting to €14.6 million, as well as exchange rate effects, sales were 3.0 percent or €192.9 million higher than the previous year. Sales increased in all Business Areas.

SALES DEVELOPMENT [€ million]  
At-equity



\*Figures adjusted due to the early adoption of IFRS 11

Other income rose by €626.2 million to €742.7 million. The increase was mainly due to income from the change in status of investments previously consolidated at equity in the amount of €583.5 million and income from disposals of financial assets with reference to the disposal of the Freudenberg Schwab Vibration Control Group.

In the 2016 financial year, other expenses amounted to €137.9 million (previous year: €110.0 million). This rise was mainly due to the de-consolidation loss included in losses from the change in status of companies previously consolidated at equity, which concerns the change in status of the Schneegans Group to a fully consolidated company. Other expenses also include impairment losses on the goodwill of the cash-

generating unit Freudenberg Oil & Gas Technologies in the amount of €50.9 million (previous year: €33.1 million).

Applying the equity consolidation method for joint ventures, the profit before income taxes in 2016 amounted to €1,265.1 million, a year-on-year improvement of €597.5 million. This increase was mainly a result of acquisitions made in the year under review.

The gross margin fell slightly. This was chiefly due to the mix effects of the new acquisitions, which were offset by the effects of higher sales, better capacity utilization and productivity improvement measures in almost all the Business Groups. In the 2016 financial year, selling expenses and administrative expenses ratios fell as a result of efficiency improvements such as process and system optimizations, and as a result of the degressive effect of higher sales.

Research and development expenses increased by 32.5 percent from €249.1 million in 2015 to €330.1 million in 2016. The acquisitions had a significant impact on research and development expenses.

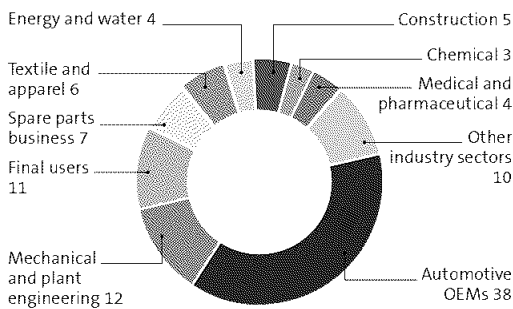
Consolidated profit was €1,086.9 million (previous year: €520.8 million). The increase was mainly due to consolidation effects from the change in status of investments previously consolidated at equity.

## Sectors and regions

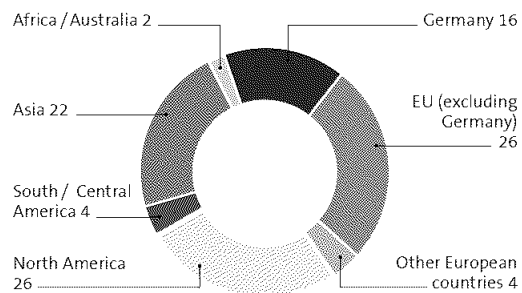
The Freudenberg Group continued to operate in a challenging market environment in the 2016 financial year.

Based on the equity consolidation method for joint ventures, the share of automotive OEM business accounted for the strongest rise in total sales in the year under review, increasing to 38 percent (previous year: 26 percent). The share of the mechanical and plant engineering sector, the second most important customer grouping, was largely in line with the prior year level, accounting for a total share of 12 percent (previous year: 15 percent). Business with final users accounted for some 11 percent of total sales (previous year: 13 percent).

SALES BY SECTORS [%]  
At-equity



SALES BY REGIONS [%]  
At-equity



The regional distribution of sales was almost constant. The Freudenberg Group generated 26 percent (previous year: 27 percent) of total sales in the European Union excluding Germany. Germany accounted for 16 percent (previous year: 17 percent), on a par with the previous year. North America accounted for 26 percent of total sales (previous year: 26 percent). Driven by continued strong growth, the share of total sales attributable to the Asia region was 22 percent (previous year: 19 percent).



## Group Management Report – Business Development and Position

### Financial Position

#### Financing management

Freudenberg SE is responsible for all the financing activities of the Freudenberg Group, thus ensuring the Freudenberg Group has sufficient liquid funds at all times. Companies obtain the financing they require via cash pool agreements or internal loans – for legal, fiscal and other reasons financing in some countries also takes the form of bank loans guaranteed by Freudenberg SE.

Freudenberg does not expose itself to financial risks through speculation with derivative financial instruments but uses such instruments only for hedging, and therefore reducing, risks in connection with underlying transactions. Future transactions are only hedged if there is a high probability of occurrence. In order to ensure the identification and management of all financing risks, the Freudenberg Group pursues a holistic approach to financial risk management. The existing financial risks are identified and limited in an institutionalized control loop.

Although financing conditions have loosened compared with previous years, currency risks on currency markets remain high. In addition, there is volatility on the credit and capital markets. This also impacts the financing conditions for industrial companies. The Freudenberg Group is in a good

position to tackle these challenges thanks to its conservative finance policy. Liquidity measures include high reserves of liquid funds and committed credit lines with core banks.

A key element of external borrowing is a long-term shareholder loan where the interest payable is oriented to a forward interest rate swap plus a premium.

As at December 31, 2016, Freudenberg had undrawn committed credit lines amounting to some €488 million. The interest payable on the certificates of indebtedness (“Schuldscheindarlehen”) included in the liabilities to banks is based on variable and fixed components. Further details on interest rate structure can be found in the section on interest rate risks on page 141 of the Notes to the Consolidated Financial Statements.

Off-balance sheet contingent liabilities and other financial obligations of the Freudenberg Group mainly relate to guarantees.

The rating agency Moody’s Deutschland GmbH, Frankfurt am Main, Germany, upgraded the issuer rating of Freudenberg SE by one notch to A3.

This gives the Freudenberg Group very good credit-worthiness at investment grade level.



CAPITAL STRUCTURE				
	Dec. 31, 2015	Dec. 31, 2016	Change	
	[€ million]	[€ million]	[percent]	[€ million]
Equity	3,699.6	4,603.3	24.4	903.7
Non-current liabilities	1,617.1	2,827.6	74.9	1,210.5
Current liabilities	1,921.2	2,792.6	45.4	871.4
<b>Equity and liabilities</b>	<b>7,237.9</b>	<b>10,223.5</b>	<b>41.2</b>	<b>2,985.6</b>

## Capital structure

The **equity ratio** fell from 51.1 to 45.0 percent. The main reason for this fall was the change in status of the Vibracoustic Group and Japan Vilene Company to fully consolidated companies. Taking into account the respective purchase price allocations, the two companies have equity ratios significantly below the previous Group equity ratio. In absolute terms, equity rose by €903.7 million, a rise which was chiefly attributable to the positive result. Dividends paid to the parent company Freudenberg & Co. KG and to non-controlling interests had an offsetting effect.

**Non-current liabilities** amounted to €2,827.6 million (previous year: €1,617.1 million). The change was mainly due to long-term financial debt. The increase in liabilities to banks was mainly the result of the full consolidation of Japan Vilene Company and the certificates of indebtedness transferred to the Group in connection with gaining control over the Vibracoustic Group. Other factors which contributed to the rise were the development in other non-current liabilities and deferred tax liabilities, which increased mainly as a result of the hidden reserves realized in connection with the purchase price allocations.

The €871.4 million rise in **current liabilities** to €2,792.6 million is attributable in particular to an increase in trade payables as a result of acquisitions and the financial statement date. Other contributory factors included the development of other current liabilities and other current provisions especially as a result of the development in provisions for personnel obligations and provisions for guarantees and warranties. After eliminating exchange rate effects and the effects of acquisitions, current liabilities decreased by 3.1 percent.

As regards the currency structure, reference is made to the currency risks section of the Notes to the Consolidated Financial Statements on page 141.



## Group Management Report – Business Development and Position

### Liquidity

**Cash flow from operating activities** in the 2016 financial year amounted to €945.1 million, corresponding to a year-on-year increase of €182.6 million. This rise is primarily due to the increase in the profit before income taxes (amounting to €86.4 million) after the elimination of depreciation and amortisation (€134.0 million) and profit and loss from disposals of financial assets. The profit and loss from disposals of financial assets also includes income and expenses from the change in status of investments previously consolidated at equity in the amount of €577.8 million. Changes in trade payables, other liabilities and provisions also had a positive effect.

As a result of the increase in cash outflow in connection with the acquisition of consolidated companies less cash acquired in connection with corporate transactions, especially the acquisition of

the Vibracoustic Group and Japan Vilene Company, and an increase in net additions to the statement of financial position, **cash flow from investing activities** amounted to €-1,510.4 million and was therefore significantly lower than the prior-year figure of €-429.0 million. In addition to acquisitions, the Freudenberg Group invested significant amounts in buildings and machinery. In this context, the main focus was on Germany, the USA and China.

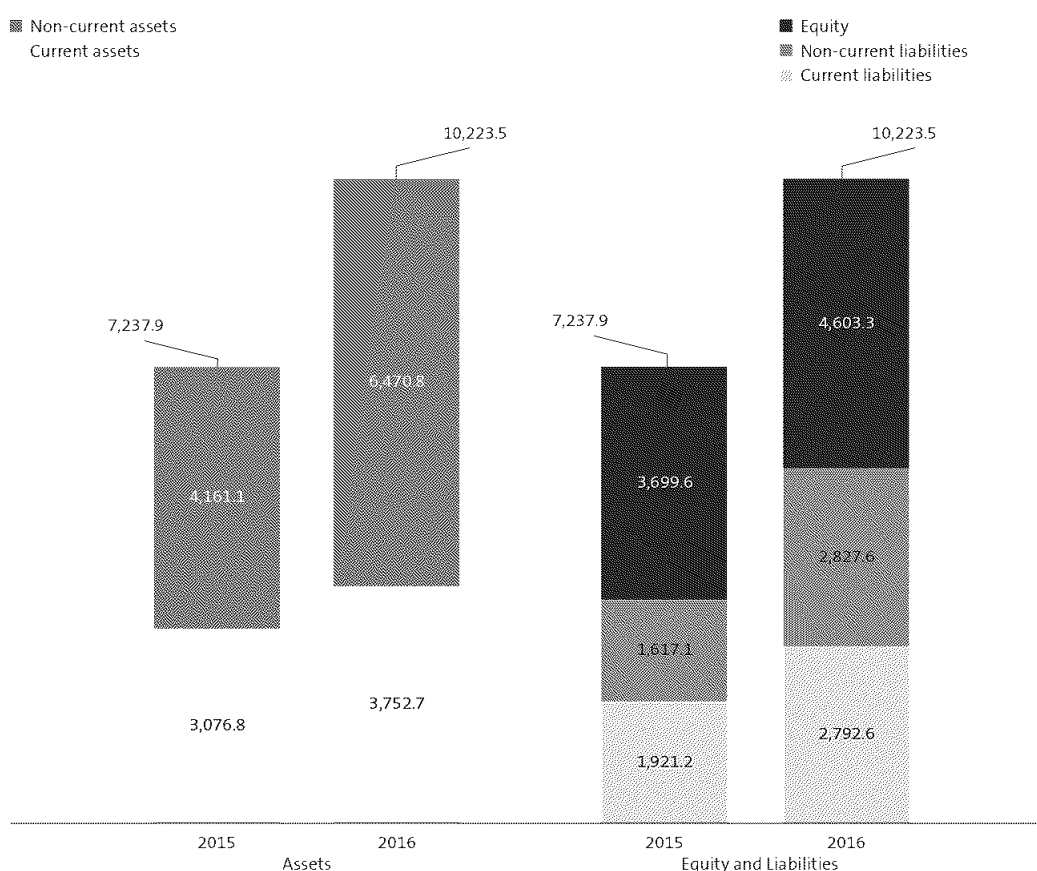
**Cash flow from financing activities** in the 2016 financial year was €471.3 million (previous year: €-198.9 million). The main factors in this rise were payments to shareholders and non-controlling interests as well as the take-up of financial debt in connection with acquisitions made during the year under review.

The Freudenberg Group can meet all of its payment obligations at any time.

SUMMARY OF CASH FLOWS		
	2015	2016
	[€ million]	[€ million]
<b>Cash flow from operating activities</b>	<b>762.5</b>	<b>945.1</b>
<b>Cash flow from investing activities</b>	<b>-429.0</b>	<b>-1,510.4</b>
<b>Cash flow from financing activities</b>	<b>-198.9</b>	<b>471.3</b>
<b>Cash and cash equivalents at beginning of year</b>	<b>917.7</b>	<b>1,055.7</b>
Changes in cash and cash equivalents with effect on payments	134.6	-94.0
Changes in cash and cash equivalents from changes in consolidated group	0.1	0.0
Changes in cash and cash equivalents from exchange rate differences	3.3	-1.0
<b>Cash and cash equivalents at end of year</b>	<b>1,055.7</b>	<b>960.7</b>

## Assets, Equity and Liabilities

STRUCTURE OF STATEMENT OF FINANCIAL POSITION [€ million]



The total assets of the Freudenberg Group increased by €2,985.6 million to €10,223.5 million (previous year: €7,237.9 million).

The rise in total assets was chiefly attributable to the significant increase in **non-current assets** to €6,470.8 million (previous year: €4,161.1 million), largely due to a marked rise in intangible assets. The increase includes the goodwill and intangible assets

determined in connection with purchase price allocation, mainly for customer lists and customer relations, technologies and know-how. These effects were offset by depreciation and amortization, which included impairment losses of €50.9 million on goodwill. Developments in participations in joint ventures companies consolidated by the equity method (change in status of the Vibracoustic Group) and participations in associated companies



## Group Management Report – Business Development and Position

consolidated by the equity method (change in status of Japan Vilene Company) also had an offsetting effect. In addition, the change in the consolidated group had a marked positive impact on changes in tangible assets. Adjusted for exchange rate effects and acquisition-related effects, there was a 0.7 percent reduction in non-current assets.

The significant increase of €675.9 million in **current assets** to €3,752.7 million was chiefly attributable to the increase in trade receivables as a result of positive business developments and newly acquired companies. Adjusted for acquisition effects and exchange rate effects, there was a rise of 13.5 percent. The fall in securities and cash at bank and in hand is connected with the financing of acquisitions. Equity and liabilities items are explained in the “Capital structure” chapter of the Group Management Report.

### Investments

Adjusted for acquisitions, investments in intangible assets, tangible assets and investment properties rose during the year under review to a total of €407.1 million (previous year: €302.5 million) and were therefore higher than depreciation and amortization of €402.0 million. In terms of Freudenberg Group sales, this corresponds to an increase in the investment rate from 4.7 percent in the previous year to 5.2 percent in 2016.

The Freudenberg Group invested worldwide. For example, Freudenberg Performance Materials invested in a new spunlaid facility in the USA and Japan Vilene Company invested in a new factory for automobile headliners in Mexico. Investments in a new plant to produce automobile headliners by Freudenberg Performance Materials in China continued. €147.8 million (previous year: €105.1 million) was invested in Germany. Work started in Maisach, Germany, on the expansion of the production and logistics facility of Freudenberg Chemical Specialities and, in Weinheim, on the

construction of a new training centre. The construction of a major office building in Weinheim Industrial Park and investments in production buildings and plant infrastructure at the Oberwihl, Germany, facility continued.

Investments planned for 2017 are likely to be financed from cash flow from operating activities and to have no major effect on net assets.

### Summary statement

In a challenging macroeconomic environment, the Freudenberg Group succeeded in implementing strategic projects in line with expectations. In 2016, this led to stable and profitable growth. Despite negative exchange rate effects, the Freudenberg Group was able to exceed the 2016 forecast for the organic growth of sales and operating profit on the basis of the pro-rata consolidation used for internal reporting purposes. There are also special effects from the change in status of participations previously consolidated at equity and additional contributions to sales and operating profit by the companies acquired in the course of the year under review.

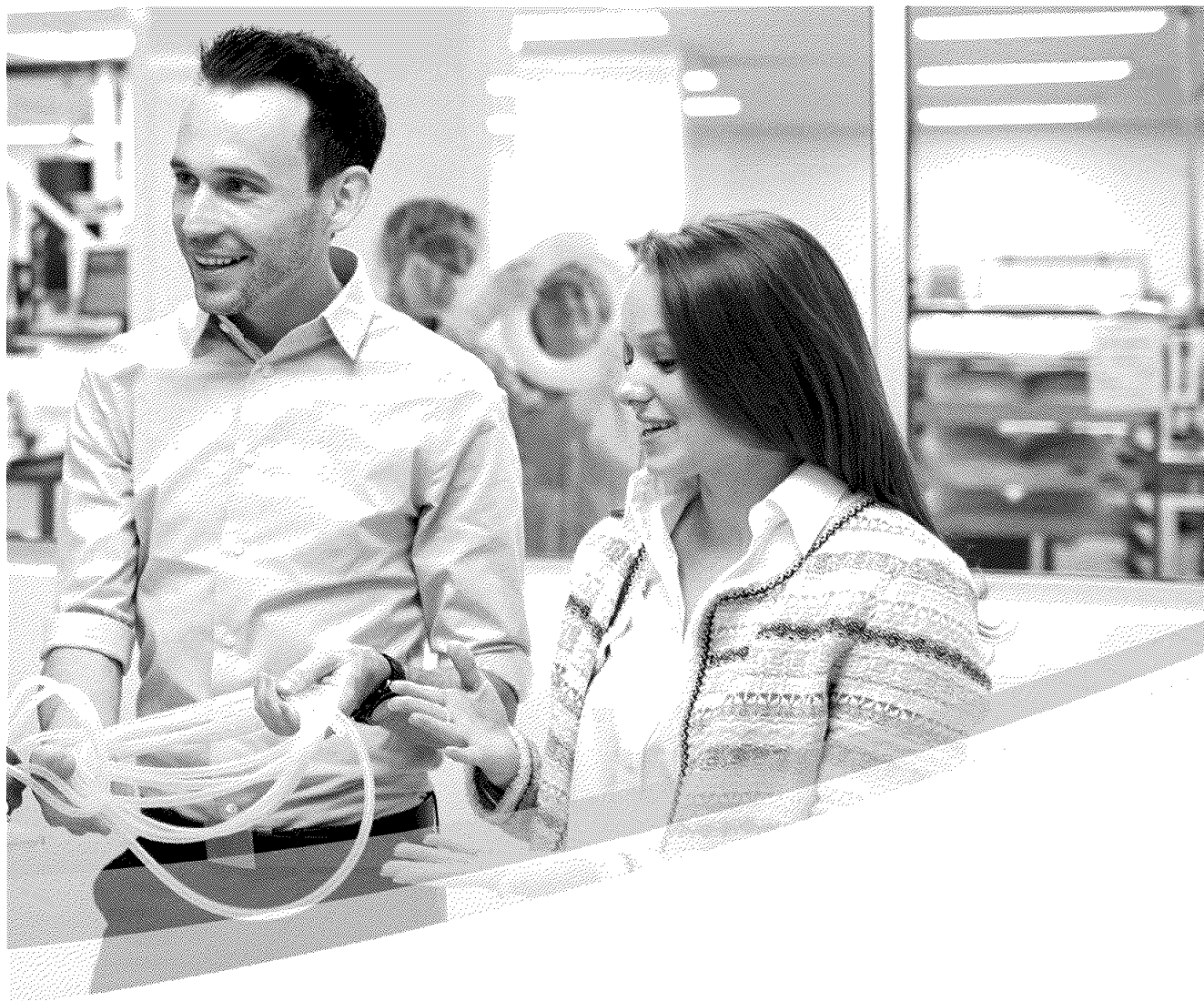
On the basis of the equity consolidation, the non-financial performance indicator LDIFR reached 1.8 in the 2016 financial year (previous year: 1.4). It was therefore not possible to achieve the slight reduction which had been forecast. As the safety of its employees is the top priority for Freudenberg, company experts precisely analyze the causes of accidents. The consequences of these analyses are discussed intensively and possible changes are initiated.

The assets, equity and liabilities of the Freudenberg Group were dominated by the company acquisitions.

This statement is not affected by the events reported in the chapter “Report on Events After the Date of the Statement of Financial Position”.



## COLLABORATION IN DIVERSE TEAMS



Diverse teams fuel innovation at Freudenberg. Numerous scientific studies confirm that teams comprising people of different ages and genders from different cultures and backgrounds are more successful than those with a more homogeneous composition.

The best solutions and innovations emerge when employees bring their different experiences, knowledge and skills to their shared tasks. This triggers new ideas, generates imaginative solutions and creates innovative products.

The more than 48,000 Freudenberg employees share a common basis: entrepreneurship in thought and action. This fundamental attitude unites them in some 60 countries – driven by the desire to develop cutting-edge products and pioneering solutions to meet the specific needs of customers.

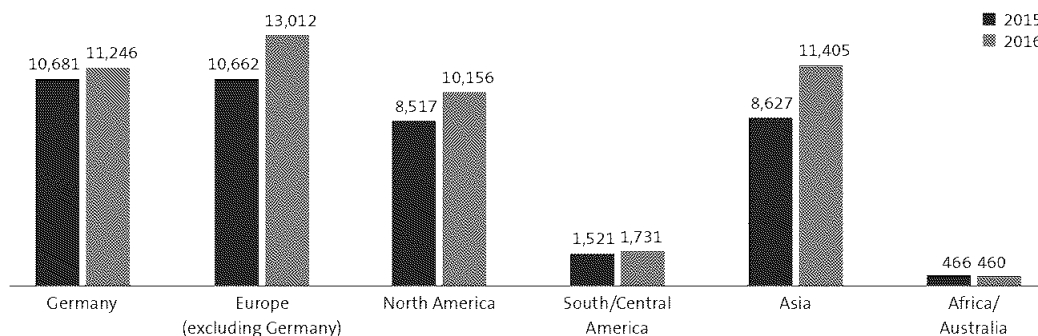


## HUMAN RESOURCES

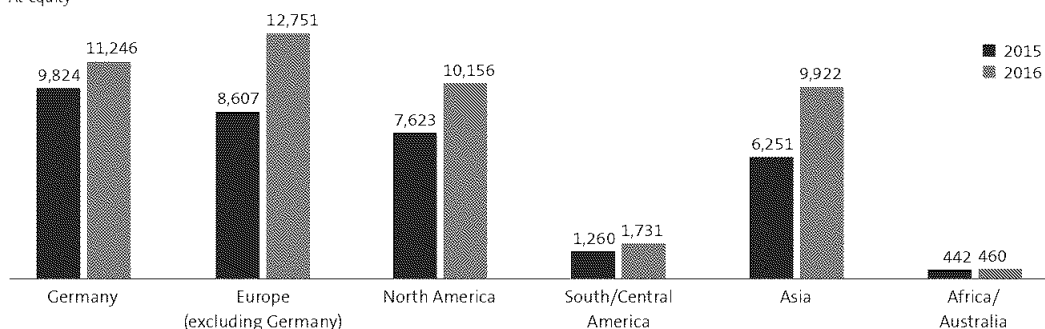
In our internal reporting – where the joint ventures are consolidated on a pro-rata basis – the headcount as at December 31, 2016 was 48,010 employees (previous year: 40,474 employees). Based on the equity consolidation method for joint ventures, the Freudenberg Group had 46,266 employees (previous

year: 34,007 employees). The increase in headcount – in some cases substantial – in the various regions is mainly attributable to the acquisitions completed in 2016. Personnel expenses based on the equity consolidation method increased to €2,317.8 million (previous year: €1,980.8 million).

FREUDENBERG GROUP WORKFORCE BY REGION  
Pro-rata



FREUDENBERG GROUP WORKFORCE BY REGION  
At-equity





## Group Management Report – Human Resources

### Personnel strategy

The personnel strategy serves to support the strategy of the Freudenberg Group. It has 3 main areas:

#### Develop international talent and management

Competition to recruit the best minds is one of the biggest challenges facing any company. Freudenberg's response to this challenge is excellent talent management:

The 4<sup>th</sup> Global Talent Management Conference was held in the year under review. During the 3-day event, each Business Group in succession presented its talent to the Board of Management and the HR Heads based on a standardized talent management process which was introduced throughout the Freudenberg Group in 2013. In addition, Group-wide development opportunities for talent were discussed at Regional Talent Dialogs. Freudenberg also extended the scope of the Functional Talent Dialogs which develop talent for specialist careers.

Furthermore, a new transparent employee appraisal system was introduced in 2016. Under the new system, the line manager prepares an appraisal and the employee writes a self-appraisal; each reviews the other document and they then meet for a one-on-one discussion to exchange their views on the past year and discuss future tasks and development requirements.

The Group-wide development programs for the top two management levels launched in cooperation with the internationally acknowledged INSEAD Business School, Fontainebleau, France, continued in 2016. The objective is to create a network for top management throughout Freudenberg in order to meet the demands of increasing internationalization and to respond to market change.

In the year under review, the Freudenberg Group prepared young managers in the various global regions for their first leadership tasks under the overarching Freudenberg Leadership Development Program (FLDP).

The training & development community in the Freudenberg Group analyzed existing development programs and elaborated new development programs for management in 2016 with the help of the "Leadership Framework" defined at the end of 2015. Moreover, further progress was made in 2016 to roll out a Group-wide Learning Management System.

#### Foster diversity

Diversity is anchored in the Group's values and principles and is also clearly positioned in the brand. Freudenberg is convinced that teams made up of people of different ages and genders and from different cultural backgrounds are more successful. Efforts focus in particular on a balanced gender mix.

#### Expand professional personnel management

During the year under review, the Freudenberg Group continued its work on international standardized IT systems for human resources with a view to enhancing the efficiency of global personnel processes. Some 5,000 data sets were added to the personnel management system for performance and potential assessment and target agreement process support, taking the total number of employee profiles to 14,000.

In addition, the Freudenberg Group introduced a standardized applicant management system at the Group's main locations in order to maximize internal and external access to information on vacant posts and career openings all over the world and to ensure a uniform layout for job advertisements.



Employees at the surface technology specialist SurTec, a Division of Freudenberg Chemical Specialities

## Examples of further activities in the regions

### North America

3 Freudenberg Business Groups launched a regional rotation program for engineers. The program concentrates on recent graduates from technical faculties and covers 3 modules which are completed in the participating Business Groups. The program is an important step toward offering development opportunities for talent at an early stage and training talent across the Group.

### South America

In August, executive management and heads of HR from the regions met up at a "Talent Sharing Meeting" to discuss gaps in succession planning as well as vacant posts. The aim is to encourage the further development of talent among Business Groups.

Engineers, sales and marketing specialists from Brazil and Argentina took part in innovation workshops on topics such as innovation, sustainability, Industry 4.0 and cognitive intelligence. The event was moderated

by an internationally acknowledged Brazilian management school. Apart from the main objective to transform ideas into genuine innovations, the program was also a big learning experience for the participants.

### China and Asia

160 local specialists have already taken part in the High Value Contributor Forum over the last 6 years. The target group for the one-year program is managers and experts who have been with Freudenberg China for at least 3 years. In a series of 4 modules, they further develop their leadership skills, acquire additional specialist knowledge and strengthen their ties with Freudenberg. The 7<sup>th</sup> Forum with 31 employees from 14 Freudenberg companies in China started in September 2016.

A whole series of training events also took place, including an introduction day called "Freudenberg in Vietnam", the "Cross Culture Ambassador" training in Singapore, and an intercultural training for the HSE (Health, Safety and Environment) network in China. Furthermore, framework agreements were concluded with 11 training providers in the region. These companies organize training events for all Business Groups at favorable terms and conditions – focusing primarily on sales and the leadership of industrial employees.

### India

Talent management in India continues to focus on the combination of management development, talent retention through individual training programs at various levels, and the recruitment of new talent from leading business schools in India.

A total of 15 training programs dealing with topics such as working effectively, leadership, presentation techniques or business etiquette were offered in 2016. Over 200 employees attended these programs.



## Group Management Report – Human Resources

### Vocational training at Freudenberg

In 2016, 112 young people (previous year: 126) began their vocational training at Freudenberg's German companies. The decline in the number of vocational trainees is chiefly due to changes at Freudenberg Sealing Technologies. In previous years the Business Group trained in excess of its requirements at the Weinheim location and realigned the number of vocational trainees accordingly.

In total, 402 people were training at Freudenberg in Germany as at December 31, 2016. The spectrum ranges from a two-year commercial or technical apprenticeship to dual studies at a university of cooperative education. Freudenberg has acquired a reputation for the high standard of its vocational training, as is confirmed by the fact that companies

located in the vicinity of Freudenberg operations send their young people to Freudenberg for training.

Building work on the new vocational training center in Weinheim began in the year under review. The center will offer innovative concepts for modern learning over 2 floors architecturally designed to make the best use of natural light. One example of such concepts is the "4.0 training factory" where vocational trainees acquire knowledge of company processes based on production workflows. This helps them to better understand interactions and improves the way they control processes on advanced, high-technology machines. Apart from technical workshops with advanced machines and a bright foyer on the ground floor plus seminar and social rooms on the first floor, the training center will also feature training stations with touchscreen monitors, a media library and an area for free learning and presentations.

## RESPONSIBILITY FOR SOCIETY

As a values-oriented, family-owned technology group, success for Freudenberg is financial success as well as fulfilling our responsibility for society. These two goals have been inseparably linked since the company was founded. Compliance, human rights and labor, sustainability, occupational health and safety and environmental protection along with corporate citizenship are anchored in the values and principles, in particular the “Responsibility” Guiding Principle. These 5 fields interact closely and are given expression in Freudenberg’s responsibility for society.

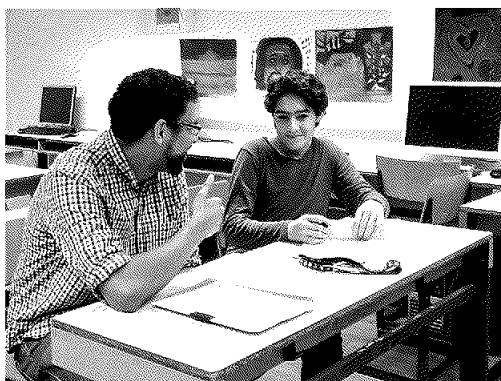
By signing the Global Compact in 2014, Freudenberg gave a commitment to a values-based and sustainable approach to business. The Group published its third Communication on Progress in June 2016. This report describes how Freudenberg brings the ten Global Compact principles on human rights, labor, environmental protection and anti-corruption to life.

### Group-wide “We all take care” initiative

“We all take care” is a Group-wide initiative launched in 2002 to foster the health and safety of all employees, environmental protection, social responsibility and site safety. Every employee is encouraged to put forward ideas and suggestions for improvement, thereby playing a personal role in putting the “Responsibility” Guiding Principle into practice in the working environment.

Each year, Freudenberg presents the “We all take care” Award to employees in recognition of their very successful commitment to the initiative. In the year under review, first place went to Freudenberg Sealing Technologies in Kufstein, Austria, for its “Integration of Refugees” project. Freudenberg Home and Cleaning Solutions came second with the “Safety First” project in Mumbai and Adas, both India. Third place went to the “Reduction of Musculoskeletal Disease” project from Freudenberg Performance Materials in

Weinheim. A total of 14 projects from all over the Freudenberg world took part in the final. 164 projects were submitted in total.



The “Integration of Refugees” project won the “We all take care” Award in the year under review. The photo shows a Freudenberg employee helping with homework.

### Environmental protection, occupational health and safety

The HSE (Health, Safety and Environment) Guideline contains the HSE principles and defines the stipulations laid down in the Freudenberg Group’s values and principles in relation to HSE issues in more concrete terms. The primary objectives are the prevention of all accidents, preventive health care, and the continuous reduction in the negative impact of business activities on the environment.

#### Management systems

The introduction of management systems relating to occupational health and safety (OHSAS 18001) and environmental protection (ISO 14001 or EMAS) continued in the 2016 financial year. Some 90 percent of the Freudenberg Group’s production facilities now operate an occupational health and safety management system pursuant to OHSAS 18001 and



## Group Management Report – Responsibility for Society

some 90 percent of production sites operate an environmental management system pursuant to ISO 14001 or EMAS.

### Investments

In the year under review, direct investments in occupational health and safety amounted to €19.0 million (previous year: €12.1 million). Direct investments in environmental protection amounted to €1.8 million (previous year: €2.7 million).

The share of direct investments in environmental protection, occupational health and safety in total investments in tangible assets, intangible assets and investment properties amounted to 5.1 percent (previous year: 4.9 percent).

### Preventive health care

The Group further expanded preventive health care management in 2016, and the health care principles were implemented under various programs and initiatives. Health care performance indicators, such as the sickness rate, have been recorded since 2011 to identify improvement potential and derive suitable measures. The transparency brought by this process has already led to a series of improvement projects.

One example is the initiative at Freudenberg Performance Materials in Weinheim. Some of the activities required to manufacture interlinings involve heavy manual work. The production process with all the critical activities was mapped on the basis of a thorough analysis of the individual working steps. Risk values for each activity were determined from the load, posture and environmental factors. In terms of ergonomics, four work steps were identified as extremely critical and in need of technical aids. The technical solutions were first tested on the production process and then gradually phased in on the entire manufacturing line.

### Occupational safety

Occupational safety measures focus on safety awareness among employees. One example of these efforts is the numerous projects implemented under the “We all take care” initiative. At the Freudenberg site in Novedrate, Italy, for example, the safety culture was brought home using experiential training. The first unit in the newly developed training module consists of improvised theater, teamwork and a dialog in the dark. Guided by a blind person, the teams experienced everyday situations and learnt to trust in others. 16 employees took part in the second unit of the training module which addressed virtual behavior. They were tasked with persuading their virtual partner to wear safety clothing. In the third unit of this experiential training, employees had to deal with an accident situation, teaming up to establish the course of the accident and processing the accident using the established procedure.

In 2015, Freudenberg began using the LDIFR (Lost Day Incident Frequency Rate) based on the pro-rata consolidation of the joint ventures in its internal reporting. On this basis, the LDIFR in 2016 was 1.7 (previous year: 1.3). This indicator serves as a non-financial performance indicator for the Freudenberg Group. It measures all accidents at work involving at least one day's absence per million working hours. Starting with the 2015 financial year, the indicator also includes data for temporary employees and agency staff. Based on the equity consolidation method for joint ventures, the LDIFR was 1.8 (previous year: 1.4).

The total number of accidents resulting in at least one day's absence from work during the year under review was 143 (previous year: 96). There were 10 serious accidents in 2016 (7 in the previous year). 4 of these serious accidents were fatal. An employee who worked for an external security company fell through a skylight at the Freudenberg Performance Materials site in Cape Town, South Africa. At the Neuenburg, Germany, location of Freudenberg Performance Materials, an employee was killed in connection with an unauthorized activity on a



machine. At the Sigma Freudenberg NOK site in Mohali, India, an employee was found injured at the phosphating line there and later died in hospital from his injuries. At the Wuxi, China, site of Wuxi Trelleborg Vibration Isolators Co. Ltd., an employee died at a machine where the safety system had been disenabled.

## Environmental protection

Environmental protection is firmly anchored in the values and principles of the Freudenberg Group and in business processes. The aim is to continually reduce negative effects on the environment throughout the value chain by using natural resources more efficiently, reducing emissions, saving energy, water and other consumables, and by optimizing transport processes. Freudenberg also takes ecological aspects into account when planning and modernizing buildings.

## Energy management

Many sites are introducing energy management systems certified to DIN EN ISO 50001 to improve energy consumption and thereby reduce the environmental impact of industrial activity. The Freudenberg Sealing Technologies, Freudenberg Performance Materials and Freudenberg Home and Cleaning Solutions Business Groups have established such management systems at their German production sites.

## Key data

In 2016, Freudenberg consumed 1.8 million megawatt hours of energy (previous year: 1.6 million megawatt hours). The break-down by sources of energy is as follows:

- Outsourced energy supplies (power, steam and district heat generated outside Freudenberg: 1.24 million megawatt hours)

- Gas (0.55 million megawatt hours)

- Fuel oil (0.03 million megawatt hours)

This energy consumption of 1.8 million megawatt hours translates into costs totaling approximately €134 million. Energy costs accounted for 1.7 percent of total sales (previous year: 1.7 percent).

There were 10 events with an environmental impact in 2016 (previous year: 3 events).

In March there were minor fires at the Freudenberg Home and Cleaning Solutions site in Augsburg, Germany, and the Freudenberg Performance Materials location in Weinheim, Germany. In June, the emission threshold for methanol at the exhaust air scrubber was exceeded at the Home and Cleaning Solutions site in Augsburg, Germany. Measures to restore compliance with the emission threshold were taken in cooperation with the competent authorities. There was no environmental damage or impact on the neighborhood. In July, a heating unit started a small fire at SurTec in Brazil; the fire was extinguished by the sprinkler system. There was a fire in the power infeed outside the building at the EagleBurgmann site in Wolfratshausen, Germany.

A fire occurred at Freudenberg Sealing Technologies in Plymouth, USA, in October. In November, there was a detonation at the power plant in Weinheim Industrial Park, Germany. In December, a thermal oil leak occurred at the Klüber Lubrication site in Dottignies, Belgium. The leak did not cause any further damage or environmental impact because the thermal oil was directly captured in the safety basin.

In December, a CO<sub>2</sub> unit raised the alarm at the Home and Cleaning Solutions in Augsburg, Germany – causing a brief interruption in operations. In the same month there was smoke formation at the Lederer GmbH site in Öhringen, Germany. The local fire services were alerted in both cases.



### Sustainability

Sustainability – in products and processes – is actively practiced at Freudenberg. During the year under review the company addressed the issue of sustainability from a strategic viewpoint, drafting a sustainability strategy for the whole company. As a global technology group, there are 2 dimensions to sustainability at Freudenberg: the first is concerned with how to design processes and utilize plant to conserve resources (footprint). The second relates to the numerous products and services offered by Freudenberg that enable customers to increase the efficiency or sustainability of their own manufacturing processes or to make their own products more resource-efficient (handprint).

Freudenberg identified 3 main themes – material efficiency, energy efficiency and emissions. All 3 play an important role throughout the Group and work commenced on defining key performance indicators which will enable greater transparency in future by making improvements visible and comparable across the Group. Furthermore, the groundwork was laid to make sustainability a systematic component of the strategy process.

The Freudenberg Group's constant quest for increased sustainability is a key driver for innovation. At the same time, innovation results in more sustainable processes and products. The one drives the other. Innovation can contribute to sustainability by having a direct positive impact on the footprint and handprint.

The following presents some examples:

- High-tech lubricants from Klüber Lubrication, a brand of Freudenberg, reduce friction between components and save energy compared with conventional oils. Energy costs can be cut by approximately 5 percent – a bonus for the environment and the company.

- Up to 90 percent of the materials used in the manufacture of the latest generation of buckets and brooms from Freudenberg's vileda® brand are recycled synthetics. Innovative manufacturing technologies result in an approximately 20 percent material reduction. In turn, this decreases the consumption of crude oil which used to be a raw material for most of the products. Furthermore, as no metal is used in their manufacture, the brooms themselves can also be recycled at end-of-life.
- Freudenberg Medical's coated balloon catheters release drugs into the body exactly where they are needed. The special compounds and innovative coating process have a better and longer-lasting effect – with just a third of the drugs normally required. This reduces the side effects for patients, decreases toxic waste at the medical center and reduces costs.
- Viledon® Water Solutions with Aquabio technology from Freudenberg Filtration Technologies are used in the food and beverage industry to treat water from the production process. The membranes used guarantee the reliable separation of solid particles and bacteria. Using reverse osmosis filtration and an additional disinfection stage, up to 70 percent of the wastewater can be purified to drinking water quality. These solutions help save energy and lower the cost of operating the filtration plant, thus reducing CO<sub>2</sub> emissions.
- EagleBurgmann delivers mechanical seals and seal supply systems for pumps and compressors in use at the most modern oil platform in the world off the Norwegian coast. EagleBurgmann has long-term experience in the oil industry and benefits its customers with valuable technological know-how. Products from the company enhance process safety, availability and efficiency.

## Corporate citizenship

At Freudenberg, corporate citizenship has always been an integral part of corporate leadership and is practiced both inside and outside the company. The Group's aim is to be a responsible corporate citizen in all states, countries and communities where it does business, and to be recognized as a good neighbor. For Freudenberg, corporate citizenship goes beyond the value chain.



Happy with e<sup>2</sup>: disadvantaged children in Bangalore, India, are among those who benefit from the Freudenberg program.

To strengthen its corporate citizenship, Freudenberg launched the "e<sup>2</sup>" (education and environment) international program in 2015. The objective is to give people access to education and work and to encourage environmental protection. e<sup>2</sup> complements existing initiatives based on a catalog of specific criteria. Over a 6-year period, Freudenberg is making available funds totaling €12 million. A broad range of projects was supported during the year under review, from small actions to major education programs in the direct neighborhood of Freudenberg sites. Examples of projects that receive support from the initiative include the following: "Beyond Basics" furthers the literacy of children in under-resourced communities in Detroit, USA. The Parikrma Humanity Foundation provides under-served children from the slums of Bangalore, India, with a high quality education. Freudenberg

Performance Materials employees in Zavolzhie, Russia, helped to green and renovate the central square and the pedestrian area along the main city road.

Numerous projects to help refugees again demonstrated that Freudenberg offers support where aid is needed. Employees, retired employees and Partners donated around €540,000 by the end of 2015. Freudenberg tripled that figure. Furthermore, Freudenberg is making €250,000 available each year until 2019 for the integration of refugees, and donating a further half a million euros to the Freudenberg Foundation for its refugee initiatives.

Some 70 projects funded so far provide emergency aid in Germany and the crisis zones as well as supporting integration through education. Projects funded during the year under review concentrated in particular on children and teenagers, families with children, and older people, with a special focus on projects where employees are making a personal commitment. With these projects, Freudenberg, along with numerous other German companies, is supporting the "Wir zusammen" (We together) initiative of German industry.

One example of projects receiving support is the internship completed by young refugees at Freudenberg in Weinheim in mid-October as part of a special preparatory year at a local vocational college. The aim is to prepare the young people to take up places on dual training courses to become metalworkers or machine and plant operators – these skills are in demand on the labor market. The refugees will complete a series of 4 2-week internships at Freudenberg's vocational training center.

Aside from this commitment, many of the Group's companies, sites and employees again engaged in local projects in 2016 – from small initiatives to complex projects. All activities are tailored to meet local needs and usually involve the engagement of local Freudenberg employees.



## Group Management Report – Responsibility for Society

Examples in 2016 included the second Service Day organized by Freudenberg in North America. Employees in more than 60 locations in Canada, the USA and Mexico spent time helping in educational institutions, local communities and agricultural businesses.

The following two examples illustrate the long-term nature of the local projects: Freudenberg gives young people the opportunity to complete dual study courses to qualify as welders, plumbers, engine mechanics and machine fitters at a nonprofit training center in Nagapattinam in the Indian state of Tamil Nadu south of Chennai opened in 2009. In 2016, the curriculum was expanded to include the profession of electrician. So far, some 400 young people have successfully set out on a career since the center was founded. The Nagapattinam region, with a population chiefly comprising low-income agricultural workers and fishermen, was very hard hit by the tsunami in 2004.

An elementary school was rebuilt with Freudenberg's help and opened in 2009 in Haijin, a village in Sichuan province, China, hit by an earthquake in May 2008. The buildings provide some 300 students with the right setting for a successful start to their education. Freudenberg employees visit the school each year and organize various activities such as the summer school project, extra tuition and a Christmas party.

A new multi-function hall was inaugurated in July 2016. The 250 square meter building with its modern equipment is a venue for events and sports activities.

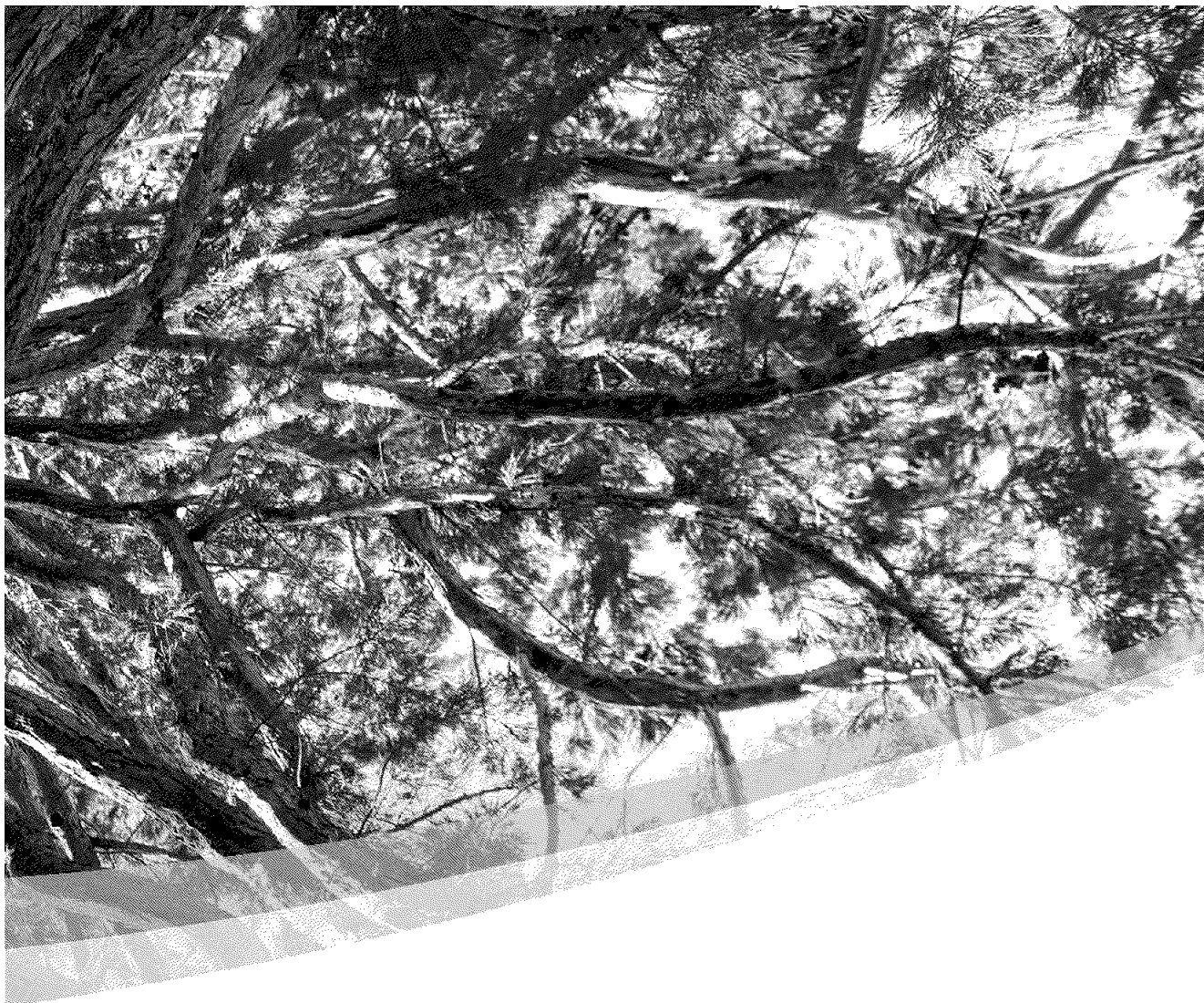
TANNER, Freudenberg's youth exchange program, was launched on the occasion of the Group's 150<sup>th</sup> anniversary in 1999. The program offers young people the opportunity to encounter different cultures, broaden their horizon and learn for life. So far, more than 1,100 young people have traveled the globe with TANNER. In the process, the young participants, their parents and their host families have gained a stronger sense of belonging to the global Freudenberg community.

Since 1984, Freudenberg Foundation has been promoting long-term structural change and contributing to more inclusion, education and democracy with its programs. As a nonprofit limited company, the foundation is a shareholder of Freudenberg & Co. KG. All projects focus primarily on children and young people and their social, language, educational and vocational integration.

Furthermore, the Freudenberg Group has been a committed Enactus partner for over 12 years: some 20 senior managers from the company sit on the Country Boards in the regions of Germany, China and the USA. Many Enactus students write their undergraduate theses or complete internships with the Group. In addition, Freudenberg is one of the organization's sponsors. Freudenberg hosted the meeting of the Enactus network in Weinheim for the third time during the year under review. Workshops with students at several Chinese universities were organized in China.



## STRONG COMPANY VALUES



At Freudenberg, strong company values are the basis of all business activities. Freudenberg employees live responsibly in everything they do – in their dealings with customers, business partners, neighbors and the environment.

These values and principles are valid worldwide and have been embedded in Freudenberg's culture for more than 165 years, guiding daily interaction. The Freudenberg Business Principles and Guiding Principles bring employees in 60 countries together as one Freudenberg family.

The Freudenberg Group remains in family ownership. This financial independence allows the company to take a long-term view. Freudenberg is proactive, operates with commercial foresight and maintains long-standing relations with customers and partners in all regions of the world – always based on a strong values structure.



## REVIEW OF OPERATIONS BY BUSINESS AREA

The Freudenberg Group's 4 Business Areas – Seals and Vibration Control Technology, Nonwovens and Filtration, Household Products, and Specialties and Others – focus on long-term, sustainable and profitable growth.

Together with its partners, customers and the world of science, the Freudenberg Group develops leading-edge technologies, and excellent products, solutions and services for more than 30 market segments and for thousands of applications in the spirit of the positioning “Freudenberg is a values-based technology group that best serves its customers and society”.

Freudenberg uses sales data for the joint ventures based on the pro-rata consolidation method and the operating result as internal performance indicators. The sales and workforce data in the chapter entitled “Review of Operations by Business Area” are presented on a pro-rata basis.

In the consolidated financial statements, however, the joint ventures are consolidated by the equity method. Sales and workforce data as well as assets and liabilities items are therefore not taken into consideration. This primarily concerns the Freudenberg Sealing Technologies Business Group.

### SEALS AND VIBRATION CONTROL TECHNOLOGY BUSINESS AREA

In the 2016 financial year, the Seals and Vibration Control Technology Business Area comprised the following 5 Business Groups:

- Freudenberg Sealing Technologies
- Freudenberg Oil & Gas Technologies
- EagleBurgmann
- Freudenberg Medical
- Vibracoustic

In 2016, some 75 percent of sales in this Business Area were generated by the automotive industry and the plant and mechanical engineering industry. Sales in this Business Area rose to €4,879.3 million (previous year: €4,330.6 million). The headcount at year-end rose to 32,162 (previous year: 27,351).

## Group Management Report – Review of Operations by Business Area

FREUDENBERG SEALING TECHNOLOGIES		
	2015	2016
Sales [€ million]	2,269.5	2,311.2
Workforce	15,146	15,131

### FREUDENBERG SEALING TECHNOLOGIES



#### Annual figures

The Business Group grew sales in the year under review to €2,311.2 million (previous year: €2,269.5 million). The increase is above all attributable to stronger demand in the automotive sector.

Freudenberg Sealing Technologies had a headcount of 15,131 at December 31, 2016 (previous year: 15,146 employees).

#### Business development

2016 was a very successful year overall for Freudenberg Sealing Technologies. The divisions expanded or consolidated business despite at times very difficult market conditions.

Freudenberg Sealing Technologies reported excellent sales and results for automotive business in North America, particularly in the first half of the year. Furthermore, the Business Group benefited from

special effects in the automotive sector in China, where the reduction in purchase tax for small cars led to increased demand in this segment. The Brazilian market again fell short of expectations.

Business in the industrial sector, on the other hand, proved challenging. Volumes in the construction machinery, mining, steel and shipbuilding sectors as well as in the Europe and North America regions declined. There was growth in India and China.

#### Key events

Freudenberg Sealing Technologies increased production capacity at the Oberwihl site, investing some €10 million there. Products manufactured at the Black Forest site include O-rings for industrial and automotive customers. With approximately 1,000 square meters of additional manufacturing space, the modernization of existing production facilities and a completely revamped plant infrastructure, the site has been made fit for the future.



Some €10 million was invested in Bursa, Turkey, creating one of the most advanced plants in the Business Group's global network. Production space was expanded to 9,000 square meters. Going forward, Bursa is to supply European customers, and business activities in Turkey and the Middle East are to be expanded. The range of products already includes encoders, bearing seals, radial shaft seal rings and cassette seals that are used in engines and transmissions.

Freudenberg Sealing Technologies doubled production space at its plant in Kecskemét, Hungary, to almost 6,000 square meters. The investment of some €4 million marks the first part of a perennial investment program and extensive expansion work totaling €13 million. Advanced production processes are used to manufacture some 100 million seals per year at the plant – including radial shaft seal rings for transmission and drivetrain applications such as the Energy Saving Seal (ESS™), which contributes to a significant reduction of vehicle fuel consumption and emissions.

The Business Group reached agreement with employee representatives and the *Industriegewerkschaft Bergbau, Chemie, Energie (IG BCE)* union on restructuring and on preserving some of the liquid silicone business at the Öhringen site. Under this agreement, production is to be partially relocated and 38 of the approx. 150 jobs are to be cut. In return, Öhringen is to be given a plant guarantee until the end of 2019. In addition, investments in the single-digit million range are to be made in both production and tooling over the next 2 years.

The business of Freudenberg Schwab Vibration Control was sold to Trelleborg Holdings Germany GmbH, Stuttgart, Germany, effective October 1, 2016. The vibration control business for railway rolling stock and the general industry sector can continue to grow and expand globally in this environment, and is thus being given a long-term perspective.

Levitex, the gas-lubricated mechanical seal, was one of the most significant technical innovations in 2016.

Freudenberg Sealing Technologies was a finalist for the 35<sup>th</sup> German Industry Innovation Award. The award's partners honored the most significant scientific, technical and entrepreneurial innovations of German industry in mid-April.

Further innovations also achieved market success in the year under review. Among other things, Freudenberg Sealing Technologies supplies an innovative sealing solution for portable insulin pumps manufactured by the Swiss medical technology specialist Ypsomed. With a weight of just 83 grams – including the battery – and a thickness of just 16 mm, the pump is very compact and comfortable to carry. Cooperation with specialty lubricant manufacturer Klüber Lubrication, also part of the Freudenberg Group, ensures the pump's flawless functioning over its prescribed four-year lifespan. The key is the proven "Lube & Seal" concept based on the perfect interaction of seal and lubricant.

More and more manufacturers of commercial vehicles are working on new concepts which convert some of the exhaust heat into kinetic energy. In this way, the fuel consumption of heavy trucks is expected to be cut by a minimum of 5 percent. Freudenberg Sealing Technologies supports such developments with its innovative Low Emission Sealing Solutions (LESS).

Freudenberg Sealing Technologies presented Levitas, a new generation of low-friction transmission seals, at the end of 2016. Levitas seal rings are suited for installation in all forms of automated transmissions. A special seal design produces a hydrodynamic oil film between the seal ring and its dynamic counter surface. This reduces friction to the point that merely replacing conventional transmission seals in an automatic transmission reduces the vehicle's CO<sub>2</sub> emissions by 0.8 grams per kilometer. As no physical contact remains between the shaft and the seal ring, only fluid friction remains, causing torque levels to decline by up to 70 percent. If 1 million new vehicles were equipped with Levitas seals, the total emissions over their entire operating life would decline by 192,000 tonnes.



Group Management Report – Review of Operations by Business Area

**Profile:**

*As a leading specialist in sealing applications and their market, Freudenberg Sealing Technologies is a supplier, development and service partner for customers in very diverse market segments, such as the automotive industry, civil aviation, mechanical engineering, shipbuilding, food and pharmaceuticals, and agricultural and construction machinery.*

*Based on the Simmerring® which was developed by Freudenberg in 1932, Freudenberg Sealing Technologies has built up a broad and continuously expanding range of sealing technology products – from customized solutions to complete sealing packages. Together with its partner NOK Corporation, Japan, Freudenberg Sealing Technologies forms a global network with the aim of offering products of the same high quality. In addition, Dichtomatik and Corteco also come under the Freudenberg Sealing Technologies umbrella. Dichtomatik is Freudenberg's sales organization in the market for technical seals. Corteco is the Freudenberg Group specialist for the independent automotive aftermarket specializing in spare parts for seals and vibration control as well as service parts such as cabin air filters.*

*Products and services*

*Simmerrings, diaphragms, high-precision molded parts, bellows, dust boots, hydraulic accumulators, O-rings, seals for hydraulic and pneumatic applications, frame gaskets, silicone seals, shock absorber seals, valve stem seals and various special seals; sealing packages for engines, gearboxes, brakes, axles and steering systems; rubber, plastic and PTFE components for suspensions; special seals for electrical and fuel systems; sealing solutions for special applications*

*Production locations*

*Austria, Brazil, Canada, China, Czech Republic, Estonia, France, Germany, Hungary, India, Italy, Mexico, Spain, Turkey, UK, USA*

*Freudenberg Sealing Technologies GmbH & Co. KG  
69465 Weinheim | Germany  
Phone: +49 6201 80 6666  
Fax: +49 6201 88 6666  
E-mail: [info@fst.com](mailto:info@fst.com)  
[www.fst.com](http://www.fst.com)*

FREUDENBERG OIL & GAS TECHNOLOGIES		
	2015	2016
Sales [€ million]	129.2	88.5
Workforce	619	478

## FREUDENBERG OIL & GAS TECHNOLOGIES



### Annual figures

In the year under review, Freudenberg Oil & Gas Technologies generated sales of €88.5 million (previous year: €129.2 million).

The Business Group's headcount at December 31, 2016 was 478 (previous year: 619 employees).

The decrease in sales is attributable to persistently difficult market conditions caused by the over-supply of crude oil, and the resulting low oil price.

### Business development

Market conditions for Freudenberg Oil & Gas Technologies once again proved extremely challenging throughout the year. 2016 was the most difficult year since the Business Group was founded in 2011. The price per barrel of crude oil remained low as a result of over-supply. This led to lower investments by the oil and gas industry. The lower level of

investment activity had a negative impact on the Business Group's sales and result. Impairment losses were therefore recognized under the impairment test.

### Key events

Freudenberg Oil & Gas Technologies therefore focused its efforts in 2016 on implementing restructuring, efficiency programs and cost-cutting measures as well as reducing production capacity. These activities were carried out at all Freudenberg Oil & Gas Technologies locations around the world. The aim is to make business stronger and more profitable so that the Business Group is ready when the oil and gas industry picks up again.

During the year under review the Business Group invested solely in specific health, safety and environmental requirements as well as capabilities at the Vector Technology Group site in the UK.

Even though drilling and well completion activity was down approximately 50 percent on 2015, the



## Group Management Report – Review of Operations by Business Area

Business Group was able to maintain relations with key customers while developing new customer contacts in virtually all areas.

The Business Group continued its upstream-focused (exploration and production) strategy in the year under review. It developed proprietary products that will support future growth at Freudenberg Oil & Gas technologies.

### *Production locations*

*Canada, Norway, United Arab Emirates, UK, USA*

### *Freudenberg Oil & Gas Technologies*

*10035 Brookriver Drive, Suite 400*

*Houston, Texas 77040 | USA*

*Phone: +1 281 233 1400*

*Fax: +1 281 894 5232*

*E-mail: sales@fogt.com*

*www.fogt.com*

### **Profile:**

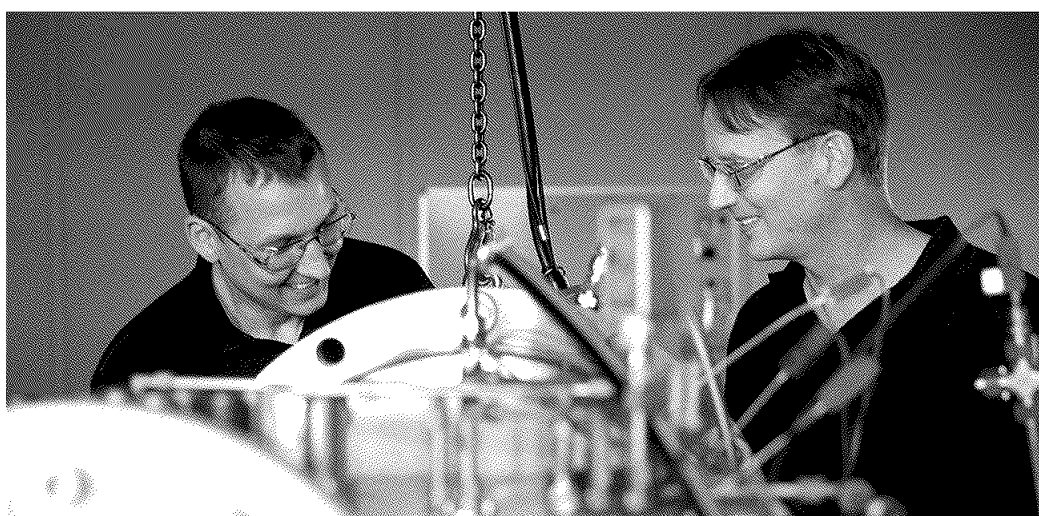
*Freudenberg Oil & Gas Technologies provides innovative sealing solutions and differentiated sealing products to the global oil and gas industry. The Business Group focuses on solutions for the upstream exploration and production segment. It develops and markets products for drilling / BOP (pressure control), wellhead equipment, fracturing services, offshore oil and gas platforms, and subsea applications. Freudenberg Oil & Gas Technologies serves a wide range of customers including oil and gas producing companies, original equipment manufacturers (OEMs) and engineering and service companies that provide technologies, equipment and services for producing oil and gas from land-based, offshore platforms and subsea throughout the world. Freudenberg Oil & Gas Technologies has its own materials development and product testing lab where new materials and solutions are developed and tested.*

### *Products and services*

*Component elastomer specialty seals, ram and annular blowout preventer seal elements and seal kits, engineered thermoplastic seals, seal stacks and assemblies, standard and proprietary metal seals, spiral wound gaskets and sheet gaskets, high-performance connectors with metal-to-metal seal technology for the most demanding offshore and subsea applications, SPO® Compact Flange, Techlok® Clamp Connector and the "Remotely Operated" Optima® Subsea Connector as well as the BlueSky RotaBall™ swivel connector, the FlexBall™ connector, AlignLock™ misalignment flange and the BlueLock™ connector.*

EAGLEBURGMANN		
	2015	2016
Sales [€ million]	806.3	778.5
Workforce	5,771	5,551

## EAGLEBURGMANN



### Annual figures

Sales by the Business Group in 2016 ran at €778.5 million (previous year: €806.3 million).

EagleBurgmann's headcount at December 31, 2016 was 5,551 (previous year: 5,771 employees).

### Business development

Many of the Business Group's markets continued to deteriorate in the year under review and were affected by uncertainty. Furthermore, currency effects had a negative impact on sales.

Customers in the oil and gas industry and the refinery sector cancelled or decelerated project investments as a result of the low oil price. There was, however, also a positive side to the oil price. The Business Group reported a higher level of incoming orders from sectors that use oil products as feedstock, such as the chemical industry. With a

broad portfolio of products for segments such as chemical, water, food and beverages, power plant technology, energy or pharmaceuticals, EagleBurgmann has a very good international presence and was therefore able to cushion the decline in orders from stagnating sectors. The TotalSealCare modular sealing service underscored the strong customer orientation.

In global terms, EagleBurgmann reported a decline in orders during the year under review, but nevertheless maintained orders at a level above the market trend. China has seen a general slow-down in market growth in the sealing business, but project business with OEMs picked up again towards the end of 2016. The Indian market began to recover from a weak period lasting several years. The state-owned oil companies in Mexico and Brazil were still in the restructuring phase during the year under review. EagleBurgmann won major project orders in Venezuela. However, hyperinflation there had a negative impact on the result.



## Group Management Report – Review of Operations by Business Area

### Key events

EagleBurgmann reported a record level of incoming orders in the project business despite the difficult market conditions. Participation in major projects was successfully expanded. The orders for the “Clean Fuels” modernization and expansion project for 2 refineries in Kuwait were delivered in the first half of 2016. As a follow-up, EagleBurgmann was awarded the contract to deliver seals and supply systems for the planned new “Al-Zour” refinery, also in Kuwait. The service business, although in general very stable, came under perceptible cost pressure.

EagleBurgmann developed the world’s largest split seal for a new pump in a pump storage facility at Oscheniksee in Austria; the seal is designed to withstand extreme pressure and has a very large shaft diameter. The market for these seals is growing, partly because more pump storage facilities are being built, but also because existing systems are being modernized. Pump storage power plants are an important element in renewable power supplies and are used to even out energy peaks. Similar EagleBurgmann seals are installed in pumps used in irrigation projects in drought regions or in wastewater technology. One such project is the “Lee Tunnel” in London, where the deepest tunnel ever constructed under the River Thames captures enormous volumes of sewage.

The CobraSeal compressor seal has proved very successful as an innovative sealing solution. Bearing oil seals are an essential component of any centrifugal compressor. CobraSeal products are now being delivered to all major compressor manufacturers or are being retrofitted in numerous compressors. Both OEMs and end users are buying this high-quality product which significantly reduces operating and service costs in the medium term and improves plant safety.

Another focus in 2016 was the integration of compressor business in defined regions with a view to significantly stepping up sales activities as well as realigning the cost basis. The concept for further standardizing and modularizing mechanical seals combined with the centralization of engineering activities in competence centers (America, Europe, India, China) was implemented and had a positive impact on engineering speed. Globalization of process and master data organization proceeded as planned.

An internal corporate initiative was launched to prepare for further deterioration in the market environment. The initiative includes intensifying the spare parts business, further optimizing sales and customer relationship processes and stepping up global procurement activities. It also focuses on further standardization and organizational evolution.



**Profile:**

*EagleBurgmann figures among the internationally leading companies for industrial sealing technology. The Business Group manufactures and markets a broad range of high-quality products – from individual designs right through to large-batch productions, irrespective of whether these are highly complex dynamic seal systems such as mechanical seals and supply units or special gaskets for a diversity of applications and sectors of industry. A workforce of around 5,600 employees in over 60 subsidiaries develops and produces EagleBurgmann seal solutions which customers around the world can rely on. A close-knit global sales and service network testifies to an international presence and customer proximity. The products are installed wherever safety and reliability are major design considerations when sealing demanding mediums under the most challenging technical conditions, for example in the oil and gas, refinery, chemical, pharmaceutical, energy, food processing, paper, water, shipbuilding, aerospace and mining industries.*

*Products and services*

*Mechanical seals, gas lubricated seals, carbon floating ring seals, magnetic couplings, seal supply systems, stuffing box packings, flat gaskets, expansion joints, TotalSealCare services; environmentally compatible solutions, standardization of sealing systems and application testing; after-sales service with assembly, commissioning, repair and damage analysis, sealing technology seminars and practical training*

*Production locations*

*Austria, Brazil, China, Denmark, Germany, India, Italy, Japan, Mexico, Turkey, USA*

*EagleBurgmann Germany GmbH & Co. KG*

*Äußere Sauerlacher Straße 6-10  
82515 Wolfratshausen | Germany*

*Phone: +49 8171 23 0*

*Fax: +49 8171 23 1214*

*E-mail: [info@eagleburgmann.com](mailto:info@eagleburgmann.com)*

*[www.eagleburgmann.com](http://www.eagleburgmann.com)*

## Group Management Report – Review of Operations by Business Area

FREUDENBERG MEDICAL		
	2015	2016
Sales [€ million]	154.7	167.6
Workforce	1,138	1,329

### FREUDENBERG MEDICAL



#### Annual figures

Freudenberg Medical generated sales of €167.6 million (previous year: €154.7 million) in the year under review. Growth is primarily attributable to projects with major OEMs and higher order levels in strategic areas such as special components, minimally-invasive solutions and innovative ear, nose and throat devices, as well as the first full-year consolidation of Hemoteq AG, Würselen, Germany.

At year end, the Business Group had a headcount of 1,329 (previous year: 1,138 employees).

#### Business development

Freudenberg Medical expanded its market presence and continued to serve the majority of the leading global manufacturers of medical devices in the year under review. The medical device market was again characterized by growth in 2016.

Consequently, Freudenberg Medical reported positive business development in all segments in the year under review and expanded the customer base, for example through the sale of innovative coating technologies and services.

The medical device supplier market saw widespread consolidation in 2016. As one of the leading medical technology suppliers, Freudenberg Medical is well positioned to benefit from these developments.

Proprietary products for the minimally-invasive markets, including the FlexSeal® introducer, triggered significant interest among a high number of customers. The FlexSeal® introducer is an innovation from Freudenberg Medical that significantly improves the introduction of a wide range of catheter systems during minimally-invasive interventions.



## Key events

Freudenberg Medical continued to invest in expanding the proprietary technology base in 2016. New hydrophilic and drug coatings, manufacturing technologies for ablation catheter tips and balloon catheters as well as advanced molding and extrusion solutions were the main focus areas. The InHealth division acquired a number of product patents to expand the successful Blom-Singer® product line. Blom Singer® is a line of ear, nose and throat products, particularly voice prostheses for laryngectomy patients, that has enjoyed considerable market success for many years.

Freudenberg Medical completed an approx. 930 square meter expansion of office and warehouse space at its silicone tubing plant in Carpinteria, USA, during the year under review. The Business Group is optimizing its supply chain with the new building and can now realize high-volume extrusion and molding projects more efficiently. The site specializes in the manufacture of platinum-cured silicone products for the medical device and pharmaceutical industry.

Furthermore, Freudenberg Medical expanded the site in Shenzhen, China, in 2016 to accommodate the rapid growth of business in the region. In addition, a project to set up a new legal entity in China was started which will allow to serve the Chinese domestic market even better.

The joint venture VistaMed Ltd., Carrick-on-Shannon, Ireland, a leading provider of catheter and extrusion solutions, opened a new research and development facility in Carrick-on-Shannon. The new center will help to further enhance the already rapid project 'turnaround' times.

In 2016, Freudenberg Medical continued the roll-out of its global ERP system with implementation at its sites in Jeffersonville, USA, and Minnetonka, USA.

The system is a key prerequisite for the ongoing harmonization of the quality system according to medical device standards across all global sites.

## Profile:

*Freudenberg Medical is the global partner for the design, development and manufacture of innovative medical device technologies. The product range includes minimally invasive catheter technology utilizing complex materials and processes. The company leads the way in manufacturing high-precision silicone and thermoplastic components and tubing as well as metal hypotubes.*

## Products and services

*Thermoplastic molding, silicone molding (HCR, LSR), silicone and thermoplastic extrusions, complex diagnostic and therapeutic catheters, assembly, packaging, sterilization and engineering services, medical device coatings including drug coatings for combination products*

## Locations

*China, Costa Rica, Germany, Ireland, USA*

*Freudenberg Medical, LLC*

*1110 Mark Avenue*

*Carpinteria, California 93013 | USA*

*Phone: +1 805 684 3304*

*Fax: +1 805 684 1934*

*E-mail: [info@freudenbergmedical.com](mailto:info@freudenbergmedical.com)*

## Group Management Report – Review of Operations by Business Area

VIBRACOUSTIC <sup>1,2</sup>		
	2015	2016
Sales [€ million]	970.9	1,533.5
Workforce	4,677	9,673

<sup>1</sup> 2015 figures: pro-rata consolidation (50 percent)

<sup>2</sup> 2016 figures: pro-rata consolidation (50 percent) for 1<sup>st</sup> half-year, full consolidation (100 percent) for 2<sup>nd</sup> half-year following gaining of control

### VIBRACOUSTIC



Pursuant to the arrangements set out in the joint venture contract with Trelleborg concluded in 2012, various options for the future shareholder structure of the TrelleborgVibracoustic joint venture were explored at the beginning of 2016. These activities included preparations for a possible IPO, and as planned, TrelleborgVibracoustic GmbH was renamed Vibracoustic GmbH. In April 2016, the Freudenberg Group decided to acquire Trelleborg's 50 percent shareholding in the joint venture to gain additional flexibility to develop the Vibracoustic Group strategically. The transaction was approved by the antitrust authorities on July 5, 2016.

#### Annual figures

Based on the 50 percent shareholding for the first half-year 2016, pro-rata sales for the year under review attributable to Freudenberg amounted to €1,533.5 million (previous year: €970.9 million). Vibracoustic generated total sales for the full 2016

financial year of €2,045.9 million (previous year: €1,941.8 million).

The headcount at 31 December 2016 was 9,673 (previous year: 4,677 employees, 50 percent pro-rata share) – with a significant rise in Asia and North America. Assuming a 100 percent share in the previous year, Vibracoustic would have had a headcount of 9,353 employees in 2015.

#### Business development

Vibracoustic continued on its sustainable growth trajectory in an environment characterized by persistently high price pressure and consolidation. The Business Group once again reported strong organic growth that outpaced the market and improved its earnings margin.

The Business Group outpaced growth in the relevant market segments in Asia, North America and Europe.



In a regional comparison, business in Asia enjoyed the highest growth by a clear margin. There was single-digit percentage growth in North America and Europe.

The difficult situation in Brazil had a negative impact on the Business Group. Business in Russia continued to deteriorate as a result of the persistently low oil price and ongoing economic sanctions, although there were signs of stabilization.

The Business Group again won numerous major orders for global vehicle platforms during the period under review. In the Chassis Business Unit, BMW placed one of the largest orders for air springs for applications in the new BMW X5. General Motors ordered hydromounts, primarily for large SUVs and pick-up trucks. Further major orders for the Chassis Business Unit were placed by Fiat, Chrysler and Ford.

The Powertrain Business Unit won major orders from customers such as BMW and Ford. BMW will fit torsional vibration dampers from the Vibracoustic Business Group in its new generation of straight six-cylinder petrol engines. Ford placed a major order for torsional vibration dampers for the 6.7-liter V8 diesel engine mainly used in trucks and pick-up trucks sold by the Ford Group in the American market. A further major order was placed for the complete engine mount system in the Ford Ranger pick-up truck built in South and North America, South Africa and Thailand.

## Key events

Vibracoustic CV Air Springs in Turkey has become an important part of Vibracoustic in recent years and has consistently contributed to the Business Group's organic growth and operating result. The shareholding was increased from 50.1 to 65.1 percent in December 2016 with a view to leveraging the potential of truck air springs operations even more effectively and intensifying integration in Vibracoustic's overall strategy.

One key initiative to secure cost leadership as part of the "Driving Growth and Efficiency" strategy is the creation of a global organizational structure. The aim of the new structure is to enhance Vibracoustic's global customer orientation and reduce organizational complexity. The new organization brings clearly-defined responsibilities, reduces interfaces, improves project implementation and speeds up decision-making, culminating in greater organizational efficiency throughout the organization.

The biggest change in the new structure concerned the merger of 6 former Divisions to become 2 Business Units (BU) – Chassis and Powertrain. The Chassis BU comprises the Chassis Mounts, Micro-Cellular Urethane (MCU), and Air Springs product groups. The Powertrain BU is made up of the Engine Mounts, Torsional Vibration Dampers, and Isolators & Damper product groups. The new organizational structure came into effect in the Business Group on December 1, 2016 and enables the Business Group to meet the needs of its customers worldwide even more effectively.

In 2016, the Business Group again moved forward with innovations in several areas that support automakers in serving current and future megatrends. Rising demand for greater comfort, enhanced safety and improved performance combined with reduced fuel consumption and lower costs presents an ever-growing challenge. The Business Group is therefore breaking new ground in the choice of materials, design optimization and functional integration.

Innovations that went into production in 2016 included a new decoupled solution for powertrains. It helps to improve noise decoupling and isolate torque peaks. The "NRG Disc" (New Rubber Generation Disc) is a cord-reinforced flexible prop shaft coupling fitted to the drive shaft that can be adjusted according to the customer's requirements without a change of geometrical dimensions. The disc can also withstand the highest torsional torques and is significantly more durable and lighter



## Group Management Report – Review of Operations by Business Area

than current series-produced solutions available on the market.

The Business Group also made progress with developing a new generation of decoupled pulleys. The overrunning damper isolation pulley combines the excellent isolation characteristics of the known rubber isolators with a one-way-clutch feature. High belt tension and friction can be reduced, thus lowering fuel consumption. The additional freewheel enables car manufacturers to make further reductions in consumption and CO<sub>2</sub> emissions.

Vibracoustic also recently started to develop and produce fluid torsional vibration dampers (TVDs). A fluid TVD reduces torsional vibrations of the crankshaft via the damping characteristics of a highly viscous silicone oil, which is located in a working gap created by housing and flywheel ring. In contrast to an elastomer TVD, a fluid TVD dampens torsional vibrations in a wide frequency range and thus achieves superior performance. With this product, Vibracoustic is also matching the current downsizing-trend in the automotive industry.

### **Profile:**

*Vibracoustic is the world's leading supplier of anti-vibration solutions for the automotive industry. With around 9,700 employees across a global network of development and production sites, Vibracoustic supplies all major vehicle manufacturers worldwide with automotive vibration control products that boost comfort on board.*

*The Business Group has many years of technical expertise from the automotive vibration control divisions of the Freudenberg and Trelleborg groups. This combines detailed knowledge of materials development with a deep understanding of the entire vehicle. From low-volume production to global platforms, from cars to heavy-duty commercial vehicles, the Business Groups offers customized solutions.*

*Vibracoustic takes advantage of its leading role in vibration control technology to support constant process and product innovations, seeking to be the first choice for customers when it comes to product and production quality as well as cost.*

### *Products and services*

*Engine mounts, transmission mounts, components for chassis, air springs, torsional vibration dampers, isolators and dampers, MCU (microcellular urethane) components*

### *Locations*

*Brazil, China, Czech Republic, France, Germany, Hungary, India, Japan, Mexico, Poland, Romania, Russia, South Africa, South Korea, Spain, Sweden, Thailand, Turkey, USA*

*Vibracoustic GmbH  
64293 Darmstadt | Germany  
Phone: +49 6151 3964 0  
Fax: +49 6151 3964 444  
E-mail: [contact@tbvc.com](mailto:contact@tbvc.com)  
[www.vibracoustic.com](http://www.vibracoustic.com)*

#### NONWOVENS AND FILTRATION BUSINESS AREA

In the year under review, the Nonwovens and Filtration Business Area comprised the following Business Groups:

- Freudenberg Performance Materials
- Freudenberg Filtration Technologies
- Japan Vilene Company

In total, the Business Area generated sales of €1,812.0 million (previous year: €1,370.7 million). At year-end 2016, the headcount was 8,334 compared with a headcount of 6,074 at the close of the previous year. The major markets for the Business Area are textile and apparel, automotive, energy, health, horticulture, agriculture, and construction.

#### FREUDENBERG PERFORMANCE MATERIALS





## Group Management Report – Review of Operations by Business Area

FREUDENBERG PERFORMANCE MATERIALS		
	2015	2016
Sales [€ million]	976.6	950.9
Workforce	3,803	3,755

### Annual figures

In 2016, Freudenberg Performance Materials generated sales of €950.9 million (previous year: €976.6 million). Exchange rate effects had a negative impact.

The headcount at December 31, 2016 was 3,755 (previous year: 3,803).

### Business development

Overall, business development for Freudenberg Performance Materials in the year under review was positive, although market conditions in some segments and various geographic regions were mixed.

In Europe, Freudenberg Performance Materials reported growing sales in the automotive, cable, adsorptive and carpet tiles business as well as in industrial applications for microfilament textiles based on Evolon® technology. Business in the construction industry, on the other hand, stagnated. The apparel business felt the effects of persistently weak demand in Southern and Eastern Europe.

Asia showed strong demand in the automotive and carpet tiles business, although competitive pressure intensified. In contrast, the apparel market lost momentum, above all in the luxury segments in China.

Growth in the carpet tiles market continued in North America. The Business Group's sales of microfilament textiles based on Evolon® technology continued to develop well in the dynamic automotive market. The microfilament textile launched in 2015 weighs less and has better sound absorption than comparable products.

Conditions in South America remained extremely challenging. The persistent recession had a strong impact on demand in Argentina and Brazil. Freudenberg Performance Materials therefore

restructured business there to create the basis for long-term success.

### Key events

Having combined the 2 formerly independent Business Groups Freudenberg Nonwovens and Freudenberg Politex Nonwovens the previous year, Freudenberg Performance Materials was able to leverage technology and materials synergies more effectively in the year under review, also further optimizing processes and pooling knowledge. Intensive Operational Excellence activities resulted in improvements in productivity, efficiency and product quality, thus putting the Business Group in a position to serve its customers even better.

In order to remain competitive and successful over the long term, Freudenberg Performance Materials must be in a position to respond flexibly to market conditions such as increasing competitive pressure and regional customer demands at its sites throughout the world. The Business Group is therefore currently working on plans to safeguard competitiveness and profitability, and launched a restructuring project at the Weinheim site in the year under review. Talks with employee representatives to discuss the planned measures and find joint solutions began prior to the statement of financial position date. Implementation is scheduled to commence in 2017.

The Business Group stepped up its innovation activities in the year under review with the aim of developing new advanced process technologies and to foster growth in special products with attractive market potential. To that end, Freudenberg Performance Materials invested in a carbonization line in Weinheim, Germany, to support the further development of business in high-quality gas diffusion layers for fuel cell applications.

In the Apparel segment, Freudenberg Performance Materials responded to structural market changes by redefining its commercial network in Europe in order to meet customers' requirements more swiftly and



effectively. The measures implemented led to improved performance and cost optimization. As a result, the Business Group defended its leading position in the global interlinings business in spite of the decline in demand.

In the Building Materials segment, construction work on a new line for high-quality glass-fiber reinforced spunlaid felts began at the U.S. site in Macon. This investment, due for completion in 2017, will enable the Business Group to strengthen its leading position for polyester nonwovens for roofing applications in the North American market, and to offer customers an excellent product. In parallel, the Building Materials Division also continued its intensive efforts to improve manufacturing process efficiency at all sites and added to its product offering for underlays for steep gabled roofs.

Freudenberg Performance Materials opened a new state-of-the-art production line for automotive headliners at the Suzhou facility in Eastern China. The new line has the potential to increase sales with Asian and Western OEMs. Freudenberg Performance Materials began marketing printed headliners in China in 2010 and is currently the only manufacturer with in-house printing capabilities.

Following on from the long-term partnership agreement with an innovative world market leader and customer with a long-term orientation active in the advanced wound care segment which was signed last year, a joint investment in finishing technologies was launched in Weinheim in the year under review. With this initiative, together with the further development of the business in polyurethane foam systems for advanced wound care, Freudenberg Performance Materials is expanding its portfolio

in the most advanced market segments in medical technology.

The Business Group was recognized with several awards in 2016. Among them was the “Corporate Citizen Seal Award” from the city administration in Jacarei, Brazil, which honored Freudenberg Performance Materials Brazil for the fourth time for its outstanding social contribution. In Taiwan, Freudenberg Far Eastern Spunweb Comp. Ltd., Taoyuan, Taiwan, was recognized with the “Supplier Excellence Award” from the Interface Group. Arvind Lifestyle Brands, a leader in the apparel industry on the India sub-continent, presented Freudenberg Performance Materials India Pvt. Ltd., Chennai, India, with their “Supplier of the Year 2015” award. Freudenberg & Vilene Nonwovens (Suzhou) Co. Ltd. in Suzhou, China, was recognized by the Chinese authorities as a “High & New Technology Enterprise (HNTE)”.

The Federal Ministry of Education and Research selected Freudenberg Performance Materials to participate in 2 development projects in the fields of e-mobility and stationary energy storage. Under the “High Power Lithium Technology” (HiPoLiT) project, a consortium of industrial companies and research institutions led by Freudenberg Performance Materials will develop innovative batteries specially suited to applications in e-mobility, logistics and stationary energy storage.

The “Ökobat-2020” project will develop and test battery cells for automotive applications. If both projects meet their targets, Freudenberg Performance Materials’ development activities will receive support totaling almost €1 million. The projects are integral elements in the process to enhance Freudenberg Performance Materials’ lithium-ion battery separators.



Group Management Report – Review of Operations by Business Area

**Profile:**

*Freudenberg Performance Materials is a leading global supplier of innovative technical textiles for a broad range of markets and applications such as automotive interiors, building materials, apparel, hygiene, medical, shoes & leather goods and specialties. The company has 25 manufacturing sites in 14 countries. Freudenberg Performance Materials has long-standing experience in the development and manufacture of technical textiles and applications. The company attaches great importance to its social and ecological responsibility as the basis for its entrepreneurial success.*

*Products and services*

*Nonwovens, woven and knitted fabrics for interlinings used in brand apparel, functional textiles, products for hobby tailoring and creative hobbies; backings for automotive carpets, automotive headliners, sound absorption materials, battery separators, fuel cell components; backings for bituminous roofing membranes, for tufted carpet materials/carpet tiles, thermal insulation; acquisition distribution layers for baby diapers, incontinence and female hygiene; function components for advanced wound care, stoma care and transdermal medication products; functional insole components for sports shoes, high fashion shoes, children's shoes, special shoes and leather goods; nonwovens for cable and electrical applications, anti-allergy encasings, packaging, printing applications; nonwovens for filtration solutions*

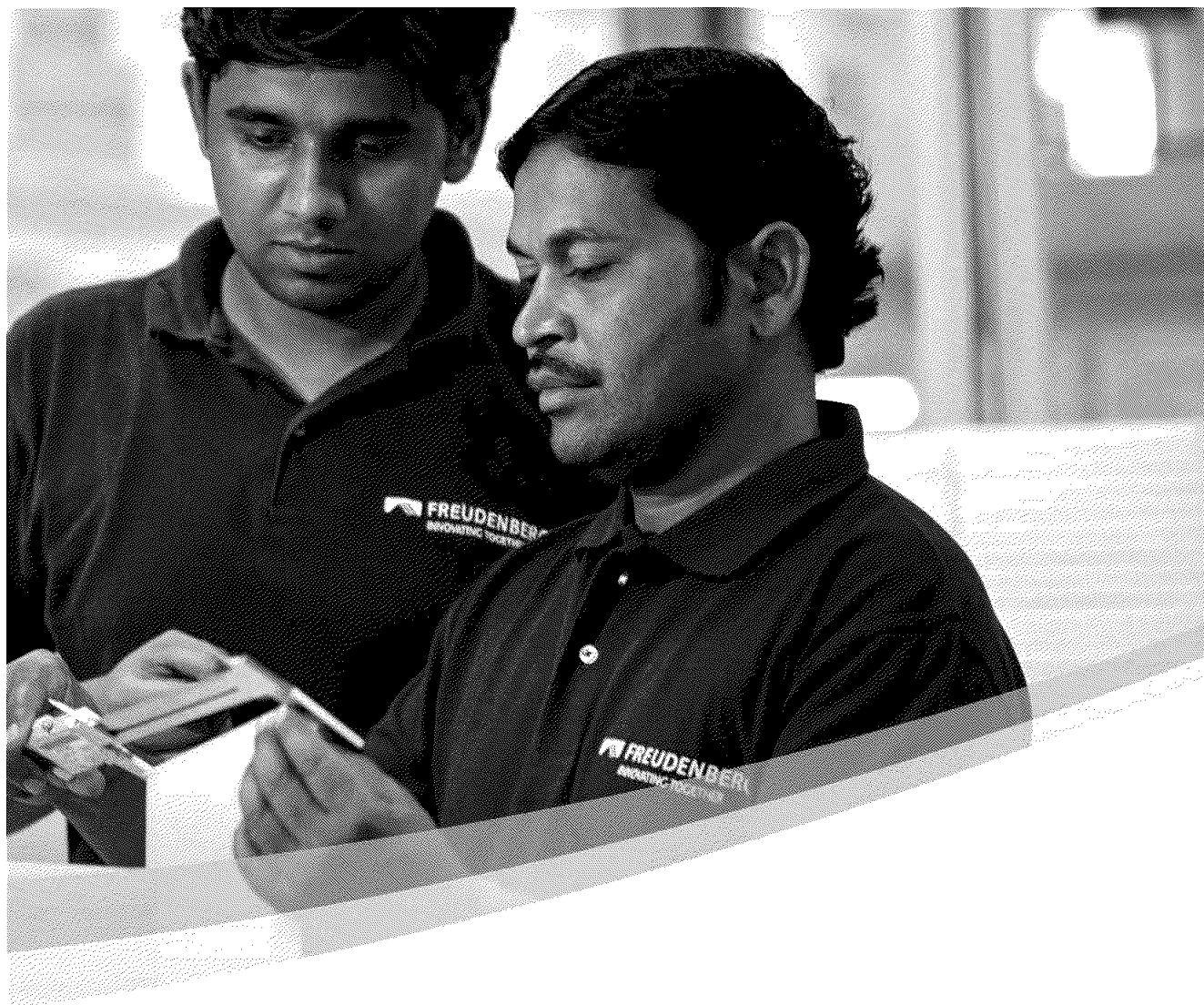
*Production locations*

*Argentina, Brazil, China, France, Germany, India, Italy, Japan, Russia, South Africa, South Korea, Taiwan, UK, USA*

*Freudenberg Performance Materials  
Holding SE & Co. KG  
69465 Weinheim | Germany  
Phone: +49 6201 80 6640  
Fax: +49 6201 88 6640  
E-mail: [info@freudenberg-pm.com](mailto:info@freudenberg-pm.com)  
[www.freudenberg-pm.com](http://www.freudenberg-pm.com)*



**COMMITTED TO EXCELLENCE**



For Freudenberg, a leading technology group and innovative partner, excellence means setting benchmarks. The Group achieves the very best quality in products and processes as well as excellent services.

This commitment to excellence has its roots in the founding era. The extreme care and attention to detail required in leather production in those early years apply just as much today in the complex, highly technical manufacturing processes. Although mostly hidden from view, Freudenberg Group products are always indispensable and are often installed in especially critical areas.

Freudenberg employees all over the globe excel themselves in their entrepreneurial thought and action, their initiative and in their willingness to take on responsibility. They develop innovative and forward-looking solutions in diverse teams and international projects. In everything they do, they help their customers achieve lasting success.

FREUDENBERG FILTRATION TECHNOLOGIES		
	2015	2016
Sales [€ million]	394.1	423.3
Workforce	2,271	2,255

## FREUDENBERG FILTRATION TECHNOLOGIES



### Annual figures

The Business Group continued on its growth trajectory and generated sales of €423.3 million (previous year: €394.1 million) on the back of increases in all regions and segments, strengthening its position in the 2 global divisions of Industrial Filtration and Automotive Filters. There were negative currency effects.

At December 31, 2016, Freudenberg Filtration Technologies had a headcount of 2,255 (previous year: 2,271 employees).

### Business development

The growing need for pure air and clean water worldwide gave momentum to the filtration market and again generated strong consolidation momentum during the year under review. The filtration industry is very complex in terms of applications, technologies and market access and offers market players very

diverse opportunities for participating. As a provider of energy-efficient, application-optimized filtration solutions, the Business Group focuses on segments where customers can benefit from a complete service offering, particularly with regard to operating cost efficiency and sustainability.

Freudenberg Filtration Technologies won several customer awards in the year under review, confirming this course. The North America team was named vendor of the year by its customers Total Filtration Services and Honda. The plant in Potvorice, Slovakia, received the prestigious "Q1 Award" presented to suppliers by the Ford Motor Company. In China, FAW CAR Company presented the Changchun facility with the "Product Development Award" for particularly innovative product developments.

The global market segments in Industrial Filtration introduced under the strategic reorientation developed well. A comprehensive innovation offensive featuring new product lines and services such as certified energy consulting was added to the product



## Group Management Report – Review of Operations by Business Area

portfolio in the Surface Technology market segment. Major new business in the Middle East, Taiwan and India was realized in the Gas Turbine & Compressors market segment, and business with OEM equipment for air intake systems was expanded. Sales in the food and beverage industry, in corrosion protection (gas phase filtration) and in comfort filtration applications in private homes and offices also developed well thanks to targeted marketing measures and product developments.

The commissioning of 2 large-scale membrane bioreactors in England contributed to encouraging organic sales growth in industrial business. These reactors are used for efficient, resource-saving water treatment in the food and beverage industry. Expansion of engineering business lines up with Freudenberg Filtration Technologies' strategic goal to evolve from a supplier of high-quality filtration products into a competence partner for complete systems and energy-efficient filtration solutions.

Freudenberg Filtration Technologies consolidated its position as the market leader in original equipment and original spare parts in an intensely competitive environment in automotive filtration business. Sales grew significantly in North America on the back of new original equipment projects. Business in China also made a major contribution to sales growth. The introduction of filter innovations with new functions opened up new possibilities for competitive differentiation. The Business Group responded to the marked increase in competitive and price pressure by investing in efficiency-enhancing manufacturing processes and product innovations. Other important measures included the further development of global key account management, expansion of the successfully launched e-mobility business, setting up sustainable business in new applications, and the systematic follow-up of the price management initiative.

### Key events

Innovations are a crucial building block in market success for Freudenberg Filtration Technologies. The Business Group's new customer-driven organizational structure therefore focuses more intensively on innovations and swift, successful market launches. The micronAir-ProTect/blue automotive cabin air filter is a novel product whose 4 biocide and nano-silver-free filter layers provide almost total protection against air pollution and carcinogenic particulate matter in the vehicle interior. At the same time, it reliably separates allergens, pollen, microorganisms, harmful gases and unpleasant odors. This minimizes health risks for vehicle occupants and contributes to enhanced driving safety in traffic.

In the Industrial Filtration Division, a number of innovations under the Viledon® product brand were launched. They include the next generation of coalescer filters for high-humidity applications – the hydroMaxx-reverse-pocket filter – as well as the energy-efficient DryPleat filter plates for paint mist dry separation, the eMaxx-2.0 cassette filters and the MVPGT filters, both optimized for use in intake air filtration for gas turbines.

To safeguard its long-term competitiveness, Freudenberg Filtration Technologies must be able to respond flexibly worldwide to growing competitive pressure and regional customers' needs. For this reason, the Business Group rolled out a restructuring project in Weinheim during the year under review. Talks with employee representatives to discuss the planned measures and find joint solutions began prior to the statement of financial position date. Implementation is scheduled to commence in 2017.

An automated high-speed cabin air filter production line was commissioned in Hopkinsville, USA. A new line for manufacturing filter cartridges for use in air intake filtration systems for gas turbines was inaugurated in India. A new activated carbon media



line in Suzhou, China, also successfully began operating. Some 200 improvement projects to enhance productivity and reduce manufacturing costs were implemented in 2016. The Business Group expects to see further improvements in the global production network over the coming years as the ongoing rapid plant assessments and total cost down initiatives continue to progress.

**Profile:**

*As a global technology leader in air and liquid filtration, Freudenberg Filtration Technologies develops and produces high-performance, energy-efficient filtration solutions which improve the efficiency of industrial processes, conserve resources, protect people and the environment and thus enhance the quality of life.*

*With its Viledon® and micronAir® global brands, Freudenberg Filtration Technologies offers customers innovative filter elements and systems in particular in the following areas of competence: automotive, gas turbines/compressors, food and beverages, surface technology, dust removal, corrosion protection, and office and home appliances as well as special applications in the general ventilation and cleanroom technology sectors.*

*Viledon® stands for reliable process air optimization and high-quality liquid filtration solutions. micronAir® cabin air filters provide health protection and ride comfort, engine intake air filters improve engine performance. Advanced system solutions such as the development, installation and operation of complete filtration systems as well as a comprehensive range of services for air and water quality management round off the product portfolio.*

*Products and services*

*Filtration elements, system solutions and services for intake and exhaust air in industrial processes and end user applications, water and membrane filtration systems, cabin air filters and engine intake air filters, filter measurement technology; training and consulting*

*Production locations*

*Australia, Brazil, China, Germany, India, Italy, Japan, Mexico, Slovakia, South Africa, South Korea, Thailand, USA*

*Freudenberg Filtration Technologies SE & Co. KG*

*69465 Weinheim | Germany*

*Phone: +49 6201 80 6264*

*Fax: +49 6201 88 6299*

*E-mail: [info@freudenberg-filter.com](mailto:info@freudenberg-filter.com)*

*[www.freudenberg-filter.com](http://www.freudenberg-filter.com)*

## Group Management Report – Review of Operations by Business Area

JAPAN VILENE COMPANY	
	2016
Sales [€ million]	437.8
Workforce	2,324

### JAPAN VILENE COMPANY



In 2015, Freudenberg SE, Weinheim, Germany, and Toray Industries Inc. (Toray), Tokyo, Japan, successfully completed a joint public takeover offer to acquire all shares of Japan Vilene Company Ltd. (Japan Vilene), Tokyo, Japan, held by independent shareholders. Japan Vilene was delisted from the stock market on December 25, 2015. The remaining shareholders of Japan Vilene are Freudenberg SE with 75 percent and Toray with 25 percent. In January 2016, the EU anti-trust authority granted permission for the acquisition of the shares, which had still been outstanding. Furthermore, in February 2016 a joint venture agreement between Freudenberg SE and Toray under which Freudenberg gained control of Japan Vilene effective April 1, 2016 was signed by both partners. Japan Vilene Company has become a new Freudenberg Business Group within Freudenberg's Nonwovens and Filtration Business Area.

#### Annual figures

Japan Vilene Company generated sales of €437.8 million in the 2016 financial year. There were negative currency effects. Japan Vilene Company was fully consolidated for the first time effective April 1, 2016.

At December 31, 2016, Japan Vilene Company had a headcount of 2,324 employees.

#### Business development

Global market conditions for Japan Vilene Company in 2016 were mixed. The market environment for the Automotive Materials division was positive. Floor



mats business in the USA benefited from growth in the automotive market. Business with floor mats and headliners in Japan also developed well. The Division enjoyed moderate growth in China and the rest of Asia.

Conditions for the Industrial Materials Division, on the other hand, were difficult, particularly as a result of slower growth in Japan and China. The Japanese economy wrestled with weak domestic demand among other things. In China the strong renminbi curbed growth in the middle of the year. Medical Materials business lost significant momentum. Development in Cabin Air Filters and Apparel and Amenity Materials was also subdued.

## Key events

The Business Group worked intensively on harmonizing systems and processes with Freudenberg and Toray in 2016. Numerous measures to integrate Japan Vilene Company in the Freudenberg Group were implemented. One of the main tasks in this context was to realign the entire financial reporting process so that Japan Vilene Company could be fully included in consolidated financial reporting. To that end, accounting and reporting and the underlying IT systems were aligned to Freudenberg standards. Integration projects in other areas such as Human Resources, Corporate Communications, Occupational Health and Safety and Environmental Protection were also started.

In the medical business, Japan Vilene Company invested in a new factory in Yasu, Japan, and in automation processes to increase production of angiography sets during the year under review. These sets are used in hospitals and have been produced by the subsidiary Pacific Giken Co., Ltd., Yasu, Japan, since 2001.

In the automotive business, Japan Vilene Company established a production company named Vitechmex Nonwovens S.A. de CV., Aguascalientes, Mexico, primarily to supply Japanese customers with

automotive headliners. In addition, construction work on a new production facility in Aguascalientes, Mexico, commenced in the year under review. This facility will manufacture nonwovens for automotive interiors and is scheduled for commissioning in August. Furthermore a new injection molding line for all-weather floor mats was installed at VIAM Manufacturing, Inc., Manchester, USA.

In the filter business, the new factory at Oshitari Laboratory, Inc., Sayama, Japan, began operating in March. It is planned to expand business in high-performance filters and develop new markets with this new facility.

The Business Group was recognized with several awards in the year under review. In May 2016, Tianjin VIAM Automotive Products Co., Ltd., Tianjin, China, was presented with the "Excellent Supplier 2015" Award from Toyota Motor (China) Investment Co., Ltd. for high quality, competitive prices and very good delivery times.

VIAM Manufacturing, Inc., Manchester, USA, won the "Supplier Excellence Gold Award" from Fuji Heavy Industries Ltd. for the third year in succession and was also recognized with the "Accessory Performance Award" from Honda Motor Co., Ltd. Furthermore, Japan Vilene Company won the "Best Performance Award" from Nissan Motor Co., Ltd.

Moreover, the Business Group made further progress in expanding the business-to-consumer business and launched a new face mask product line for consumers in the year under review.

Additionally, 2016 saw the start of separator exports to China; this product is used to manufacture nickel-metal hydride batteries for hybrid vehicles.



## Group Management Report – Review of Operations by Business Area

### **Profile:**

*Since it was established in 1960, Japan Vilene Company has maintained its position as the leading domestic manufacturer of nonwoven materials under the motto of “Engineering Fabric Innovation”, utilizing its long-standing raw material expertise and considerable know-how in the fields of production processes and technologies as well as nonwoven converting, and offering a wide range of products through its Automotive Materials and Industrial Materials divisions. In addition to its 2 main production sites and an R&D Center, Japan Vilene operates 5 further production, conversion and sales subsidiaries in Japan.*

*Japan Vilene Company has developed its business with automotive interiors into a global operation with production facilities close to its customers in Japan, China, USA, Thailand and Mexico.*

*In close cooperation with Freudenberg Performance Materials and Freudenberg Filtration Technologies, Japan Vilene Company operates a network of production and sales joint ventures throughout Asia.*

### *Products and services*

*Headliners, floor mats and cabin air filters for the automotive industry; filter media and filter units; battery separators for hybrid vehicles and the end user market as well as other industrial nonwovens; elastic base materials for transdermal products and respiratory masks, angiography sets and other medical products; interlinings and face masks; fiber from recycled PET beverage bottles*

### *Locations*

*China, Japan, South Korea, Mexico, Taiwan, Thailand, USA*

### *Japan Vilene Company Ltd.*

*Hama-rikyu Mitsui Bldg. 6-4 Tsukiji 5-chome, Chuo-ku*

*Tokyo 104-8423 | Japan*

*Phone: +81 3 4546 1111*

*Fax: +81 3 4546 1105*

*E-Mail: [p-relations@vilene.co.jp](mailto:p-relations@vilene.co.jp)*

*[www.vilene.co.jp](http://www.vilene.co.jp)*

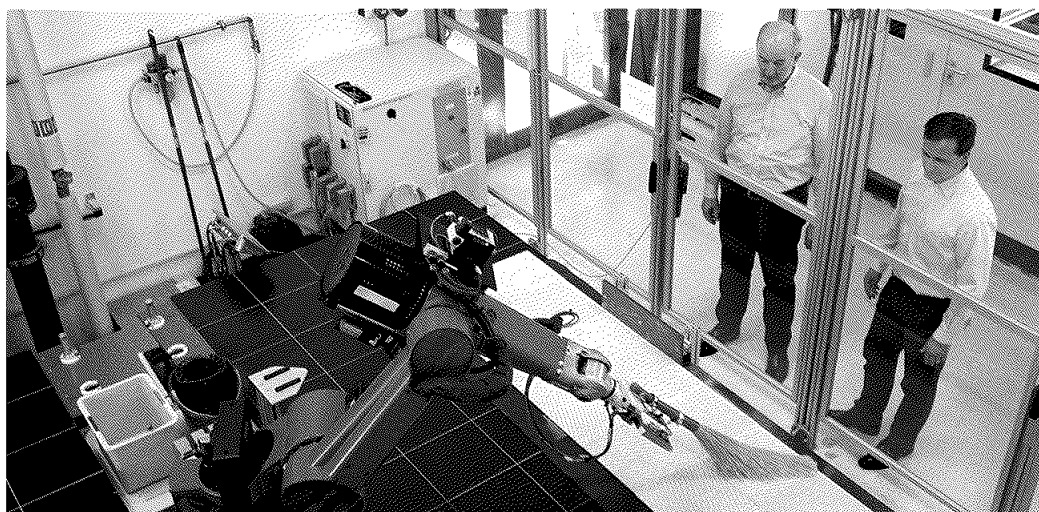
FREUDENBERG HOME AND CLEANING SOLUTIONS		
	2015	2016
Sales [€ million]	808.8	859.3
Workforce	2,637	2,962

## HOUSEHOLD PRODUCTS BUSINESS AREA

The Household Products Business Area comprises the Freudenberg Home and Cleaning Solutions Business Group whose vileda®, O-Cedar®, Wettex®, Gala®, Marigold®, SWASH®, Gimi®

and Framar® brands are active in the mechanical cleaning and laundry care segment for final users and professional cleaning companies.

## FREUDENBERG HOME AND CLEANING SOLUTIONS



### Annual figures

During the year under review, the Business Group generated sales of €859.3 million (previous year: €808.8 million). Better than market growth in business and the integration of Gimi S.p.A., Monseice, Italy, acquired effective August 31, 2016, contributed significantly to the positive sales development of

Freudenberg Home and Cleaning Solutions. Fluctuating exchange rate effects, on the other hand, had a negative impact overall on sales and earnings.

The headcount at December 31, 2016 was 2,962 (previous year: 2,637 employees).



## Group Management Report – Review of Operations by Business Area

### Business development

Freudenberg Home and Cleaning Solutions reported very mixed developments in the various sales markets in a generally friendly market environment.

In Europe, the consumer climate in many countries improved. Market conditions were also very positive in India and some other Asian markets. Growth momentum in China, on the other hand, deteriorated. Consumer behavior in the Middle East was affected in particular by the wars in Syria and Yemen as well as the low oil price. The market in North America recovered after a very weak start to the year and returned to solid growth in the third quarter.

The Business Group reinforced its position in this market environment through attractive products combined with a noticeably stronger media presence. As a result, the Business Group gained market share in all categories, with the e-commerce and electrical stores sales channels making an above-average contribution. Adjusted for exchange rate, acquisition and consolidation effects, the Business Group outperformed the market in terms of growth.

### Key events

Freudenberg Home and Cleaning Solutions took a major step towards market leadership in laundry care products with the acquisition of Gimi S.p.A. The company manufactures and markets laundry driers, ironing boards and household ladders. Combined with the vileda® brand laundrycare business, this makes Freudenberg Home and Cleaning Solutions one of the global market leaders in this category.

The Business Group used the success of its product innovations with customers to strengthen its market position by boosting advertising activities even further. This first and foremost strengthened successful launches of recent years such as the Easy Wring & Clean cleaning system, the innovative polyvinyl alcohol (PVA) microfiber cleaning cloths (Actifibre) along with

the Windomatic vacuum cleaner and the new steam cleaning products.

Further areas of investment included improving productivity throughout the value chain. In production, attention focused on reducing process costs. Furthermore, the Business Group invested in IT systems to improve the system-based integration of all management processes.

Innovations from the Business Group again won numerous awards in 2016. The Virobi Slim, for example, was recognized by the “Lebensmittel Praxis” trade journal as the most successful product innovation of 2016. vileda® cloths were named Germany’s top brand in 2016 by the “Lebensmittel Zeitung” trade magazine. Windomatic, the Vrobi Slim and the “Steam” steam cleaning product won the prestigious “Red Dot Design Award 2016”. In addition, vileda® was once again honored with the “Superbrand 2016/17” title in Germany.

### Location changes

With the acquisition of Gimi S.p.A., the Business Group acquired 2 locations in Italy – Monselice with production, sales and administration operations, and Mombello with its production facilities – as well as a further site in Bangalore, India, with sales and administration operations.

### Profile:

*Freudenberg Home and Cleaning Solutions is one of the leading international manufacturers of brand cleaning articles and systems and laundry care products. The company is the market leader in almost all countries. Products are marketed under the brand names of vileda®, O-Cedar®, Wettex®, Gala®, Marigold®, SWASH®, Gimi® und Framar®. The Business Group’s success factors are detailed knowledge of the market, innovations, new and effective products, and a pronounced customer orientation. These are complemented by international market and customer research, innovation centers and production facilities in*



*all regions of the world and a dedicated sales network in over 35 countries.*

*Products and services*

*Floor cleaning systems, household cloths, cleaning articles, household gloves, mats, laundry care products such as ironing boards and clothes driers, cleaning systems for professional applications*

*Locations*

*Australia, Belgium, Canada, Chile, China, Czech Republic, Denmark, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Italy, Jordan, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Russia, Serbia, Slovenia, South Korea, Spain, Sweden, Taiwan, Thailand, Turkey, UK, USA*

*Freudenberg Home and Cleaning Solutions GmbH*

*Im Technologiepark 19  
69469 Weinheim | Germany  
Phone: +49 6201 80 871000  
Fax: +49 6201 88 874000  
E-mail: [info@fhp-ww.com](mailto:info@fhp-ww.com)  
[www.vileda.com](http://www.vileda.com)*

## Group Management Report – Review of Operations by Business Area

FREUDENBERG CHEMICAL SPECIALITIES		
	2015	2016
Sales [€ million]	963.0	1,004.0
Workforce	3,304	3,359

### SPECIALITIES AND OTHERS BUSINESS AREAS

In the year under review, the Specialities and Others Business Area mainly comprised the following Business Groups:

- Freudenberg Chemical Specialities
- Freudenberg IT

The companies in this Business Area generated sales of €1,270.6 million (previous year: €1,234.9 million). At year-end 2016, the headcount was 4,552 compared with 4,412 at year-end 2015. Well over half of the sales generated by this Business Area are attributable to the Freudenberg Chemical Specialities Business Group.

### FREUDENBERG CHEMICAL SPECIALITIES



#### Annual figures

The Business Group generated sales of €1,004.0 million (previous year: €963.0 million) in 2016. Better than market growth is attributable to the

strong position held by the Divisions of Freudenberg Chemical Specialities.

The headcount rose from 3,304 in the previous year to 3,359.



## Business development

Moderate global economic growth, fluctuating exchange rates through much of the year, the recession in Brazil and the precursors of Brexit – as in previous years, market conditions for Freudenberg Chemical Specialities in 2016 were characterized by increasing volatility. The slump in demand from heavy industry, particularly in the steelmaking and steel processing segment, and in the oil and gas industry, along with weaker demand for some industrial goods presented a challenge for most of the Divisions at Freudenberg Chemical Specialities. The Business Group saw pleasing growth in Europe and Asia. Demand in North America began to recover at the end of the year. Overall, South America showed the first signs of recovery, with Klüber Lubrication and Chem-Trend even reporting above-average local-currency growth there.

In the year under review, Klüber Lubrication benefited both from its excellent position in all regional markets and from the development of new market segments. The very good order situation in the food and automotive industries, the marine sector, with wind energy customers, and in the market for transport engineering boosted business.

Chem-Trend put up a convincing performance through strong organic growth, and also reported acquisition-driven growth. With its wide-ranging portfolio of environmentally-friendly products, the company is increasingly gaining an edge over competitors in terms of customer projects.

After a subdued start to the year, the surface technology company SurTec reported strong growth in the second half of the year. Customer projects where long-term preparation is now paying off are a key factor in this success.

Capol reported even more robust growth than in previous years thanks to strong demand for chocolate and wine gums. The strategic internationalization of business paid off.

Maintenance specialist OKS reported significant double-digit growth in all major regional markets throughout the year.

## Key events

The new joint Chem-Trend and SurTec facility in Valinhos, Brazil, was inaugurated in April 2016. The plant develops and produces specialty release agents and solutions for chemical surface treatment. Work on expanding the global R&D center at the Chem-Trend headquarters in Howell, USA, began. The existing area is being expanded by almost 50 percent, including labs for applied research and analysis as well as additional offices, and will facilitate the development of new, high-performance release agents.

June saw the ground-breaking ceremony marking the start of construction work on the European logistics center for Klüber Lubrication, Chem-Trend and OKS in Maisach. All logistics processes will be significantly speeded up and customer service further improved once the center has been completed in the second half of 2017.

Chem-Trend Limited Partnership, Howell, USA, acquired the global business of Huron Technologies Inc., USA, for specialty release agents and process chemicals, particularly for the polyurethane industry, at the end of June 2016. Chem-Trend thus extended its leading position in this market segment.

Chem-Trend purchased the Ultra Purge® brand from the Italian purging compounds manufacturer Moulds Plus International in July 2016. Purging compounds help to improve the efficiency of thermoplastic processors, a market segment of growing significance to the company. The integration of the two businesses has almost been completed.

In the year under review, Freudenberg Chemical Specialities acquired the remaining minority shares in the Japanese company Chem-Trend Japan K.K., Kobe, Japan, which primarily supplies release agents and additives to the composite industry. This transaction



## Group Management Report – Review of Operations by Business Area

strengthens Chem-Trend's position as a global market leader for release agents.

Klüber Lubrication reached a milestone in expanding its market position in the key wind energy market when 4 of the most important global OEMs released a new synthetic gear oil for wind turbines. Chem-Trend achieved a breakthrough in reducing emissions when using release agents for composites. The new products already meet the extremely demanding air pollution criteria of the Environmental Protection Agency (EPA) and are a crucial step towards raising occupational safety and health protection at composite processors. SurTec qualified for the final round of the Freudenberg Innovation Award with its innovative, environmentally-friendly process for the decorative chrome plating of plastics.

After a 9 year construction period, the expanded Panama Canal started operation in 2016. Ships sailing from the Atlantic to the Pacific have to level a vertical height difference of 26 meters, which is achieved by a series of consecutive locks, flooded with water from adjoining reservoirs. 16 units of giant gates of reinforced concrete featuring massive dimensions and weight were therefore installed. These enormously heavy gates can only move reliably because they sit on specially-designed high-performance roller bearings. The lock gate designers chose a synthetic special grease from Klüber Lubrication to meet the required long-time and service-free operation, particularly under the difficult climatic conditions in the Canal.

### **Profile:**

*The Business Group comprises the operationally autonomous divisions of Klüber Lubrication, Chem-Trend, SurTec, OKS, and Capol. Klüber Lubrication is one of the world's leading manufacturers of specialty lubricants. Its customized tribological solutions are almost exclusively sold direct to customers in virtually all industries and markets. Chem-Trend is a world market leader for release agents used to manufacture composite, rubber, plastic, metal and polyurethane molded parts. SurTec is a leading supplier of chemical specialties for surface treatment and electroplating.*

*OKS specializes in performance lubricants and in repair and maintenance products. Capol is one of the world's leading manufacturers of coatings for the confectionery industry and supplies glazes, release agents and sealing agents as well as other specialty products.*

### *Products and services*

*Oils, greases, waxes, pastes, bonded coatings, dry lubricants, solid lubricants, anticorrosion products, chemotechnical products for MRO, hydraulic fluids, cleaning agents, release agents for die casting, composites, rubber and polymer processing; surface treatment products, industrial parts cleaning and electroplating; glazes, release agents and sealing agents for the confectionery industry*

### *Locations*

*Argentina, Australia, Austria, Belgium, Brazil, Chile, China, Croatia, Czech Republic, Denmark, Finland, France, Germany, India, Indonesia, Italy, Japan, Malaysia, Mexico, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Turkey, United Arab Emirates, UK, USA, Vietnam*

### *Freudenberg Chemical Specialties SE & Co. KG*

*Geisenhausenerstraße 7*

*81379 Munich | Germany*

*Phone: +49 89 7876 0*

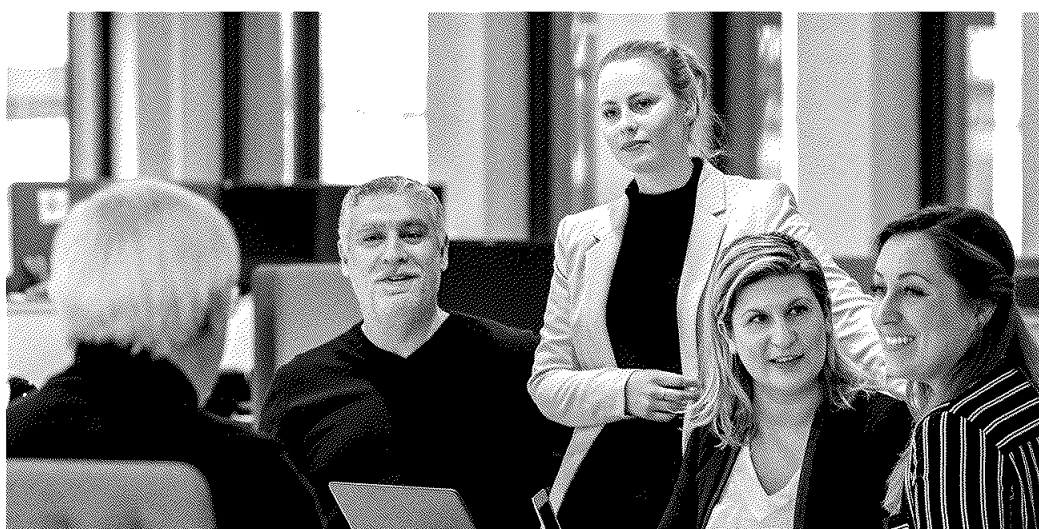
*Fax: +49 89 7876 1600*

*E-mail: [info@fcs-munich.com](mailto:info@fcs-munich.com)*

*[www.fcs-munich.com](http://www.fcs-munich.com)*

FREUDENBERG IT		
	2015	2016
Sales [€ million]	152.8	165.0
Workforce	754	826

## FREUDENBERG IT



### Annual figures

Freudenberg IT generated sales of €165.0 million (previous year: €152.8 million) in the year under review. Organic sales growth is attributable to the expansion of business in all regions, above all North America.

At December 31, 2016, the Business Group had a headcount of 826 (previous year: 754 employees).

### Business development

The digital transformation and globalization trends remain the key pacemaker and stimulus in the IT sector across all areas of business.

Demand for in-memory databases continued to be very high in the year under review. In addition, individualized cloud services and the optimization of IT-based value chains and business models increasingly moved to the fore.

Freudenberg IT again performed very well in this market environment. The global customer focus as “equal partners”, high quality and data security standards, an integrated global orientation, and competence in innovation issues were very well received by customers. There was a positive response to the more detailed definition of key offerings – for example in the environment of Industry 4.0 and the Internet of Things – thus further strengthening the company’s market positioning.

Above all the very strong U.S. business drove success and growth at Freudenberg IT further forward in 2016. Activities to inject new stimulus in business in Asia included the realization of campaigns in Germany explicitly focusing on companies with branches in the Chinese market. The high standards of Freudenberg IT’s data center offering in China are very important for European companies in particular.



## Group Management Report – Review of Operations by Business Area

### Key events

A key element of Freudenberg IT's globalization strategy is the organizational integration of sites and processes in order to offer customers comprehensive, globally standardized IT services with clearly-defined, simple communication interfaces. The concept with the 3 completely global organizational units "Product Management", "Operations" and "Information Systems" signed off the year before was fully established in 2016 and is now part of everyday operations at Freudenberg IT.

The first positive effects of the new organization are already visible. Freudenberg IT received several awards in the year under review, for example from the prestigious Experton Group analyst firm which gave Freudenberg IT leader status (the highest ranking) in the categories "Cloud", "Digital Workspace", "SAP HANA" and "Mobile Enterprise Vendor". The partnership with Microsoft had a multiple positive effect in this regard.

The decades-long close business relations with SAP were further intensified. 2016 saw the first joint market approach in Germany in the form of an advertising campaign aimed specifically at SMEs in the DACH countries (Germany, Austria and Switzerland) based on concrete Industry 4.0 service offerings.

Furthermore, Freudenberg IT was awarded SAP-REX-certification (Recognized Expertise Partner) for the SAP Landscape Transformation which was a great success with customers.

In the year under review, Freudenberg IT continued with the realignment of the product portfolio to suit changing customer requirements. The focus lay on the integrated offering of SAP and Microsoft products, expanding application management support in global 24/7 operations, and new IT solutions for the challenges presented by Industry 4.0 and the Internet of Things. The Global Product Management Team continued to develop the Freudenberg IT portfolio. An elaborated innovation

process ensures that new products are in line with market needs.

Intensive marketing activities and the successive development of digital marketing channels increased the visibility of Freudenberg IT in 2016. These activities were implemented locally in the various regions based on a global mission (Digital Marketing Transformation). The marketing focus not only lies in raising the visibility of Freudenberg IT with its target groups, but also on lead generation and thus on building up new customer contacts over the long term.

### Location changes

In 2016, Freudenberg IT opened a new location in Košice, Slovakia, thus further enhancing its worldwide service coverage and optimizing its response to the globalization demands of its own customers.

A presence in Germany, China, Mexico, Slovakia and the USA ensures proximity to all customers and 24/7 availability of both services and contact persons.

### Profile:

*Freudenberg IT is a global, full-service IT provider with more than 30 years of excellence as a reliable partner for quality- and security-aware customers. The portfolio of services covers all facets of the modern SAP landscape, from a variety of outsourcing offerings through system optimization and system operating services to process and SAP consulting.*

*Freudenberg IT is an MES specialist (Manufacturing Execution System), particularly for SMEs in the manufacturing and automotive industries, optimizing the integration between production control and the ERP system, and is a pioneer for Industry 4.0. The additional partnership with Microsoft rounds off the Freudenberg IT portfolio and enables focused*



*digitalization support for all customers right through to optimization of the modern workplace environment.*

*The digital transformation is increasingly based on cloud computing solutions, which Freudenberg IT customers can use to outsource IT without any investment risk. That means users are free to focus completely on their core business without having to address IT issues.*

*Products and services*

*Outsourcing, cloud computing, consulting for SAP, MES, Internet of Things*

*Locations*

*China, Germany, Mexico, Slovakia, USA*

*Freudenberg IT GmbH & Co. KG*

*69465 Weinheim | Deutschland*

*Phone: +49 6201 80 8000*

*Fax: +49 6201 88 8000*

*E-Mail: [info@freudenberg-it.com](mailto:info@freudenberg-it.com)*

*[www.freudenberg-it.com](http://www.freudenberg-it.com)*



Group Management Report – Review of Operations by Business Area  
Report on Events after the Date of the Statement of Financial Position

## REPORT ON EVENTS AFTER THE DATE OF THE STATEMENT OF FINANCIAL POSITION

Major events after the date of the statement of financial position which are not included either in the statement of profit or loss or the statement of financial position are explained in the Notes to the Consolidated Financial Statements under the section “Major events after the date of the statement of financial position” on page 150.



## SUSTAINABLE SOLUTIONS WORLDWIDE



Taking responsibility for society is a given at Freudenberg and has been anchored in the company values for more than 165 years. The Freudenberg Group develops pioneering and sustainable solutions for better living conditions throughout the world – for the benefit of present and future generations.

Freudenberg engages with communities at all its locations, offering support where help is needed. For example, the Freudenberg Group is providing long-term assistance for a school in Haijin (photo), China, which was completely destroyed by an earthquake. An international program testifies to the Group's engagement in the fields of education and environmental protection.

The Group acknowledges the principles of the Global Compact, and its employees uphold the standards of behavior set out in the internal Code of Conduct. Furthermore, they proactively engage with the internal "We all take care" initiative which focuses on areas such as environmental protection, occupational health and safety.



## REPORT ON OPPORTUNITIES AND RISKS

Freudenberg is exposed to numerous opportunities and risks inseparably associated with business activities. Monitoring technological, political and social changes in particular is part of proactive entrepreneurial behavior. This often generates opportunities to be harnessed in order to secure and specifically improve the company's competitiveness. Opportunities are addressed in the context of the annual planning process and pursued and reported throughout the year. Long-term opportunities for profitable growth are primarily identified as part of the strategy process. The Freudenberg Group operates a Group-wide risk management system, in which the newly-acquired enterprises will also be integrated, to identify risks in a timely fashion and respond to them appropriately.

### Opportunities

#### Freudenberg global brand

The Freudenberg Group global brand positions Freudenberg as an innovative technology group. The company slogan "Innovating Together" transports the values and goals of the Freudenberg Group. It gives a clear benefit statement, strengthens the image, and raises the visibility of Freudenberg, for example as an attractive employer or as a trusted supplier. All Business Groups therefore profit from this visible Group affiliation.

#### Investments in strategic growth areas and regions

A central element of strategic planning is the continuous evolution of existing business through product and process innovations with a view to achieving profitable, significantly higher than market growth in existing business areas. Furthermore, it is planned to expand the portfolio by making selective, targeted acquisitions in order to close identified technology gaps and develop access to new markets. The successful buy-and-build strategies in defined strategic growth areas continue. Examples in 2016 include the acquisition of the majority shareholding in Japan Vilene Company Ltd., Tokyo, Japan, and the acquisition of the remaining 50 percent of shares in the Vibracoustic Business Group. In addition, options to acquire new areas of business that complement Freudenberg's existing organization are also being investigated. In the medium term Freudenberg's goal is a strategically balanced regional portfolio with sales distributed evenly among the regions of the Americas, Europe and Asia.



## Group Management Report – Report on Opportunities and Risks

### Global presence

Due to its global presence, Freudenberg has for many years been able to offer products and services at uniform worldwide standards. As a result, Freudenberg can keep pace with the international strategies of its customers, for example in production or research and development. Traditionally, Freudenberg has leveraged this expertise for many customers from Europe or North America as they gained a foothold in emerging countries. As the presence in these countries increases, some progress is being made to successfully support the international strategy of individual customers from emerging economies entering the market in western Europe. If this trend were to intensify in the future, Freudenberg could achieve additional benefits from its global presence.

### Technological change and innovation

The ongoing digitalization trend in its various forms (Internet of Things, Industry 4.0) brings the Freudenberg Group the opportunity for product and process innovations and to develop new areas of consulting (Freudenberg IT). The transition from fossil fuel drives to e-mobility brings an opportunity for profitable growth for the Freudenberg Business Groups whose operations focus on the automotive sector irrespective of all the necessary adjustments. Innovation output from overarching technologies of key relevance for Freudenberg which are of interest for several Business Groups is a further significant factor.

### Talent management

A talent management process covering the majority of employees worldwide has been in place at Freudenberg for several years. The process establishes a uniform procedure for talent management throughout the entire Freudenberg Group. It includes harmonized assessment systems and is based on standardized skills profiles and definitions of potential. This enhances the comparability of

assessments and facilitates personnel development. The process improves the basis on which Freudenberg can take personnel decisions in the future.

### Administrative excellence

The initiative to increase administrative excellence launched in 2013 comprises several projects to raise efficiency in the field of administration and was expanded in terms of content and geographic coverage in 2016. Savings and efficiency enhancements to date have in some instances exceeded expectations. The initiative will be continued in the coming years and further cost savings and efficiency enhancements may be possible. Freudenberg would then be in a position to become even more competitive than in previous years.

### Risk management system

The Freudenberg Group's risk management system is a decentralized system oriented to the Group's organizational structure. It covers all companies fully consolidated in the Freudenberg Group, and includes all Group measures addressing the main risks. This process in particular ensures the structured identification, assessment, control and monitoring of main risks. The process also includes appropriate risk communication and the continuous improvement of the risk management system. The Vibracoustic and Japan Vilene Company Business Groups use existing risk management systems for reporting to Freudenberg SE.

The objective of the risk management system is the prompt identification of risks that might jeopardize the continued existence of the company and the initiation of appropriate countermeasures. The intention is not to avoid all potential risks, but rather to create the leeway for taking a deliberate decision to enter into a risk backed by a comprehensive knowledge of essential information.



The risk management strategy is derived from the general strategy of the Group. The risk management system is developed and refined as required. The system is reviewed regularly by the external auditor.

Controlling, internal auditing, the compliance organization, the Code of Conduct, the internal control system, and HSE all make a significant contribution to the success of risk management.

## Risks

Risks are defined as all future developments, events or actions that could have a negative impact on the targets and strategies of the Freudenberg Group.

The following chapter deals with risks classified as significant for the Freudenberg Group ranked by their importance according to the potential level of damage. These risks can have very differing impacts. They may occur individually and independent of one another or simultaneously. In all cases they have the potential to impact directly or indirectly the net assets, financial position or results of operations of the Freudenberg Group. Quantitative data are not disclosed because qualitative factors affecting operating activities of the Freudenberg Group such as failure to meet corporate targets or damage to the company's reputation are included in impact classification.

## Legal risks and compliance

Freudenberg is a globally active manufacturer of functionally relevant technical components and system parts for the automotive industry and many other sectors of industry. Freudenberg develops and produces specialty lubricants, release agents and a broad range of specialty chemicals for very diverse applications. Freudenberg also produces cleaning equipment and filter products for end users and is becoming increasingly active in the manufacture and sale of medical materials (Scaffolene®) and components. A broad range of services in various

business segments as well as in the field of IT rounds off the Freudenberg portfolio. Consequently, Freudenberg is exposed to various legal risks, including product liability risks, contractual warranty risks, risks relating to competition and antitrust law, anti-corruption regulations, export controls, tax and excise duty law, intellectual property rights (patents and brand law), asset misappropriation fraud, IT security and data protection, as well as occupational health and safety and environmental protection. These risks can affect Freudenberg to various degrees and can lead not only to fines or other penalties or compensation, for example, but can also impact the reputation and image of the Freudenberg Group as a whole. In extreme cases, legal risks could have a substantial effect on Freudenberg.

Freudenberg has many measures in place to respond to these legal risks, including comprehensive quality assurance mechanisms tailored to the requirements of the respective business models and value chains, clearly-defined product specifications, instructions, regular training for employees, documentation or preventive contractual solutions containing provisions to limit liability. These measures are flanked by customary insurance cover which is thoroughly analyzed and where necessary adapted to changed conditions on an annual basis.

The Freudenberg Group conducts its global business in many different jurisdictions under different legal and regulatory frameworks that are undergoing change and becoming steadily more complex. The scale and scope of the laws and regulations that must be observed are subject to constant changes that are sometimes difficult to predict, and demand a high level of information processing, interdisciplinary and cross-border communication as well as a swift response and proactive approach.

By tradition, compliance with laws and regulations as well as internal guidelines and Freudenberg's own Guiding Principles and Business Principles has very high priority at Freudenberg. Employees are made aware of the relevant legal risks for their respective Business Group and the regions of relevance for



## Group Management Report – Report on Opportunities and Risks

Freudenberg on the basis of harmonized internal guidelines; they are expected to observe and comply with these requirements.

Freudenberg uses classic methods (documents in all relevant languages, forms, sample presentations, templates and attendance seminars) to communicate compliance issues through training, seminars, dialog and discussions. Modern communication instruments such as web training, e-learning tools, interactive video conferences, etc. are also being increasingly used to complement the classic activities and reach as many employees as possible.

Despite all carefully applied control and prevention mechanisms in our compliance structure and compliance measures, there is a residual risk that is unavoidable given the size and complexity of our global organization. Moreover, the possibility that Freudenberg or Freudenberg employees unconsciously infringe third-party rights cannot be ruled out; this could trigger negative judicial consequences or damage the image or reputation of Freudenberg.

### Economic and sectoral risks

Freudenberg delivers solutions to many customer segments and sectors and is active in many regions and countries. The broad diversification of the Group reduces dependence on individual customers, customer groupings, regions and countries. Nevertheless, Freudenberg is dependent on the general economic situation, particularly with regard to general demand for its products and services, and dependent on some major customers. In spite of sustained efforts to diversify further, a slump in demand in a specific region or sector could lead to a substantial decline in sales and earnings for Freudenberg, as for most other companies, and thus pose a not insignificant risk for Freudenberg.

The Freudenberg Group has implemented several measures to limit the negative consequences of demand-side risks. In particular, the company has high capacity flexibility and practices active working capital

management. Freudenberg regularly monitors several success indicators and can thus respond promptly to negative developments. In the context of a long-term response to demand-side risks, Freudenberg makes targeted investments in research and development, in individual regions and customer relations as well as selected strategic growth areas.

### Interruption of operations and long-term disruptions

The classic risk of unplanned interruptions of operations has several possible causes. The main ones are interruptions in production, raw material availability, delivery delays, restricted availability of IT infrastructure, damage from natural hazards, or any combination of these causes. The possible consequences are loss of sales revenue and earnings, contract infringements, possible contractual penalties and claims for damages as well as reputational damage.

The Freudenberg Group has taken numerous precautions to maintain and safeguard IT systems (back-up solutions, emergency data centers) as well as to meet contractual delivery obligations (dual/multi-sourcing, lead centers with interchangeable infrastructures, cross-plant tools) and to ensure delivery reliability and contract compliance, and has also taken out insurance cover for insurable individual risks. Despite all the measures that have already been taken or will be taken in the event of an emergency, there is a potential residual risk of a temporary interruption in operations with a possible impact on the sales and earnings of the Freudenberg Group.



## Information security risk

Modern business processes are based to a significant extent on information recorded, processed, exchanged and stored by electronic means. Potential risks caused by faults in these processes could impact both internal business processes and communication with customers and suppliers and could, for example, lead to the interruption of operations at Freudenberg or at a third party. Demands on the reliability and security of IT systems are intensifying as a result of technological progress and the trend towards greater networking. As a provider of services, Freudenberg offers its customers the usual guarantees regarding availability and performance.

The aim of the guideline on information security issued by the Board of Management is to preserve the confidentiality, availability and integrity of information. Freudenberg deals with the relevant information security risks by operating information security management systems oriented to the ISO/IEC 27001:2013 international standard. The Business Groups, Corporate Functions and Freudenberg Regional Corporate Centers conduct comprehensive risk monitoring and implement the appropriate measures. For example, measures such as geographically separate, redundant data centers are implemented to deal with technical risks. Numerous internal training measures encourage heightened awareness on the part of employees with regard to the correct handling of information and information processing systems. An assessment of the information management security system and its necessary further development is conducted on a regular basis.

## Financial risks

As an internationally active company with major shareholdings in other countries Freudenberg is exposed to financial risks which under certain circumstances could significantly impact the net assets, financial position or results of operations of the Group. Such risks include financial risks from the

Group's intensified M&A activities arising from the potential impairment of goodwill or of unrecognized obligations. Freudenberg employs various measures to manage these risks. The Group has several specialist functions and expert groups specifically tasked with the identification, analysis and control of Freudenberg's financial risk profile. In addition, specific corporate bodies discuss and define existing and future processes concerning the methodology and control of financial risk management.

Various measures to safeguard liquidity are in place which allow Freudenberg to react swiftly to unexpected liquidity-related risks. Such risks are hedged by solid banking and Partners' financing and high liquid reserves. Freudenberg has an above-average equity ratio, a stable level of Partners' reserves, and comprehensive credit lines.

In addition, Freudenberg is exposed to currency and interest rate risks. Managing these risks is implemented by internal guidelines and processes and monitored by a treasury management system. Because the currency risks of the various companies have a partially offsetting effect, the effective foreign exchange risk is determined for the Freudenberg Group as a whole and controlled by a central unit.

Interest rate risks arise from possible changes in the market rate and can lead to changes in the market value of fixed interest investments. Freudenberg supports subsidiaries in reducing interest rate risks.

Funds are made available in the form of loans or cash pool agreements. Freudenberg companies channel surplus liquidity to the central finance department.

Binding internal guidelines for companies in the Freudenberg Group clearly specify that derivative financial instruments may not be used for speculative purposes, but only for hedging risks in connection with underlying transactions and associated financing operations.

Freudenberg's sound financial profile was one of several factors that led the rating agency Moody's



## Group Management Report – Report on Opportunities and Risks

Deutschland GmbH, Frankfurt am Main, Germany, to upgrade its rating of Freudenberg SE to A3 and to assess the outlook as “stable”. This gives the Freudenberg Group very good creditworthiness at investment grade level.

### Risks from technological progress and third-party innovations

As a highly diversified technology group, Freudenberg is active in numerous product and market segments, some of which differ considerably. Moreover, Freudenberg conducts its entrepreneurial activities on the basis of different business models. Consequently, Freudenberg operates in a constantly changing environment and is exposed to technological progress and a wide range of innovations. In specific terms, this means that Freudenberg comes up against new products, technologies or organizational structures.

Freudenberg uses various measures, in particular in-house research and development and innovation, to manage the consequences of these customary risks. The most important pillar and key driver of innovation at Freudenberg is to be found in the Business Groups, whose research and development activities are closely geared to their customers. In addition, the Freudenberg Group acquires external companies or business units to add to the Group’s technology and product portfolio and to enhance competitiveness through innovation.

With the Freudenberg Technology Innovation Corporate Function, Freudenberg has created an organizational unit that bundles the Group’s technical knowledge – in particular through cross-sectional technologies. Based on the at-equity consolidation of the joint ventures, Freudenberg invests 4.2 percent of sales in research and development. This substantial sum led to increase in the share of sales attributable to new products to 33.1 percent.

### Contractual risks

Freudenberg enters into contracts with third parties on a daily basis and makes continuous adjustments to its portfolio through acquisitions and disinvestments of companies and business units. During the course of these activities, obligations are assumed or commitments undertaken that may change as time goes by, must be complied with over a longer period of time, or may prove impossible to meet as a consequence of unforeseen events. These activities could in retrospect prove disadvantageous and above all could negatively impact the earnings situation of the Group to a limited extent. Freudenberg has several measures in place to deal with these significant risks, including comprehensive upfront analyses and checks, dedicated management or contractual solutions such as time restrictions, index clauses, raw material clauses, and similar. Freudenberg ensures the establishment and continuous improvement of systematic contract management and contract monitoring in line with business demands in the Business Groups.

### Occupational health and safety and environmental risks

Freudenberg has production sites in some 60 countries, some of which operate under very different conditions. There are operative risks with regard to production processes in particular in terms of workflows, production equipment and the processing of hazardous materials. Freudenberg trains employees to comply with safety regulations and in the use of protective equipment, and fulfills all relevant safety requirements and guidelines.

Group-wide standards in the fields of occupational health and safety, the environment, and fire protection define and implement the minimum requirements and guidelines for the Business Groups. Internal and external audit processes monitor the implementation of programs to continuously minimize risks in these fields at the Business Groups. The audit findings are systematically evaluated and



measures implemented throughout the Group. Despite all of these preventive measures, significant occupational health and safety and environmental risks cannot be entirely ruled out.

In the case of hazardous substances, for example, efforts are made to identify alternatives or substitute substances before a statutory provision comes into effect with a view to minimizing potential and customary risks arising in connection with such hazardous substances. This forestalls the effects on production of a possible ban on a given substance. In addition, many product developments are subject to a stage gate process which among other things ensures that new products have a better environmental performance than their predecessors.

Since it was launched in 2002, the worldwide “We all take care” initiative motivates Freudenberg Group employees to make their work and their workplaces safer, healthier and more environmentally friendly as well as taking responsibility for society. The initiative is supported by the Group’s top management and senior executives in the Business Groups, and the best projects are honored each year.

#### Overall assessment of the risk situation

In our opinion, based on the probability of occurrence and potential impact of the risks described above, they do not individually or cumulatively present a risk to the continued existence of the Freudenberg Group.



## Group Management Report – Report on Opportunities and Risks Report on Expected Developments

### REPORT ON EXPECTED DEVELOPMENTS

The challenging macroeconomic conditions<sup>1</sup> will persist in 2017 – most particularly in South America and Russia, but also in China because of lower growth. No less demanding are the geopolitical trouble spots alongside developments in the oil and gas business, in the mining industry and in the agricultural sector. At the same time, new technological developments call for new solutions – from e-mobility and the demands of autonomous driving in the automotive sector to viable concepts for renewable energies and the implementation of Industry 4.0. The pace at which customer demands are changing is getting faster and faster as technology progresses. This also impacts the industrial and medical sectors as well as the consumer goods business. We anticipate overall growth of 1.0 to 3.0 percent in the markets of relevance to Freudenberg. However, apart from economic and technological factors, this also depends strongly on developments in the current geopolitical trouble spots.

More specifically, we expect a further slightly positive economic trend in Germany with economic growth of 1.5 percent, on a par with growth anticipated for the eurozone, the Freudenberg Group's largest sales region.

We anticipate a stronger economic trend in the USA and estimate that economic growth there for the full year will run at 2.2 percent.

In contrast, our forecasts for the emerging economies are very volatile. We expect China, an important market for Freudenberg, to remain a key driver of business development despite lower growth rates. GDP in China is forecast to grow by slightly more than 6.0 percent in 2017. We anticipate GDP growth of some 7.0 to 8.0 percent in India, with this forecast based on the successful implementation of key tax reforms.

Brazil and Argentina could see the first signs of a slight improvement in 2017, assuming the necessary structural reforms are implemented there.

In light of the ongoing conflict with Ukraine and its consequences, and as a result of the low oil price, we do not expect to see any significant year-on-year economic growth in Russia.

Furthermore, we anticipate there may be a slightly positive trend in the oil and gas industry on the back of the slight rise in oil prices. We expect the impact of exchange rate effects and raw material prices on the Group to be largely neutral to slightly negative compared with the 2016 financial year. In light of these circumstances, cautious optimism with regard to expected economic conditions is in order.

The environment in which we operate is becoming increasingly complex, but this also brings greater opportunities. Consequently, the Freudenberg Group plans to outpace the markets of relevance to the Group in terms of growth in almost all Business Groups once again in 2017, and to derive above-average benefits from economic developments in the various regions.

**Freudenberg Sealing Technologies** plans to expand business further in all regions. Activities will focus on the automotive and industrial sector and on expanding the relevant product portfolio.

In light of business developments in the year under review, **Freudenberg Oil & Gas Technologies** anticipates that business will at most be stable or slightly higher based on investments by the oil and gas industry on the back of the slight rise in the oil price. This Business Group intends to further improve its competitiveness based on the restructuring measures that center on optimizing production and improving internal workflows.

<sup>1</sup> Sources: in this chapter, all figures relating to economic developments are based on data from Consensus Economics, the European Commission, the International Monetary Fund, and the market research and consulting company Schlegel und Partner.



**EagleBurgmann** expects business in Central and South America to be difficult and anticipates subdued demand for mechanical seals in Asia. The Business Group will therefore systematically continue with its global cost and liquidity management.

**Freudenberg Medical** expects higher than market sales growth in 2017, driven above all by the recent business acquisitions. In addition, the Business Group will continue investing in proprietary know-how and innovation for various medical applications, and bring these applications to market.

**Vibracoustic** expects a slightly positive trend in business in 2017. While largely stable sales development is anticipated for the Powertrain Division, higher than market growth is expected for Chassis Division sales.

**Freudenberg Performance Materials** expects a slightly positive trend in business in 2017 underpinned by the renewal of the product portfolio and restructuring, in particular through investments in innovative products, applications and technologies.

**Freudenberg Filtration Technologies** will continue to focus on automotive filters and industrial filtration. It will also seize attractive openings to expand its market position in further filtration applications.

The **Japan Vilene Company** Business Group expects slightly positive business development for 2017 in a market environment characterized by high uncertainty, particularly in the core markets of Japan and the USA. The Business Group plans to optimize the product portfolio and strengthen the globalization strategy in order to lay the groundwork for positive development. One key focal area will be improving profitability in Japan. In addition, integration in the Freudenberg Group will progress further with a view to realizing synergies.

**Freudenberg Home and Cleaning Solutions** will profit from the expansion of the laundry care business through the recent acquisition of the Gimi group in Italy and through the dynamic expansion of

e-commerce business. At the same time, the Business Group will address the challenges in North America and Asia.

**Freudenberg Chemical Specialities** expects to see a slightly positive business trend in 2017. In line with economic conditions, expectations for the individual regions are very mixed.

**Freudenberg IT** expects consistently positive business development, as in previous years, and will continue to work on expanding its market position in America, Europe and Asia.

Our unique portfolio and our long-term strategy offer countless possibilities for us to contribute to the benefit of our customers and society in 2017, too. We must strive even harder to achieve excellence in our company in order to seize these opportunities. We must further improve our efficiency and harness our Group's potential to an even greater degree, we must stay flexible and adapt swiftly to market conditions. We have confidence in our talent management and in diversity as a success factor. We will continue to act prudently and to pursue our solid accounting policy and financial management.

We will drive our key projects forward and continue with the new initiatives in the fields of sustainability, non-financial key performance indicators, and our responsibility for society. As a responsible, innovative technology group, the Freudenberg Group will once again implement numerous measures in environmental protection and occupational health and safety in the 2017 financial year. Special attention will be devoted to occupational safety this year. We expect to see a significant reduction in the number of accidents measured on the basis of the LDIFR (Lost Day Incident Frequency Rate - all incidents at work involving at least one day's absence per million working hours) referred to the full financial year.

The analysis of present risks concludes there are no risks which pose a threat to the continued existence of the Freudenberg Group. There were no major changes



## Group Management Report – Report on Expected Developments

in the overall risk situation of the Group compared with the previous year.

Starting in 2017, the financial key performance indicators of relevance to Freudenberg will be determined based on the at-equity consolidation for the purposes of the regular monitoring of business development. Consequently, the Business Group joint ventures are no longer consolidated on a pro-rata basis. As a result, the sales of such joint ventures are no longer disclosed and only the profit after income taxes is recognized in the operating result.

Based on this, and despite all challenges, we expect year-on-year organic sales growth of between 1.0 and 3.0 percent for the Freudenberg Group in the 2017 financial year accompanied by an operating result slightly above the prior-year level. Almost all Business Groups are likely to contribute to this performance. On the basis of this forecast, we expect to see stable development of the return on sales.

Overall, we are confident we will be able to improve the excellence of our Group still further in the current financial year.

Weinheim, March 23, 2017

The Board of Management



## CONSOLIDATED FINANCIAL STATEMENTS

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Consolidated Financial Statement – Consolidated Statement of Financial Position

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

[€ million]	Note	Dec. 31, 2015	Dec. 31, 2016
<b>ASSETS</b>			
Intangible assets	(1)	871.0	2,635.1
Tangible assets	(2)	1,574.2	2,363.9
Investment properties	(3)	15.6	13.8
Investments in joint ventures	(4)	415.2	149.8
Investments in associated companies	(5)	978.5	900.5
Other financial assets		130.7	128.1
Financial assets		1,524.4	1,178.4
Other non-current assets	(7)	37.1	50.9
Deferred taxes	(25)	138.8	228.7
<b>Non-current assets</b>		<b>4,161.1</b>	<b>6,470.8</b>
Inventories	(6)	807.5	991.4
Trade receivables		982.2	1,500.9
Other current assets		155.7	211.5
Current receivables	(7)	1,137.9	1,712.4
Current tax assets		75.7	88.2
Securities and cash at bank and in hand	(8)	1,055.7	960.7
<b>Current assets</b>		<b>3,076.8</b>	<b>3,752.7</b>
		<b>7,237.9</b>	<b>10,223.5</b>
<b>EQUITY AND LIABILITIES</b>			
Subscribed capital		450.0	450.0
Capital reserves		50.2	50.2
Retained earnings		2,820.8	3,735.8
<b>Equity without non-controlling interests</b>		<b>3,321.0</b>	<b>4,236.0</b>
Non-controlling interests		378.6	367.3
<b>Equity</b>	<b>(9)</b>	<b>3,699.6</b>	<b>4,603.3</b>
Provisions for pensions and similar obligations	(10)	632.8	758.1
Other long-term provisions	(11)	78.0	125.6
Long-term provisions		710.8	883.7
Financial debt		661.8	1,151.6
Other non-current liabilities		113.3	370.8
Liabilities	(12)	775.1	1,522.4
Deferred taxes	(25)	131.2	421.5
<b>Non-current liabilities</b>		<b>1,617.1</b>	<b>2,827.6</b>
Other current provisions	(11)	474.7	637.9
Current tax liabilities		54.3	94.1
Financial debt		560.7	638.9
Trade payables		531.1	907.2
Other current liabilities		300.4	514.5
Liabilities	(12)	1,392.2	2,060.6
<b>Current liabilities</b>		<b>1,921.2</b>	<b>2,792.6</b>
		<b>7,237.9</b>	<b>10,223.5</b>



## CONSOLIDATED STATEMENT OF PROFIT OR LOSS

[€ million]	Note	2015	2016
Sales	(13)	6,410.9	7,900.1
Cost of sales	(14)	-3,950.6	-5,085.2
<b>Gross profit</b>		<b>2,460.3</b>	<b>2,814.9</b>
Selling expenses	(15)	-1,175.8	-1,298.1
Administrative expenses	(16)	-529.3	-600.3
Research and development expenses	(17)	-249.1	-330.1
Other income	(18)	116.5	742.7
Other expenses	(19)	-110.0	-137.9
Income from investments in joint ventures	(4),(20)	71.3	54.2
<b>Profit from operations</b>		<b>583.9</b>	<b>1,245.4</b>
Income from investments in associated companies	(5),(21)	94.8	47.5
Other investment result	(22)	15.5	-0.7
Other interest and similar income	(23)	12.0	10.7
Interest and similar expenses	(24)	-38.6	-37.8
<b>Financial result</b>		<b>83.7</b>	<b>19.7</b>
<b>Profit before income taxes</b>		<b>667.6</b>	<b>1,265.1</b>
Income taxes	(25)	-146.8	-178.2
<b>Consolidated profit</b>		<b>520.8</b>	<b>1,086.9</b>
Of which: attributable to Freudenberg		463.9	1,041.7
Of which: attributable to non-controlling interests	(26)	56.9	45.2



Consolidated Financial Statements – Consolidated Statement of Profit or Loss  
Consolidated Statement of Comprehensive Income

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

[€ million]	Note	2015	2016
<b>Consolidated profit</b>		<b>520.8</b>	<b>1,086.9</b>
<b>Other comprehensive income:</b>			
Remeasurement of defined benefit plans	(10)	-0.6	-52.1
Income tax relating to items that will not be reclassified to profit or loss	(9)	0.2	10.9
Share in other comprehensive income of joint ventures	(4)	-0.9	0.0
Share in other comprehensive income of associated companies	(5)	13.9	-18.8
<b>Items that will not be reclassified to profit or loss</b>		<b>12.6</b>	<b>-60.0</b>
Exchange rate differences	(9)	185.1	74.8
Changes in value of securities	(9)	5.4	-15.5
Changes in value of derivative financial instruments	(9)	-0.8	-0.1
Miscellaneous comprehensive income		-40.0	-28.8
Income tax relating to items that will be reclassified subsequently to profit or loss when specific conditions are met	(9)	-15.6	0.3
Share in other comprehensive income of joint ventures	(4)	-1.3	-1.0
Share in other comprehensive income of associated companies	(5)	-10.0	-23.5
<b>Items that will be reclassified subsequently to profit or loss when specific conditions are met</b>		<b>122.8</b>	<b>6.2</b>
<b>Other comprehensive income for the year</b>		<b>135.4</b>	<b>-53.8</b>
<b>Total comprehensive income for the year</b>		<b>656.2</b>	<b>1,033.1</b>
Of which: attributable to Freudenberg		574.9	1,005.2
Of which: attributable to non-controlling interests		81.3	27.9



## CONSOLIDATED STATEMENT OF CASH FLOWS

[€ million]	Note	2015	2016
Profit before income taxes		667.6	1,265.1
Current income taxes		-173.6	-245.9
Depreciation, amortization and impairment losses on intangible assets, tangible assets, investment properties and financial assets less write-ups		320.0	454.0
Profit or loss on disposal of intangible assets, tangible assets, investment properties and financial assets		-4.5	-649.6
Other expenditure and income not affecting payments		-2.4	-41.6
Changes in inventories, trade receivables and other assets		-65.4	-24.0
Changes in trade payables and other liabilities		-26.2	114.6
Changes in provisions		47.0	72.5
<b>Cash flow from operating activities</b>	<b>(27)</b>	<b>762.5</b>	<b>945.1</b>
Cash inflow from disposals of intangible assets, tangible assets and investment properties		22.2	32.3
Cash outflow from acquisitions of intangible assets, tangible assets and investment properties		-302.5	-406.8
Cash inflow from disposals of financial assets		11.2	1.9
Cash outflow from acquisitions of financial assets		-22.1	-4.6
Cash inflow in connection with the disposal of consolidated companies less cash disposed of		0.3	89.1
Cash outflow in connection with the acquisition of consolidated companies less cash acquired		-138.1	-1,222.3
<b>Cash flow from investing activities</b>		<b>-429.0</b>	<b>-1,510.4</b>
Payments to shareholders/non-controlling interests	(28)	-167.6	-129.3
Cash inflow from the take-up of financial debt		160.7	778.4
Cash outflow from the repayment of financial debt		-194.4	-181.3
Cash inflow from disposals of loans and securities held as non-current assets		3.6	4.3
Cash outflow from acquisitions of loans and securities held as non-current assets		-1.2	-0.8
<b>Cash flow from financing activities</b>		<b>-198.9</b>	<b>471.3</b>
<b>Changes in cash and cash equivalents with effect on payments</b>	<b>(29)</b>	<b>134.6</b>	<b>-94.0</b>
Changes in cash and cash equivalents from changes in consolidated group		0.1	0.0
Changes in cash and cash equivalents from exchange rate differences		3.3	-1.0
<b>Cash and cash equivalents at beginning of year</b>		<b>917.7</b>	<b>1,055.7</b>
<b>Cash and cash equivalents at end of year</b>		<b>1,055.7</b>	<b>960.7</b>



Consolidated Financial Statement – Consolidated Statement of Cash Flows  
Consolidated Statement of Changes in Equity

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

[€ million]	Subscribed capital	Capital reserves	Retained earnings	Equity without non-controlling interests	Non-controlling interests	Equity
<b>Status Jan. 1, 2015</b>	<b>450.0</b>	<b>50.2</b>	<b>2,344.4</b>	<b>2,844.6</b>	<b>366.4</b>	<b>3,211.0</b>
Consolidated profit			463.9	463.9	56.9	520.8
Appropriation of profit			-98.5	-98.5	-69.1	-167.6
Other comprehensive income			111.0	111.0	24.4	135.4
<b>Status Dec. 31, 2015</b>	<b>450.0</b>	<b>50.2</b>	<b>2,820.8</b>	<b>3,321.0</b>	<b>378.6</b>	<b>3,699.6</b>
Consolidated profit			1,041.7	1,041.7	45.2	1,086.9
Appropriation of profit			-90.2	-90.2	-39.2	-129.4
Other comprehensive income			-36.5	-36.5	-17.3	-53.8
<b>Status Dec. 31, 2016</b>	<b>450.0</b>	<b>50.2</b>	<b>3,735.8</b>	<b>4,236.0</b>	<b>367.3</b>	<b>4,603.3</b>

See also the explanatory remarks on equity in note (9) to the Consolidated Financial Statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### General

The Freudenberg Group is an international industrial group mainly active as a supplier to the automotive, mechanical engineering, oil and gas industries as well as the textile and apparel industries. The Group's portfolio also includes medical technology and consumer goods.

The consolidated financial statements of Freudenberg SE, Weinheim, Germany, for 2016 have been drawn up in accordance with the International Financial Reporting Standards (IFRS) as they are to be applied in the European Union (EU) as of the date of the statement of financial position (December 31, 2016).

Comparative figures for the previous financial year were based on the same principles.

Freudenberg SE has availed itself of the right as laid down in Sec. 315a (3) HGB (Handelsgesetzbuch, "German Commercial Code") to set up its consolidated financial statements in accordance with IFRS.

The Group currency is the euro. All amounts are indicated in million euros unless otherwise stated.

In the 2016 financial year, the application of the following amended and new standards was binding for the first time:

Standards/amendments	Title
IFRS 10, IFRS 12 and IAS 28	Amendments to IFRS 10, IFRS 12 and IAS 28 – <i>Investment Entities: Applying the Consolidation Exception</i>
IFRS 11	Amendments to IFRS 11 – <i>Accounting for Acquisitions of Interests in Joint Operations</i>
IFRS 14 <sup>1</sup>	<i>Regulatory Deferral Accounts</i>
IAS 1	Amendments to IAS 1 – <i>Disclosure Initiative</i>
IAS 16 and IAS 38	Amendments to IAS 16 and IAS 38 – <i>Clarification of Acceptable Methods of Depreciation and Amortisation</i>
IAS 16 and IAS 41	Amendments to IAS 16 and IAS 41 – <i>Bearer Plants</i>
IAS 19	Amendments to IAS 19 – <i>Defined Benefit Plans: Employee Contributions</i>
IAS 27	Amendments to IAS 27 – <i>Equity Method in Separate Financial Statements</i>
IAS 28 and IFRS 10 <sup>2</sup>	Amendments to IAS 28 and IFRS 10 – <i>Sale or Contribution of Assets between an Investor and its Associate or Joint Venture</i>
Various standards	<i>Annual Improvements to IFRSs 2010-2012 Cycle</i>
Various standards	<i>Annual Improvements to IFRSs 2012-2014 Cycle</i>

<sup>1</sup> This standard is not proposed for incorporation in EU law.

<sup>2</sup> Endorsement by the EU has been postponed.

The first-time application of the amendments to these standards had no effect or no material effect on the consolidated financial statements.

The International Accounting Standards Board (IASB) and the IFRS Interpretations Committee have

published additional standards, interpretations and amendments the application of which was not yet binding for the 2016 financial year. The application of these standards, interpretations and amendments is subject to endorsement by the EU which, in some cases, is still pending.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

Standards/interpretations/amendments		Application binding from <sup>1</sup>	Endorsed by EU	Probable impact
IFRS 2	Amendments to IFRS 2 – <i>Classification and Measurement of Share-based Payment Transactions</i>	January 1, 2018	No	None
IFRS 4	Amendments to IFRS 4 – <i>Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts</i>	January 1, 2018	No	None
IFRS 9	<i>Financial Instruments</i>	January 1, 2018	Yes	Changes in the classification and measurement of financial assets and liabilities, impairments, hedge accounting and extended disclosures in notes; it is expected that the impact of the changes will be slight.
IFRS 15	<i>Revenue from Contracts with Customers</i>	January 1, 2018	Yes	The new definition of the transaction price will result in a reduction in sales for some Business Groups. There will also be time shifts in the recognition of sales as a result of new criteria for determining the transfer of control, for example for customer specific tools. In addition, sales may be realized at an earlier point in time as a result of the application of revenue recognition over time in the case of customer-specific production contracts. There will be further changes in the statement of financial position due to the recognition of contract assets and contract liabilities and in the notes as a result of extended disclosures. The transition effects of the first-time application of the new regulations are currently being analyzed. In addition to the transition effects, only slight effects on the consolidated financial statements are expected.
IFRS 15	Clarifications to IFRS 15 – <i>Revenue from Contracts with Customers</i>	January 1, 2018	No	None
IFRS 16	<i>Leases</i>	January 1, 2019	No	Effects on the balance sheet total and on the profit or loss statement as well as on extended disclosures as a result of the obligation to recognize a right-of-use asset and a lease liability for most leasing contracts. It will only be possible to reliably quantify the expected effects following the system-based impact analysis planned for 2017.
IAS 7	Amendments to IAS 7 – <i>Disclosure Initiative</i>	January 1, 2017	No	None
IAS 12	Amendments to IAS 12 – <i>Recognition of Deferred Tax Assets for Unrealised Losses</i>	January 1, 2017	No	None
IAS 40	Amendment to IAS 40 – <i>Investment Property</i>	January 1, 2018	No	None
IFRIC 22	<i>Foreign Currency Transactions and Advance Consideration</i>	January 1, 2018	No	None
Various standards	<i>Annual Improvements to IFRSs 2014 – 2016 Cycle</i>	January 1, 2017/January 1, 2018	No	None

<sup>1</sup> From this date or for reporting periods beginning after this date.



## Consolidated group

Apart from Freudenberg SE, 63 German (previous year: 62) and 363 foreign (previous year: 312) **affiliated companies** with respect to which Freudenberg SE has the power to direct the relevant activities of the company, the right to variable returns from the company and the ability to affect such variable returns, are fully consolidated.

Freudenberg operates a joint venture in the field of mechanical seals within the EagleBurgmann Business Group together with the partner Eagle Industry Co., Ltd., Tokyo, Japan. Freudenberg holds a 25-percent stake in EagleBurgmann Japan Co., Ltd., Tokyo, Japan. The partner also holds a 25-percent indirect stake in EagleBurgmann Germany GmbH & Co. KG, Wolfratshausen, Germany. According to the joint venture agreement between the partners, Freudenberg exercises control over affiliated companies of the EagleBurgmann Group in which Freudenberg holds less than half of the voting rights of the other company; such affiliated companies are therefore fully consolidated.

No German (previous year: 8) and 14 foreign (previous year: 57) **joint ventures** are included in the consolidated financial statements. These legally independent companies are managed jointly with the partner company in each case. Both parties hold rights to the net assets of the companies. The joint ventures are consolidated by the equity method.

In addition, 11 foreign (previous year: 12) **associated companies** are included in the consolidated financial statements. Freudenberg does not control these companies but only exercises a significant influence. These companies are consolidated by the equity method.

All affiliated companies, joint ventures and associated companies are listed under "Shareholdings".

In the year under review, 75 companies were included in the consolidated financial statements as fully consolidated affiliated companies for the first time. 23 companies which had previously been fully consolidated were no longer included as fully consolidated affiliated companies due to sale, liquidation or merger. The timing of the initial

consolidation was determined on the basis of the date when Freudenberg SE gained control.

## Acquisitions and disposals

On the basis of the joint venture agreement between the two partners Freudenberg SE and Toray Industries, Inc. (Toray), Tokyo, Japan, Freudenberg gained control over Japan Vilene Company Ltd. (Japan Vilene), Tokyo, Japan, with effect from April 1, 2016. Freudenberg holds 75 percent of the shares, while the partner Toray holds the remaining 25 percent. Japan Vilene and its affiliates are operated as a new Freudenberg Business Group in the Nonwovens and Filtration Business Area and the company operates independently in the market. Freudenberg SE and Toray had made a joint public tender in 2015 to acquire all common shares in Japan Vilene at a price of ¥1,200 per share and then acquired all the shares in Japan Vilene held by other shareholders. The shares of Japan Vilene were delisted as of December 25, 2015. In January 2016, the EU anti-trust authority granted permission for the acquisition of the shares. Under the joint venture agreement, both parties agreed upon unconditional put and call options for the acquisition of all the minority shares. These options can be exercised for the first time five years after the effective date of the joint venture agreement. At the time of acquisition, the options are measured as financial liabilities at fair value and subsequently capitalized at amortized acquisition cost. At the time of acquisition, the fair value of the options was €75.9 million. The fair value of the share in the equity capital of Japan Vilene held before the acquisition date was €100.0 million. The remeasurement of the equity share at the time of acquisition resulted in a profit of €15.6 million, which was disclosed as other income. The goodwill resulting from purchase price allocation, which is not deductible for tax purposes, amounting to €52.4 million, represents inseparable intangible assets such as the specialist knowledge of employees and synergy potentials. Since the acquisition date, the Japan Vilene Group has contributed sales in the amount of €437.8 million and profit in the amount of €17.7 million to the consolidated profit. If the acquisition had already taken place with effect from January 1, 2016, sales would have been increased by a further €130.6 million and consolidated profit would have been increased by a further €10.9 million.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

With effect from July 5, 2016, Freudenberg acquired the 50-percent stake in the joint venture company Vibracoustic GmbH, Darmstadt, Germany, held by Trelleborg Holding AB, Trelleborg, Sweden. In the 2015 financial year, the Vibracoustic Group, with a workforce of about 9,400 employees, reported sales of almost €2 billion. The company is a worldwide market and technology leader for antivibration components and modules for the global automotive industry. The Vibracoustic Group produces components such as engine and chassis mounts, air springs, dampers and isolators. These reduce noise and vibration caused by the powertrain or by rough road surfaces. The consideration transferred for the newly acquired stake in the company was €790.9 million (of which €669.9 million with effect on payments). This includes the fair value of the earn-out agreement included in the purchase contract, in the amount of €121.0 million which is based on a variable performance component taking into consideration product sales in the 2016 and 2017 financial years. The fair value of the equity share in Vibracoustic GmbH held prior to the acquisition was €760.9 million. The goodwill resulting from purchase price allocation, which is not deductible for tax purposes, amounting to €835.9 million, represents inseparable intangible assets such as the specialist knowledge of employees and expected future prospects and also includes the non-controlling interests in the Vibracoustic Group. The remeasurement of the equity capital at the time of acquisition resulted in a profit of €567.9 million, which was disclosed as other income. Since the acquisition, the Vibracoustic Group has contributed sales of the amount of €1,021.0 million and profit in the amount of €35.2 million to the consolidated profit. If the acquisition had already taken place with effect from January 1, 2016, sales would have been increased by a further €1,025.0 million and consolidated profit by a further €68.7 million.

The Vibracoustic Group is under obligations to remediate environmental damage in Brazil. As at the date of the first-time consolidation, it was not possible

to make a reliable estimate of the remediation expenses as the final expert's report was not yet available and the necessary negotiations with the competent authorities had not been completed. The provisions recognized in the consolidated statement of financial position as at December 31, 2016 include the remediation expenses estimated by independent experts. Corresponding reimbursement claims against the former co-shareholder are recognized under other assets.

With effect from August 31, 2016, the Freudenberg Home and Cleaning Solutions Business Group acquired all of the shares in Gimi S.p.A. in Monselice, Italy. The company is the market leader in Italy for laundry care products, especially ironing boards and laundry dryers. The Gimi Group is active in more than 80 countries throughout the world and reported sales of about €80 million in 2015. As at the acquisition date, the company employed about 320 people. The consideration for the acquisition was €59.0 million, which was transferred entirely in cash. The goodwill resulting from purchase price allocation, which is not deductible for tax purposes, amounting to €35.7 million, mainly represents potential synergy effects such as sales synergies resulting from the expansion of the product portfolio and cost synergies. Since the acquisition date, the Gimi Group has contributed sales in the amount of €29.3 million and profit in the amount of €2.4 million to the consolidated profit. If the acquisition had already taken place with effect from January 1, 2016, sales would have been increased by a further €53.1 million and consolidated profit would have been reduced by €1.1 million.

The transaction costs arising in connection with the company acquisitions were, in each case, not significant and were recognized with effect on net income. As at the acquisition date, there was no significant difference in each case between the gross amount of the consideration payable and the fair values.



The fair values of the main asset and liability items of the groups acquired as at the acquisition dates were as follows:

[€ million]	Vibracoustic	Japan Vilene	Gimi
Intangible assets	1,678.3	126.9	66.4
Tangible assets	416.7	240.8	8.9
Other non-current assets	37.1	86.3	4.9
Inventories	127.1	64.2	15.6
Trade receivables	358.9	117.1	22.4
Other current assets	43.7	9.5	3.5
Cash acquired	146.0	60.2	1.6
<b>Assets</b>	<b>2,807.8</b>	<b>705.0</b>	<b>123.3</b>
Non-current liabilities	799.0	89.9	37.6
Current liabilities	420.4	313.0	26.7
<b>Liabilities</b>	<b>1,219.4</b>	<b>402.9</b>	<b>64.3</b>
<b>Net assets</b>	<b>1,588.4</b>	<b>302.1</b>	<b>59.0</b>

Intangible assets identified in connection with purchase price allocations mainly concern customer lists/relations, technologies and know-how. The fair values of the customer lists/relations identified were measured by the residual value method on the basis of corporate planning with a useful life of 20 to 25 years. As regards technologies, a license price analogy method with a useful life of 10 to 25 years was applied.

With effect from October 1, 2016 the Freudenberg Group sold the business of Freudenberg Schwab Vibration Control to Trelleborg Holdings Germany GmbH, Stuttgart, Germany. Over the past decades, Freudenberg Schwab Vibration Control has established itself as a technology leader in the market for vibration control solutions for railway rolling stock as well as general industry. Freudenberg Schwab Vibration Control is headquartered and has its production site in Velten, Germany. It also has engineering and sales offices in Laudenbach, Germany and Adliswil, Switzerland. In 2015 Freudenberg Schwab Vibration Control generated sales of some €60 million.

#### Consolidation methods

The consolidated financial statements are based on the annual accounts of Freudenberg SE and the consolidated companies. All the annual accounts concerned were drawn up as at December 31, 2016. In accordance with IFRS 10, the accounts of the individual companies to be included in the consolidated financial statements were drawn up applying uniform accounting and measurement methods.

The acquisition costs of the individual consolidated companies are set off against the pro-rata share in the fair value of the equity of the companies concerned as of the date of acquisition according to the purchase method. Identifiable acquired assets and liabilities are also included in the consolidated statement of financial position at their fair values as of the acquisition date. Any remaining differences are shown as goodwill.

Inter-company profits and losses, sales, expenses and income and all receivables and payables between



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

consolidated companies are eliminated. Deferred taxes are set up on consolidation transactions affecting net income.

Joint ventures and associated companies are consolidated by the equity method on the basis of financial statements drawn up in accordance with IFRS.

The differences arising from the acquisition of shareholdings in joint ventures and associated companies form part of the book value of the shareholding in the company concerned. Amortization is not recognized on goodwill in subsequent periods. An impairment test is carried out on the book value of the shareholding in the joint venture or associated company as a whole if there are indications that the carrying amount could be impaired.

### Accounting and measurement principles

In some cases, it is necessary to apply accounting methods based on estimates or the exercise of discretion in connection with the establishment of the consolidated financial statements. Normally, these methods include complex, subjective assessments and the use of uncertain assumptions which may be subject to change. It is therefore conceivable that actual amounts in the future and future events may deviate from the forecasts made as estimates for the same reporting period could have been made differently for reasons which are easy to understand. Such accounting methods based on estimates and the exercise of discretion may therefore have a material impact on the net assets, financial position and results of operations in the consolidated financial statements and may also change over the course of time.

Acquired intangible assets are capitalized at acquisition cost and amortized on a systematic basis.

Amortization is based on the following useful lives:

Software	3 to 8 years
Patents and licenses	depending on contract term

Intangible assets with finite useful lives acquired in a business combination are amortized on a systematic basis over useful lives of up to 25 years.

An impairment test is carried out on goodwill at least once per year. For the impairment test, the goodwill acquired is allocated to the cash-generating units expected to benefit from the business combination. In line with internal management reporting, the cash-generating units are represented by the Business Groups. An impairment loss is recognized if the carrying amount of the cash-generating unit is higher than the recoverable amount of the unit. The recoverable amount is the higher of the fair value less costs of disposal and the value in use of the cash-generating unit.

For the determination of the recoverable amount, the value in use of the cash-generating units concerned is determined by the discounted cash flow method on the basis of a detailed planning period of five years. The determination of the value in use of a cash-generating unit is therefore connected with management assessments concerning future developments and with past experience. The cash flows predicted on the basis of these assessments may be affected by factors such as the volatility of capital markets, exchange rate fluctuations or expected economic development. The discount rates used for the determination of the value in use are based on the weighted average cost of capital (hereafter WACC) determined separately for each cash-generating unit.

Impairments of capitalized goodwill are shown under other expenses in the consolidated statement of profit or loss. Reversals of impairments are not recognized with respect to goodwill for which impairments have been recognized.

Impairment losses going beyond goodwill are recognized for individual assets of cash-generating units if the fair value less costs of disposal of such units or the value in use of such units has fallen below their carrying amount.

Provided that such assets meet the requirements of IAS 38, internally generated intangible assets are carried as assets at production cost and are amortized on a systematic basis over their useful lives, if their useful lives are finite.



If the useful life of intangible assets is not considered to be finite, no amortization is effected. An impairment test is carried out on such assets annually. An intangible asset may be regarded as having an indefinite useful life when, based on an analysis of all of the relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash flows for the Group.

Expenditure in connection with development projects is capitalized as intangible assets if, in addition to meeting the criteria of IAS 38, a Group threshold is exceeded. Otherwise, development expenditure is shown as expenses. Capitalized development expenditure is amortized on a straight-line basis over the underlying contract term starting with the beginning of production of the product concerned. Amortization of capitalized development expenditure is normally recognized in cost of sales.

Tangible assets are capitalized at acquisition or production cost. In the case of assets produced by Group companies, production cost also includes directly attributable cost as well as pro-rata overheads and depreciation.

Borrowing costs are capitalized as part of acquisition or production cost in the case of qualifying assets.

Expenditure for repairs and maintenance is generally shown as expenses. Such expenditure is only capitalized if future economic benefits in connection with such expenditure are probable and the acquisition or production cost can be reliably measured.

Taxable grants and tax-free investment subsidies, normally paid by public bodies, are set off against acquisition or production cost.

Movable non-current assets and industrial buildings are depreciated over their useful lives. This approach normally corresponds to straight-line depreciation.

Systematic depreciation is determined on the basis of the following useful lives:

Buildings	max. 50 years
Machinery and equipment	5 to 20 years
Other fixtures, fittings and office equipment	3 to 20 years

An impairment test on tangible and intangible assets is always carried out if circumstances or changed conditions indicate that the carrying amount of such assets may not be recovered. The estimates required for the determination of the recoverable amount may have an impact on the amount of the impairment. If the impairment of an asset reflected by a write-down in the past is reduced or eliminated, the impairment loss is reversed. The updated acquisition or production cost represents the upper limit of measurement in such cases.

In accordance with IAS 17, tangible assets leased under finance leases are recognized as assets and written off over their economic useful life if substantially all the risks and rewards associated with the ownership of the leased asset lie with the lessee. Such assets are carried at the fair value of the leased asset at the inception of the lease or, if lower, at the present value of the minimum lease payments. A liability of the same amount is also shown on the statement of financial position.

In the case of operating leases, lease payments are recognized as expenses.

Land and buildings held to earn rentals from third parties are dealt with as investment properties. Such properties are measured at acquisition cost. Investment properties are depreciated over their useful lives. This approach normally corresponds to straight-line depreciation. As a general principle, systematic depreciation is calculated on the basis of a maximum useful life of 50 years and effected on a straight-line basis. The fair value is determined by the discounted cash flow method.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

Participations are shown at acquisition cost or, if lower, at fair value.

Investments in joint ventures and associated companies are shown at acquisition cost on first-time consolidation and subsequently adjusted for changes in the share of the shareholder in the net assets of the company concerned.

Long-term loans are discounted if the amount of such discount is significant.

Inventories are shown at acquisition or production cost or at net realizable value, where this is lower. Inventories of raw materials and consumables and merchandise are measured by the weighted average cost method. Production cost includes directly attributable costs as well as production and material overheads and depreciation.

Receivables and other assets are recognized at amortized cost. Impairments are recognized for individual risks identified which are not covered by credit insurance. Impairments are effected using a separate account if circumstances become apparent as a result of which the conclusion can be drawn that certain receivables are subject to risks in excess of the general credit risk. The amortized cost is approximately equivalent to the fair value of the assets concerned. Long-term receivables are discounted if the amount of such discount is significant.

Securities carried as non-current or current assets that are available for sale are recorded at fair value as of the statement of financial position date. Value changes are shown under equity without an effect on net income.

Cash at bank or in hand is shown at its nominal value. Cash held in foreign currencies is converted using the exchange rate as of the statement of financial position date.

Non-current assets and groups of assets held for sale are shown separately in the statement of financial position if they are available for immediate sale in their present condition and the sale of such assets is highly probable within the next 12 months. Such assets are shown at the lower of fair value less costs to sell and book value. Systematic depreciation is not

recognized on such assets from the date of reclassification. Liabilities included in a disposal group are shown separately under liabilities.

The requirement for the reversal of the impairment of assets has been complied with both for non-current and for current assets. Unless individual standards call for a different measurement, the updated acquisition or production cost represents the upper limit of measurement in such cases.

Provisions for pensions and similar obligations are determined by the projected unit credit method using actuarial principles. The actuarial assessments are based on major assumptions concerning the discount rates to be used and take into account future income and pension trends. Service cost and the net interest on the net defined benefit liability are recognized under personnel expenses with an impact on net income. Gains and losses from remeasurements of the net defined benefit liability are disclosed under other comprehensive income. Assets held to provide benefits for employees are measured at fair value.

Deferred taxes are calculated on temporary differences between the book values of assets and liabilities in the consolidated statement of financial position and their tax bases, taking into account the applicable national income tax rates valid on the date of realization and already in force on the statement of financial position date. In addition, deferred tax assets are recognized for tax losses carried forward if sufficient taxable income will be available in the future. Deferred tax assets and liabilities are only set off against each other in cases where the income taxes concerned are levied by the same tax authority and concern the same period.

Other provisions allow for all recognizable risks and uncertain obligations towards third parties which will probably result in an outflow of resources which can be reliably estimated. Such provisions are recognized at their most probable settlement value and discounted if the amount of such discount is significant. Especially the determination of the settlement value of provisions for restructuring, environmental risks, guarantees and litigation is connected with estimates and uncertainty. For the measurement of such values, the assessments of local independent experts are used in some cases. In the



future, deviations between actual events and the assumptions made may necessitate adjustments to the Group's provisions. Reimbursement rights in this connection are shown separately under other assets.

Liabilities are shown at their face value or at the repayment or settlement value, where this is higher. Non-current liabilities are discounted if the amount of such discount is significant.

Put options granted to the holders of non-controlling interests for the sale of their shares are recognized as forward purchases. The item recorded in equity for these shares is de-recognized and a liability measured at fair value is recognized. As at each statement of financial position date, the liability is remeasured on the basis of recognized measurement models, taking into consideration the estimate of the expected settlement amount. Any resulting changes in book value are recognized with an effect on net income.

Sales and other income are recognized at the fair value of the consideration received or receivable when the services are performed or the goods or products concerned are delivered.

The consolidated statement of cash flows is broken down into cash flows from operating, investing and financing activities. Effects arising from changes in the consolidated group and the effects of exchange rate differences have been eliminated from the consolidated statement of cash flows. The influence of these effects on cash and cash equivalents is indicated separately.

Fair value is determined on the basis of input factors in three defined categories. Determination is based on estimates and assumptions associated with uncertainty. The following fair value measurement hierarchy is applied:

Level 1: Use of quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2: Determination of fair value using measurement procedures based on observed input factors for similar assets or liabilities in active markets or for identical assets or liabilities in markets that are not active.

Level 3: Measurement of assets and liabilities using measurement methods based on unobservable inputs as adequate observable market data are not available for the measurement of fair value.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

### Currency translations

The financial statements of almost all companies included in the consolidated financial statements which are not located in the eurozone are drawn up in the national currencies concerned. This is the currency of the primary economic environment in which the companies concerned operate (concept of functional currency).

In the accounts of individual companies, foreign-currency receivables and liabilities are translated at the exchange rates as of the date of the statement of financial position.

Goodwill created as a result of acquisitions on or after March 31, 2004, is carried as an asset of the economically independent foreign companies concerned in their respective functional currencies.

In the consolidated financial statements, the financial statements of all companies not located in the eurozone are translated in accordance with the following principles:

- Statement of financial position items are translated at the exchange rate as of the date of the statement of financial position.
- Statement of profit or loss items are translated at average annual exchange rates.

- Differences arising from the use of different exchange rates are recognized in equity without an effect on net income.

The same principles are used in the case of investments in joint ventures and associated companies consolidated by the equity method.

The annual financial statements of companies located in hyperinflationary economies are translated in accordance with the requirements of IAS 29. Gains or losses on the inflation adjustment of the carrying amounts of non-monetary items are recognized under other income or other expenses.

With effect from the beginning of the 2016 financial year, the regulations of IAS 29 were applied for the first time to Group company EagleBurgmann Venezuela, C.A., Caracas, Venezuela. In order to determine adjustments for inflation, a consumer price index developed by Ecoanalítica, C.A., Caracas was used. In the reporting year, this index rose by 525%. From Group perspective neither the first-time adjustment nor continual inflation adjustments based on historic acquisition and production costs had a significant impact on the net assets, financial position and results of operations as at December 31, 2016.

The exchange rates of currencies used for currency conversion which are material to the annual financial statements developed as follows:

Country	Currency	Closing rate		Average rate	
		1 Euro = Dec. 31, 2015	Dec. 31, 2016	2015	2016
Brazil	BRL	4.3139	3.4394	3.7418	3.8003
China	CNY	7.0724	7.3443	6.9434	7.3488
United Kingdom	GBP	0.7350	0.8581	0.7236	0.8227
Japan	JPY	131.1173	123.5816	133.5530	120.4280
Mexico	MXN	18.9240	21.8430	17.6440	20.6246
USA	USD	1.0892	1.0568	1.1039	1.1040

Differences arising from the use of different exchange rates compared with the previous year are shown in the statement of changes in intangible and tangible

assets with respect to non-current assets and in the consolidated statement of comprehensive income with respect to equity.



NOTES TO THE CONSOLIDATED  
STATEMENT OF FINANCIAL POSITION

(1) Intangible assets

Changes in intangible assets from January 1 to  
December 31, 2015:

[€ million]	Internally generated software	Development costs	Development costs under construction	Concessions, licenses and others <sup>1</sup>	Goodwill	Payments made on account	Total
<b>ACQUISITION/PRODUCTION COST</b>							
<b>Status Jan. 1, 2015</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>693.3</b>	<b>561.2</b>	<b>0.9</b>	<b>1,255.4</b>
Additions/disposals from changes in consolidated group	0.0	0.0	0.0	29.1	31.8	0.0	60.9
Exchange rate differences	0.0	0.0	0.0	23.4	23.4	0.0	46.8
Additions	0.0	0.0	0.0	13.2	0.0	1.5	14.7
Disposals	0.0	0.0	0.0	-6.4	-4.5	0.0	-10.9
Reclassifications <sup>2</sup>	0.0	0.0	0.0	2.2	0.0	-0.6	1.6
<b>Status Dec. 31, 2015</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>754.8</b>	<b>611.9</b>	<b>1.8</b>	<b>1,368.5</b>
<b>AMORTIZATION</b>							
<b>Status Jan. 1, 2015</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>368.0</b>	<b>26.8</b>	<b>0.0</b>	<b>394.8</b>
Disposals from changes in consolidated group	0.0	0.0	0.0	-0.3	0.0	0.0	-0.3
Exchange rate differences	0.0	0.0	0.0	13.1	-2.1	0.0	11.0
Additions – systematic	0.0	0.0	0.0	65.6	0.0	0.0	65.6
Impairment losses	0.0	0.0	0.0	3.7	33.1	0.0	36.8
Disposals	0.0	0.0	0.0	-5.9	-4.5	0.0	-10.4
Reclassifications <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Status Dec. 31, 2015</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>444.2</b>	<b>53.3</b>	<b>0.0</b>	<b>497.5</b>
<b>Book value Dec. 31, 2015</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>310.6</b>	<b>558.6</b>	<b>1.8</b>	<b>871.0</b>

<sup>1</sup> Intangible assets identified in connection with purchase price allocations mainly concern customer lists/relations, technologies and know-how.

<sup>2</sup> The reclassifications also include transfers to other balance sheet items.



Consolidated Financial Statement – Notes to the Consolidated Financial Statements

Changes in intangible assets from January 1 to December 31, 2016:

[€ million]	Internally generated software	Development costs	Development costs under construction	Concessions, licenses and others <sup>1</sup>	Goodwill	Payments made on account	Total
<b>ACQUISITION/PRODUCTION COST</b>							
Status Jan. 1, 2016	0.0	0.0	0.0	754.8	611.9	1.8	1,368.5
Additions/disposals from changes in consolidated group	1.0	10.8	10.8	921.2	927.5	1.7	1,873.0
Exchange rate differences	0.3	0.0	0.0	17.1	13.4	0.0	30.8
Additions	0.1	0.0	9.3	13.1	3.6	3.2	29.3
Disposals	0.0	0.0	0.0	-27.2	-3.8	0.0	-31.0
Reclassifications <sup>2</sup>	0.5	0.0	0.0	1.4	0.0	-0.4	1.5
Status Dec. 31, 2016	1.9	10.8	20.1	1,680.4	1,552.6	6.3	3,272.1
<b>AMORTIZATION</b>							
Status Jan. 1, 2016	0.0	0.0	0.0	444.2	53.3	0.0	497.5
Disposals from changes in consolidated group	0.0	0.0	0.0	-19.1	0.0	0.0	-19.1
Exchange rate differences	0.2	0.0	0.0	8.6	2.7	0.0	11.5
Additions – systematic	0.3	1.3	0.0	109.7	0.0	0.0	111.3
Impairment losses	0.0	0.0	0.0	11.9	50.9	0.0	62.8
Disposals	0.0	0.0	0.0	-26.9	-0.2	0.0	-27.1
Reclassifications <sup>2</sup>	0.5	0.0	0.0	-0.4	0.0	0.0	0.1
Status Dec. 31, 2016	1.0	1.3	0.0	528.0	106.7	0.0	637.0
<b>Book value Dec. 31, 2016</b>	<b>0.9</b>	<b>9.5</b>	<b>20.1</b>	<b>1,152.4</b>	<b>1,445.9</b>	<b>6.3</b>	<b>2,635.1</b>

<sup>1</sup> Intangible assets identified in connection with purchase price allocations mainly concern customer lists/relations, technologies and know-how.

<sup>2</sup> The reclassifications also include transfers to other balance sheet items.



Goodwill was subjected to an impairment test as at December 31, 2016. Apart from the expected developments in sales and profit as well as net investments of the Business Groups concerned, the basic assumptions used for determining the value in use of the cash generating units included a growth rate of 2.0 percent (previous year: 2.0 percent) and pre-tax WACCs ranging from 5.2 percent to 12.2 percent (previous year: ranging from 6.4 percent to 11.6 percent).

An impairment of goodwill was only identified in the case of the cash generating unit Freudenberg Oil & Gas Technologies. This is a result of changed business prospects for subsequent financial years in the

context of continuing low price levels on the oil market and the resulting effect on sales markets. On the basis of a WACC of 12.2 percent (previous year: 6.4 percent) and the growth rate stated above, impairment of the full carrying amount of €50.9 million was effected (previous year: €33.1 million). It was not necessary to record impairment of any further assets on the basis of the impairment test.

The two significant goodwills are assigned to the cash-generating units Vibracoustic and Freudenberg Sealing Technologies. The book values of these goodwills and the sustainable growth rates and WACCs used for the impairment test are listed in the following table:

[€ million]	Vibracoustic <sup>1</sup>		Freudenberg Sealing Technologies	
	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016
Goodwill	-	835.9	183.4	174.9
Sustainable growth rate	-	2.0 %	2.0 %	2.0 %
WACC	-	9.9 %	11.6 %	9.9 %

<sup>1</sup> No disclosure of previous year figures for new acquisitions (see also the explanatory remarks on acquisitions and disposals).

For the cash-generating unit Vibracoustic, in addition to the sustainable growth rate and WACC mentioned above, corporate planning also includes a growth rate slightly above the growth rate for global automobile production derived from external studies as increased use of vibration control equipment is expected in vehicles during the planning period. The main areas of growth will be in the regions of North America and Asia. Cost increases are to be compensated for by productivity improvements; insofar and profitability is expected to grow at a higher rate than sales during the detailed planning period.

Plans for the cash-generating unit Freudenberg Sealing Technologies are based on stable development in sales and profitability in the detailed planning period compared with the 2016 financial year. Although there are differences between the various regions and sectors, market developments in the

sealing segment as a whole throughout the world are assessed as stable. Here too, rising costs, especially for materials, are to be compensated for by further productivity increases.

An impairment test was also carried out with a variation in the WACCs of up to plus/minus 2.0 percentage points.

In the case of the cash-generating unit Vibracoustic, the recoverable amount exceeds the carrying amount of the Business Group by €410.0 million. With an increase of 1.2 percentage points in the WACC, the recoverable amount would correspond to the carrying amount.

In the case of the other goodwill items, a variation of up to +/-2.0 percentage points in the WACC would not result in any further impairment loss.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

### (2) Tangible assets

Changes in tangible assets from January 1 to December 31, 2015:

[€ million]	Land and buildings	Machinery and equipment	Other fixtures, fittings and office equipment	Payments made on account	Construction in progress	Total
<b>ACQUISITION/PRODUCTION COST</b>						
<b>Status Jan. 1, 2015</b>	<b>1,070.6</b>	<b>2,092.6</b>	<b>762.9</b>	<b>15.3</b>	<b>98.8</b>	<b>4,040.2</b>
Additions/disposals from changes in consolidated group	9.2	6.9	2.6	0.0	0.1	18.8
Exchange rate differences	30.6	53.0	14.0	0.9	0.0	98.5
Additions	26.9	73.3	50.0	17.4	119.9	287.5
Write-ups	0.0	0.4	0.0	0.0	0.0	0.4
Disposals	-8.3	-57.9	-22.1	-0.9	-0.3	-89.5
Reclassifications <sup>1</sup>	30.3	62.3	20.1	-16.9	-94.9	0.9
<b>Status Dec. 31, 2015</b>	<b>1,159.3</b>	<b>2,230.6</b>	<b>827.5</b>	<b>15.8</b>	<b>123.6</b>	<b>4,356.8</b>
<b>DEPRECIATION</b>						
<b>Status Jan. 1, 2015</b>	<b>518.2</b>	<b>1,486.1</b>	<b>569.1</b>	<b>0.0</b>	<b>0.3</b>	<b>2,573.7</b>
Additions/disposals from changes in consolidated group	1.7	0.0	1.0	0.0	0.0	2.7
Exchange rate differences	13.5	41.5	9.4	0.0	0.0	64.4
Additions - systematic	33.1	104.9	65.5	0.0	0.0	203.5
Impairment losses	0.9	12.1	0.5	0.0	0.1	13.6
Write-ups	-0.6	-0.2	0.0	0.0	0.0	-0.8
Disposals	-4.8	-50.3	-19.4	0.0	0.0	-74.5
Reclassifications <sup>1</sup>	1.4	2.5	-3.9	0.0	0.0	0.0
<b>Status Dec. 31, 2015</b>	<b>563.4</b>	<b>1,596.6</b>	<b>622.2</b>	<b>0.0</b>	<b>0.4</b>	<b>2,782.6</b>
<b>Book value Dec. 31, 2015</b>	<b>595.9</b>	<b>634.0</b>	<b>205.3</b>	<b>15.8</b>	<b>123.2</b>	<b>1,574.2</b>

<sup>1</sup> The reclassifications also include transfers to other balance sheet items.



Changes in tangible assets from January 1 to December 31, 2016:

[€ million]	Land and buildings	Machinery and equipment	Other fixtures, fittings and office equipment	Payments made on account	Construction in progress	Total
<b>ACQUISITION/PRODUCTION COST</b>						
<b>Status Jan. 1, 2016</b>	<b>1,159.3</b>	<b>2,230.6</b>	<b>827.5</b>	<b>15.8</b>	<b>123.6</b>	<b>4,356.8</b>
Additions/disposals from changes in consolidated group	179.8	279.1	113.0	21.3	70.4	663.6
Exchange rate differences	16.5	44.1	8.3	0.7	2.2	71.8
Additions	20.0	71.7	62.9	35.9	187.3	377.8
Write-ups	0.0	0.7	0.0	0.0	0.0	0.7
Disposals	-18.5	-70.7	-55.8	-1.5	-1.2	-147.7
Reclassifications <sup>1</sup>	34.0	87.3	52.8	-29.4	-146.5	-1.8
<b>Status Dec. 31, 2016</b>	<b>1,391.1</b>	<b>2,642.8</b>	<b>1,008.7</b>	<b>42.8</b>	<b>235.8</b>	<b>5,321.2</b>
<b>DEPRECIATION</b>						
<b>Status Jan. 1, 2016</b>	<b>563.4</b>	<b>1,596.6</b>	<b>622.2</b>	<b>0.0</b>	<b>0.4</b>	<b>2,782.6</b>
Disposals from changes in consolidated group	-1.5	-11.2	-7.4	0.0	0.0	-20.1
Exchange rate differences	7.1	34.1	5.9	0.0	0.0	47.1
Additions - systematic	38.3	140.0	93.5	0.0	0.0	271.8
Impairment losses	0.3	3.8	0.8	0.0	0.7	5.6
Write-ups	-0.5	-0.7	0.0	0.0	0.0	-1.2
Disposals	-11.1	-64.0	-53.0	0.0	0.0	-128.1
Reclassifications <sup>1</sup>	0.4	-0.4	-0.4	0.0	0.0	-0.4
<b>Status Dec. 31, 2016</b>	<b>596.4</b>	<b>1,698.2</b>	<b>661.6</b>	<b>0.0</b>	<b>1.1</b>	<b>2,957.3</b>
<b>Book value Dec. 31, 2016</b>	<b>794.7</b>	<b>944.6</b>	<b>347.1</b>	<b>42.8</b>	<b>234.7</b>	<b>2,363.9</b>

<sup>1</sup> The reclassifications also include transfers to other balance sheet items.

In the financial year under review, Freudenberg received government grants for tangible assets in the amount of €1.2 million (previous year: €2.2 million). The grants mainly concerned investment promotion and were netted against acquisition costs.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

### Leased assets

Leased assets are recognized under non-current assets at the following book values:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Land and buildings	4.6	4.5
Machinery and equipment	2.7	3.0
Other fixtures, fittings and office equipment	0.2	0.2
<b>Book value of leased assets recognized</b>	<b>7.5</b>	<b>7.7</b>

The finance lease contracts were concluded at arm's-length business conditions. Such leases normally include favorable purchase options. The lease

contracts do not provide for any contingent rent payments or significant restrictions.

[€ million]	Up to 1 year	1 to 5 years	Over 5 years	Dec. 31, 2015	Up to 1 year	1 to 5 years	Over 5 years	Dec. 31, 2016
<b>Finance leases</b>								
Minimum lease payments	0.9	2.7	5.0	8.6	1.4	2.5	5.0	8.9
Discount	0.0	0.3	1.1	1.4	0.1	0.2	1.0	1.3
Present value	0.9	2.4	3.9	7.2	1.3	2.3	4.0	7.6
<b>Operating leases</b>								
Minimum lease payments	68.2	126.4	58.2	252.8	79.0	157.7	88.9	325.6

Lease payments totaling €101.5 million (previous year: €86.5 million) under operating leases were recognized with an effect on net income.



### (3) Investment properties

Details of land and buildings held by the Freudenberg Group as investment properties are shown in the table below:

[€ million]	2015	2016
Third-party use	100 %	100 %
Rent income	3.9	4.0

There were no significant direct operating expenses in the year under review or in the previous year.

There are no restrictions on the saleability of investment properties. Freudenberg is not under any contractual obligations to purchase, build or develop investment properties. Furthermore, Freudenberg is not under any contractual obligations to repair or maintain such investment properties going beyond its statutory obligations.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

Changes in investment properties from January 1 to December 31:

[€ million]	2015	2016
<b>ACQUISITION/PRODUCTION COST</b>		
<b>Status Jan. 1</b>	<b>51.0</b>	<b>46.2</b>
Changes in consolidated group	0.0	0.0
Exchange rate differences	0.0	0.0
Additions	0.3	0.0
Write-ups/revaluations	0.0	0.0
Disposals	-5.1	-0.5
Reclassifications	0.0	0.0
<b>Status Dec. 31</b>	<b>46.2</b>	<b>45.7</b>
<b>DEPRECIATION</b>		
<b>Status Jan. 1</b>	<b>30.4</b>	<b>30.5</b>
Changes in consolidated group	0.0	0.0
Exchange rate differences	0.0	0.0
Additions - systematic	1.6	1.4
Impairment losses	0.0	0.0
Write-ups/revaluations	0.0	0.0
Disposals	-1.4	0.0
Reclassifications	0.0	0.0
<b>Status Dec. 31</b>	<b>30.6</b>	<b>31.9</b>
<b>Book value Dec. 31</b>	<b>15.6</b>	<b>13.8</b>

The fair value of investment properties was €50.5 million (previous year: €33.4 million) and was calculated on the basis of discounted cash flows (level 3 inputs).



**(4) Investments in joint ventures**

The joint venture agreement with NOK Corporation, Tokyo, Japan, is of major importance for Freudenberg.

Japanese NOK Corporation and Freudenberg SE with the objective of serving the high-growth Chinese and Indian market with locally-produced and imported sealing products.

NOK-Freudenberg Asia Holding Co. Pte. Ltd., Singapore, is a 50:50 joint venture between the

The summarized financial information of this joint venture company is set out below:

[€ million]	NOK-Freudenberg Asia Holding Co. Pte. Ltd.	
	Dec. 31, 2015	Dec. 31, 2016
Current assets	183.0	179.4
Of which: cash and cash equivalents	70.9	50.3
Non-current assets	146.2	152.0
Current liabilities	74.2	92.2
Of which: current financial liabilities	4.1	15.5
Non-current liabilities	0.0	0.1
<b>Equity without non-controlling interests</b>	<b>255.0</b>	<b>239.1</b>
Freudenberg share	50.0 %	50.0 %
Pro-rata share in equity	127.5	119.5
<b>At-equity measurement</b>	<b>127.5</b>	<b>119.5</b>
	<b>2015</b>	<b>2016</b>
Sales	308.2	338.9
Profit or loss from continuing operations	36.5	37.6
Other comprehensive income	12.5	-9.3
<b>Total comprehensive income</b>	<b>49.0</b>	<b>28.3</b>
Of which: depreciation and amortization	-15.1	-16.6
Of which: interest income	0.9	0.9
Of which: interest expenses	-0.6	-0.6
Of which: income tax expense or income	-16.5	-16.5



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

Freudenberg received dividends in the amount of €22.2 million (previous year: €13.6 million) from NOK-Freudenberg Asia Holding Co. Pte. Ltd.

The total carrying amount of interests in all individual joint ventures which are not material was €30.3 million (previous year: €112.9 million). The reduction in this figure was mainly the result of the change in status of Japan Vilene Company to full consolidation.

The pro-rata share of the profit or loss from continuing operations of all individual joint ventures classed as not material was €35.4 million (previous year: €0.9 million) and the pro-rata share in other comprehensive income was €-3.2 million (previous year: €1.8 million). The pro-rata share in total comprehensive income was therefore €32.2 million (previous year: €2.7 million).

### (5) Investments in associated companies

For Freudenberg, its most important investment in associated companies is its participation in the Japanese company NOK Corporation with its registered office in Tokyo, Japan.

The NOK Group manufactures and supplies sealing products, flexible printed circuits, roll products for office equipment and further products such as specialty lubricants.

This major associated company gave the following figures in its consolidated interim financial statements as at December 31 in each case:

[€ million]	NOK Corporation	
	Dec. 31, 2015	Dec. 31, 2016
Current assets	2,707.8	2,859.9
Non-current assets	3,035.3	3,308.7
Current liabilities	1,392.8	1,594.4
Non-current liabilities	752.0	867.7
Treasury shares	-17.3	-10.4
Non-controlling interests	299.2	291.4
<b>Equity without treasury shares and non-controlling interests</b>	<b>3,316.4</b>	<b>3,425.5</b>
Freudenberg share	25.1 %	25.1 %
Pro-rata share in equity	832.5	859.9
Goodwill	7.1	7.1
<b>At-equity measurement</b>	<b>839.6</b>	<b>867.0</b>

	2015	2016
Sales	5,791.1	5,707.4
Profit or loss from continuing operations	339.0	161.0
Other comprehensive income	-13.0	-169.8
<b>Total comprehensive income</b>	<b>326.0</b>	<b>-8.2</b>



The decrease in the other comprehensive income of NOK Corporation is due to exchange differences on translating the financial statement in foreign currency, to effects from the change in the value of securities available for sale and to the remeasurement of defined benefit plans.

Freudenberg received dividends in the amount of €18.1 million (previous year: €19.3 million) from NOK Corporation.

As at December 31, 2016, the market value of the shareholding in NOK Corporation was €832.0 million (¥ 102,820.4 million) (previous year: €947.3 million; ¥ 124,201.5 million).

The total carrying amount of interests in all associated companies classed as not material was €33.5 million (previous year: €44.5 million).

The pro-rata share in the profit or loss from continuing operations of all individual associated companies classed as not material was €12.0 million (previous year: €9.8 million) and the pro-rata share in the other comprehensive income of these companies was €0.7 million (previous year: €1.9 million). The pro-rata share in the total comprehensive income was therefore €12.7 million (previous year: €11.7 million).



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

### (6) Inventories

Inventories break down as follows:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Raw materials and consumables	230.5	304.6
Work in progress	122.6	135.7
Finished goods and merchandise	452.5	547.9
Payments made on account	1.9	3.2
	<b>807.5</b>	<b>891.4</b>

Inventories rose by €183.9 million compared with the previous year. After eliminating the effects of changes in the consolidated group and exchange rate effects, inventories fell by about 3 percent.

Write-downs of inventories totaling €27.5 million (previous year: €25.0 million) were recognized as expenses in the reporting year.

Write-ups totaling €12.0 million (previous year: €10.2 million) were effected on inventories as the reason for the impairment losses concerned no longer existed.

The inventories shown are not subject to any significant restrictions on title or disposal.

### (7) Receivables

[€ million]	Dec. 31, 2015	Dec. 31, 2016
<b>Trade receivables</b>	<b>982.2</b>	<b>1,500.9</b>
Of which: Residual term up to 1 year	982.2	1,500.9
Of which: Residual term more than 1 year	0.0	0.0
<b>Other assets</b>	<b>192.8</b>	<b>262.4</b>
Of which: Residual term up to 1 year	155.7	211.5
Of which: Residual term more than 1 year	37.1	50.9

After adjustment for effects resulting from changes in the consolidated group and exchange rate effects, trade receivables rose by about 5 percent.

The other assets for the year under review did not include any pension plan assets. In the previous year, pension plan assets in excess of the corresponding pension obligations amounted to €6.6 million.

The other assets also include other tax receivables in the amount of €75.3 million (previous year: €44.0 million) and liability insurance claims totaling €5.3 million (previous year: €5.6 million).

The claims for reimbursement in connection with recognized provisions, which are included in other assets, are shown in the other provisions under note (11).

**(8) Securities and cash at bank and in hand**

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Securities	279.5	30.6
Checks and cash in hand	4.1	4.1
Cash at banks	772.1	926.0
	<b>1,055.7</b>	<b>960.7</b>

The decrease in securities mainly concerns a reduction in commercial papers.

**(9) Equity**

The subscribed capital in the amount of €450.0 million (previous year: €450.0 million) consists of 450 million no-par-value registered shares. The sole shareholder of Freudenberg SE is Freudenberg & Co. Kommanditgesellschaft, Weinheim (hereafter: Freudenberg & Co. KG).

The reserves break down as follows:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Capital reserves	50.2	50.2
Retained earnings	2,820.8	3,735.8
	<b>2,871.0</b>	<b>3,786.0</b>

The capital reserves consist of contributions in kind made by the shareholder.

The retained earnings include net income earned by the Group in the past and not distributed as well as reserves of companies included in the consolidated

financial statements including expenses and income recorded without effect on net income.

The profit distributed in the reporting year amounted to €90.2 million (previous year: €98.5 million). This corresponded to a profit per share of €0.20 (previous year: €0.22).

The Board of Management proposes that the 2016 net retained profit in the amount of €1,559.5 million (previous year: €1,188.1 million) should be carried forward to new account.

In the reporting year, income (+) and expenses (-) which had previously been recorded without an effect on net income with respect to the following components of other comprehensive income were reclassified to the statement of profit or loss:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Exchange rate differences	21.8	23.3
Securities	0.7	0.0
Derivative financial instruments	-1.3	-0.2
	<b>21.2</b>	<b>23.1</b>

In the 2016 financial year, tax effects (income (+)/expenses (-)) recorded without effect on net income are attributable to the various items of other comprehensive income as follows:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Remeasurement of defined benefit plans	0.2	10.9
Securities and other items	-15.6	0.3
	<b>-15.4</b>	<b>11.2</b>

**Consolidated Financial Statement – Notes to the Consolidated Financial Statements**
**Non-controlling interests**

The change in non-controlling interests in the equity of consolidated affiliated companies from €378.6 million to €367.3 million is mainly the result of the allocation of profit for the year exchange rate differences and changes in the equity structure in connection with the first-time full consolidation of Vibracoustic and Japan Vilene Company. Dividend payments also resulted in a reduction in non-controlling interests.

In the case of the following affiliated company, the consolidated financial statements include significant non-controlling interests in the amount of 25 percent of the shares:

[€ million]		
Freudenberg-NOK General Partnership, Plymouth, USA	Dec. 31, 2015	Dec. 31, 2016
Profit (+)/loss (-) attributable to non-controlling interests	17.4	16.7
Total amount of non-controlling interests	96.9	112.0

This affiliated company is included in the consolidated financial statements with the following values:

[€ million]		
Freudenberg-NOK General Partnership	Dec. 31, 2015	Dec. 31, 2016
Current assets	258.2	296.8
Non-current assets	290.3	319.8
Current liabilities	106.2	110.4
Non-current liabilities	78.5	79.9

	2015	2016
Sales	638.0	655.8
Profit (+)/loss (-)	52.1	54.8
Total comprehensive income	97.9	67.4

Freudenberg-NOK General Partnership paid dividends in the amount of €5.0 million (previous year: €44.0 million) to the holder of the non-controlling interests.

Other non-controlling interests especially concern the EagleBurgmann Business Group, where they arise as a result of the contractual agreements with the partner Eagle Industry Co., Ltd., Tokyo, Japan.

**(10) Provisions for pensions and similar obligations**

The Freudenberg Group pension scheme consists of both defined contribution and defined benefit pension plans. Defined benefit plans include both fixed salary and final salary plans. The provisions for pensions and similar obligations include obligations arising from current pensions and future pension entitlements.

The pension plans within the Freudenberg Group mainly concern German, US and British companies. The pension obligations of the German companies are commitments financed by provisions. These obligations are subject to the rules of the pension plan concerned and the applicable statutory provisions. The plans include benefit commitments dependent on service periods and on salaries and provide for disability



benefits and benefits for surviving dependents as well as for retirement benefits.

The pension plans of US and British companies are managed by third party pension funds. The representatives of the pension funds are legally obliged to act in the interest of all participants in the plan. In cooperation with investment advisers, they are responsible for the development and regular review of investment strategies for the plan assets. Commitments based on age and years of service include both retirement benefits and certain forms of survivor benefits. Most US and British plans are frozen and future entitlements can no longer be earned by plan participants. The pension obligations of these companies are mainly financed by plan assets, funded chiefly by employers' contributions.

Apart from pension obligations, this item also includes obligations similar to pensions, such as amounts paid to employees upon the termination of their employment which do not constitute termination benefits. These benefits vary in accordance with the legal, tax and economic conditions in the countries concerned.

All defined benefit schemes of the Freudenberg Group are subject to typical actuarial risks, especially investment and interest risks.

Current service cost and net interest on the net defined benefit liability are disclosed in the statement

of profit or loss under personnel expenses in the relevant functional areas.

In the case of the defined contribution plans, there are no additional obligations apart from the payment of contributions. Contributions paid are expensed under personnel expenses and amounted to €78.4 million in 2016 (previous year: €74.6 million).

The defined benefit obligations were calculated on actuarial principles by the projected unit credit method. The calculation was based on the following discount rates as major actuarial assumptions:

	Dec. 31, 2015	Dec. 31, 2016
Germany	2.25 %	1.80 %
USA	4.09 %	3.75 %
United Kingdom	3.66 %	2.79 %

German pension commitments were determined on the basis of the biometric calculation principles of the "Richttafeln 2005 G" (actuarial tables) of Prof. Dr. Klaus Heubeck.

As a result of the pension plan regulations, the assumed trend in salaries and wages only has an effect on the value of pension obligations in exceptional cases.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

In the case of the other foreign companies, the actuarial assumptions used for the calculations were within the following ranges:

	Dec. 31, 2015	Dec. 31, 2016
Discount rate	1.1 % - 4.5 %	0.3 % - 4.0 %
Salary trend	0.0 % - 2.4 %	0.0 % - 3.5 %
Pension trend	0.0 % - 3.0 %	0.0 % - 3.3 %

Net obligations are shown in the following items of the statement of financial position:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Provisions for pensions and similar obligations	632.8	758.1
Other assets	6.6	0.0
	<b>626.2</b>	<b>758.1</b>

Net obligations are calculated as follows:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Present value of funded obligations	379.0	518.4
Fair value of plan assets	-350.1	-464.1
<b>Surplus (-)/Deficit (+)</b>	<b>28.9</b>	<b>54.3</b>
Present value of unfunded obligations	597.3	703.8
	<b>626.2</b>	<b>758.1</b>



Defined benefit obligations developed as follows:

[€ million]	Germany	USA	United Kingdom	Other countries	2015
<b>Present value of defined benefit obligations, Jan. 1, 2015</b>	<b>536.3</b>	<b>149.4</b>	<b>187.9</b>	<b>71.7</b>	<b>945.3</b>
Current service cost	14.2	0.0	0.0	3.8	18.0
Interest cost	11.6	5.7	7.2	1.4	25.9
Gains (-) and losses (+) from remeasurement of defined benefit obligations	-3.9	-4.0	-5.6	2.9	-10.6
Gains (-) and losses (+) on settlements	0.0	0.0	0.0	0.0	0.0
Past service cost	0.0	0.0	0.0	-0.5	-0.5
Contributions by plan participants	0.0	0.0	0.0	1.4	1.4
Liabilities extinguished on settlements	0.0	0.0	0.0	0.0	0.0
Benefits paid	-18.1	-7.4	-8.2	-5.3	-39.0
Changes in consolidated group	0.0	0.0	0.0	0.0	0.0
Other changes	-0.3	0.0	0.0	3.3	3.0
Exchange rate differences	0.0	12.2	12.0	8.6	32.8
<b>Present value of defined benefit obligations, Dec. 31, 2015</b>	<b>539.8</b>	<b>155.9</b>	<b>193.3</b>	<b>87.3</b>	<b>976.3</b>

[€ million]	Germany	USA	United Kingdom	Other countries	2016
<b>Present value of defined benefit obligations, Jan. 1, 2016</b>	<b>539.8</b>	<b>155.9</b>	<b>193.3</b>	<b>87.3</b>	<b>976.3</b>
Current service cost	14.0	0.0	0.0	6.7	20.7
Interest cost	12.0	6.5	5.9	2.4	26.8
Gains (-) and losses (+) from remeasurement of defined benefit obligations	35.8	2.1	31.1	9.7	78.7
Gains (-) and losses (+) on settlements	0.0	-0.2	0.0	-0.1	-0.3
Past service cost	0.0	0.0	0.0	-0.4	-0.4
Contributions by plan participants	0.0	0.0	0.0	0.7	0.7
Liabilities extinguished on settlements	0.0	-3.3	0.0	-1.1	-4.4
Benefits paid	-18.7	-8.6	-8.3	-9.8	-45.4
Changes in consolidated group	47.6	18.3	0.0	122.6	188.5
Other changes	4.6	-0.1	0.0	-3.0	1.5
Exchange rate differences	0.0	5.7	-27.7	1.5	-20.5
<b>Present value of defined benefit obligations, Dec. 31, 2016</b>	<b>635.1</b>	<b>176.3</b>	<b>194.3</b>	<b>216.5</b>	<b>1,222.2</b>



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

The plan assets of funded pension plans developed as follows:

[€ million]	USA	United Kingdom	Other countries	2015
<b>Fair value of plan assets, Jan. 1, 2015</b>	<b>134.1</b>	<b>175.9</b>	<b>17.0</b>	<b>327.0</b>
Interest income	5.1	6.9	0.3	12.3
Gains (-) and losses (+) from remeasurement of plan assets	-8.0	-3.5	0.3	-11.2
Contributions by employer	0.5	5.8	3.3	9.6
Contributions by plan participants	0.0	0.0	1.4	1.4
Benefits paid	-7.4	-8.1	-2.1	-17.6
General plan administration costs	-1.1	-0.3	1.4	0.0
Changes in consolidated group	0.0	0.0	0.0	0.0
Other changes	-0.1	0.0	0.1	0.0
Exchange rate differences	10.9	11.2	6.5	28.6
<b>Fair value of plan assets, Dec. 31, 2015</b>	<b>134.0</b>	<b>187.9</b>	<b>28.2</b>	<b>350.1</b>

[€ million]	USA	United Kingdom	Other countries	2016
<b>Fair value of plan assets, Jan. 1, 2016</b>	<b>134.0</b>	<b>187.9</b>	<b>28.2</b>	<b>350.1</b>
Interest income	5.6	5.8	0.6	12.0
Gains (-) and losses (+) from remeasurement of plan assets	-0.2	19.9	6.9	26.6
Contributions by employer	10.6	2.0	-0.6	12.0
Contributions by plan participants	0.0	0.0	0.7	0.7
Benefits paid	-8.6	-8.3	0.5	-16.4
General plan administration costs	-1.1	-0.3	-0.1	-1.5
Changes in consolidated group	15.5	0.0	89.2	104.7
Other changes	-3.4	0.0	0.6	-2.8
Exchange rate differences	4.9	-27.0	0.8	-21.3
<b>Fair value of plan assets, Dec. 31, 2016</b>	<b>157.3</b>	<b>180.0</b>	<b>126.8</b>	<b>464.1</b>

The fair value of plan assets with quoted prices in active markets was as follows:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Equity instruments	142.3	115.0
Interest-bearing securities	93.2	158.7
Other assets	4.6	87.1
	<b>240.1</b>	<b>360.8</b>

The fair value of plan assets without quoted prices in active markets was as follows:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
Equity instruments	0.0	0.8
Interest-bearing securities	0.0	0.1
Other assets	110.0	102.4
	<b>110.0</b>	<b>103.3</b>

In the reporting year, gains and losses from the remeasurement of the defined benefit obligations and plan assets developed as follows:

[€ million]	2015	2016
<b>Gains (+) and losses (-) from remeasurement, Jan. 1</b>	<b>-344.2</b>	<b>-354.9</b>
Gains (+) and losses (-) from remeasurement of defined benefit obligations	10.6	-78.7
Of which: as a result of changed financial assumptions	3.3	-78.1
Of which: as a result of changed demographic assumptions	6.9	5.0
Of which: as a result of experience-based adjustments	0.4	-5.6
Gains (+) and losses (-) from remeasurement of plan assets	-11.2	26.6
Reclassifications/other changes	0.2	1.1
Exchange rate differences	-10.3	8.2
<b>Gains (+) and losses (-) from remeasurement, Dec. 31</b>	<b>-354.9</b>	<b>-397.7</b>

In the following year, contributions in the amount of €36.1 million (previous year: €4.0 million) will probably be made to plan assets.

The weighted average duration of defined benefit obligations as at the end of the reporting year was 16.7 years (previous year: 16.1 years).

The possible changes in the defined benefit obligation as a result of changes in the discount rate, a major actuarial assumption, were calculated on the basis of the projected unit credit method. If the discount rate as at the statement of financial position date had been 0.50 percentage points (previous year: 0.25 percentage points) lower, the present value of defined benefit obligations as at the statement of financial position date would have been €103.9 million (previous year: €38.2 million) higher. If the discount rate as at the statement of financial position date had been 0.50 percentage points (previous year: 1.00 percentage points) higher, the present value of defined benefit obligations as at the statement of financial position date would have been €89.7 million (previous year: €143.0 million) lower.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

### (11) Other provisions

[€ million]	Personnel obligations	Warranties, guarantees and onerous contracts	Rebates, bonuses and commissions	Miscellaneous	Total
<b>Status Jan. 1, 2016</b>	<b>244.2</b>	<b>71.4</b>	<b>34.6</b>	<b>202.5</b>	<b>552.7</b>
Increases	253.5	48.2	35.4	131.8	468.9
Unwinding of discount and effect of change in discount rate	0.0	0.1	0.0	-0.1	0.0
Amounts used	-173.7	-18.3	-28.7	-105.4	-326.1
Reversal	-14.3	-14.9	-3.6	-26.0	-58.8
Exchange rate differences	1.3	0.7	-0.1	5.8	7.7
Changes in consolidated group	35.0	19.1	8.6	57.4	120.1
Other changes	-0.2	0.0	-0.6	-0.2	-1.0
<b>Status Dec. 31, 2016</b>	<b>345.8</b>	<b>106.3</b>	<b>45.6</b>	<b>265.8</b>	<b>763.5</b>
Of which: long-term	64.7	12.5	0.8	47.6	125.6
Of which: short-term	281.1	93.8	44.8	218.2	637.9
Reimbursement claims connected with provisions and shown in the statement of financial position under other assets	1.1	0.0	0.2	10.5	11.8

The provisions for personnel obligations mainly include provisions for other short-term employee benefits such as bonuses and commissions, provisions for vacation not taken and other long-term employee benefits such as long-term remuneration components as well as provisions for termination benefits.

The provisions for guarantees and warranties concern products supplied and services rendered, as do

provisions for rebates, bonuses and commissions. The provisions for onerous contracts include unrealized losses from contracts which have not been performed or not been fully performed.

The miscellaneous provisions include, inter alia, provisions for restructuring, risks of legal action, environmental protection and advertising.

**(12) Liabilities**

[€ million]	Residual term			Dec. 31, 2015	Residual term			Dec. 31, 2016
	Up to 1 year	1 to 5 years	More than 5 years		Up to 1 year	1 to 5 years	More than 5 years	
Liabilities to banks (= financial debt)	39.5	123.2	10.0	172.7	90.7	541.6	58.2	690.5
Other financial debt, including leasing	9.6	2.8	3.9	16.3	12.6	2.5	4.0	19.1
Shareholder's loans	350.0	0.0	300.0	650.0	365.0	150.0	150.0	665.0
Accounts of Freudenberg & Co. KG Partners	161.6	221.9	0.0	383.5	170.6	245.3	0.0	415.9
<b>Financial debt</b>	<b>560.7</b>	<b>347.9</b>	<b>313.9</b>	<b>1,222.5</b>	<b>638.9</b>	<b>939.4</b>	<b>212.2</b>	<b>1,790.5</b>
<b>Trade payables</b>	<b>531.1</b>	<b>0.0</b>	<b>0.0</b>	<b>531.1</b>	<b>907.2</b>	<b>0.0</b>	<b>0.0</b>	<b>907.2</b>
Advance payments received on orders	21.4	0.0	0.0	21.4	22.0	0.0	0.0	22.0
Miscellaneous liabilities	279.0	91.4	21.9	392.3	492.5	179.2	191.6	863.3
<b>Other liabilities</b>	<b>300.4</b>	<b>91.4</b>	<b>21.9</b>	<b>413.7</b>	<b>514.5</b>	<b>179.2</b>	<b>191.6</b>	<b>885.3</b>
	<b>1,392.2</b>	<b>439.3</b>	<b>335.8</b>	<b>2,167.3</b>	<b>2,060.6</b>	<b>1,118.6</b>	<b>403.8</b>	<b>3,583.0</b>

The increase in the liabilities to banks was mainly the result of the full consolidation of Japan Vilene Company and the certificates of indebtedness ("Schuldscheindarlehen") transferred in connection with the assumption of control over the Vibracoustic Group.

The interest payable on the certificates of indebtedness included in the liabilities to banks is based on variable and fixed components. Cash flows for variable and fixed interest and repayment of principal will probably be as follows from 2017 to 2023:

The average interest rate on long-term liabilities to banks is 1.04 percent (previous year: 1.80 percent).

[€ million]	Book value	Cash flows		
	Dec. 31, 2015	2016	2017	2018 - 2023
Certificates of indebtedness	132.0	2.5	2.6	137.9

	Dec. 31, 2016	2017	2018	2019 - 2023
Certificates of indebtedness	342.0	4.2	127.8	226.2

Other financial debt includes loans granted by third parties, on the long-term component of which interest is payable at an average rate of 2.10 percent (previous year: 2.10 percent). This item also includes liabilities in

connection with finance leasing, with an average interest rate of 3.70 percent (previous year: 3.56 percent). Further details are given in the information on finance leases under note (2).



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

Some of the loans granted by the shareholder were extended during the reporting year. Interest is payable on these loans at rates between 1.00 and 3.35 percent (previous year: between 1.07 and 3.13 percent).

The interest rates applicable to accounts of Freudenberg & Co. KG Partners vary between 1.00 and 4.00 percent depending on the individual agreements (previous year: between 1.00 and 4.00 percent).

Miscellaneous liabilities include liabilities for tooling cost contributions, outstanding wages and salaries, holiday pay and special bonuses and liabilities for other taxes, as well as liabilities in connection with social security.

### Contingent liabilities and other financial obligations

[€ million]	Dec. 31, 2015	Dec. 31, 2016
<b>CONTINGENT LIABILITIES</b>		
Bills of exchange	4.0	0.5
Guarantees	134.2	11.7
Warranty agreements	0.0	8.3
Miscellaneous	2.9	5.0
	<b>141.1</b>	<b>25.5</b>
<b>OTHER FINANCIAL COMMITMENTS</b>		
Commitments arising from leasing contracts <sup>1</sup>	241.9	316.5
Purchase commitments in connection with intangible assets	0.5	1.8
Purchase commitments in connection with tangible assets	31.6	58.1
Purchase commitments in connection with the delivery of goods and services	63.6	95.0
Miscellaneous	2.9	2.7
	<b>340.5</b>	<b>474.1</b>

<sup>1</sup> See also the explanatory remarks on leased assets in note (2) to the Consolidated Financial Statements.

In addition, the following contingent liabilities and other financial commitments concern joint ventures:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
<b>CONTINGENT LIABILITIES</b>		
Guarantees	6.0	6.3
	<b>6.0</b>	<b>6.3</b>
<b>OTHER FINANCIAL COMMITMENTS</b>		
Commitments arising from leasing contracts <sup>1</sup>	31.8	24.1
Purchase commitments in connection with intangible assets	0.3	0.0
Purchase commitments in connection with tangible assets	8.1	1.3
Purchase commitments in connection with the delivery of goods and services	5.5	0.2
	<b>45.7</b>	<b>25.6</b>

<sup>1</sup> See also the explanatory remarks on leased assets in note (2) to the Consolidated Financial Statements.



## Additional information on financial instruments

The term "financial instrument" is used to refer to any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise. A distinction is made between primary and derivative financial instruments. Primary financial instruments in the case of the purchase or sale of assets are recognized at the settlement date, i.e. the delivery of the asset concerned. Derivative financial instruments are recognized as of the trade date. In the event of loss of control over the contractually agreed rights to a financial asset, the asset concerned is derecognized. Financial liabilities are derecognized on the statement of financial position when the commitment is discharged or cancelled, or expires.

Under IAS 39, financial instruments are divided into the following categories:

- Loans and receivables

This category includes financial assets with fixed or determinable payments that are not quoted in an active market.

- Held-to-maturity investments

Held-to-maturity investments are financial assets with fixed or determinable payments and fixed

maturity that an entity has the positive intention and ability to hold to maturity.

- Available-for-sale financial assets

This category includes all the other financial assets which cannot be allocated to any of the categories mentioned above.

- Financial assets or financial liabilities at fair value through profit or loss

These include:

- financial assets or financial liabilities held for trading and
- financial assets or financial liabilities designated by the entity as at fair value through profit or loss upon initial recognition.

The Freudenberg Group does not hold any financial assets or financial liabilities for trading purposes.

Freudenberg did not avail itself of the fair value option under IAS 39 under which it is possible to measure any financial asset or financial liability at fair value through profit or loss.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

### Primary financial instruments

Primary financial instruments are assigned to categories on the basis of the relevant items in the statement of financial position. The allocation to the categories unambiguously defines the accounting and measurement of the instruments.

Loans, receivables and liabilities are recognized at amortized cost. Available-for-sale financial assets are recognized at fair value without effect on net income except where the fair value of such assets cannot be reliably determined. In such cases, these assets are recognized at acquisition costs. Any impairments are shown in the statement of profit or loss with an effect on net income.

[€ million]	Loans and receivables at amortized cost	Available-for-sale financial assets at fair value without effect on profit or loss	Available-for-sale financial assets at amortized cost	Other financial liabilities at amortized cost	Book value Dec. 31, 2015
<b>ASSETS</b>					
Other financial assets	8.4	12.3	110.0		130.7
Trade receivables	982.2				982.2
Other assets	102.0				102.0
Securities and cash at bank and in hand	1,055.7				1,055.7
	<b>2,148.3</b>	<b>12.3</b>	<b>110.0</b>		<b>2,270.6</b>
<b>LIABILITIES</b>					
Financial debts				1,222.5	1,222.5
Trade payables				531.1	531.1
Other liabilities				179.9	179.9
				<b>1,933.5</b>	<b>1,933.5</b>



[€ million]	Loans and receivables at amortized cost	Available-for-sale financial assets at fair value without effect on profit or loss	Available-for-sale financial assets at amortized cost	Other financial liabilities at amortized cost	Book value Dec. 31, 2016
<b>ASSETS</b>					
Other financial assets	7.9	12.9	107.3		128.1
Trade receivables	1,500.9				1,500.9
Other assets	140.2				140.2
Securities and cash at bank and in hand	960.7				960.7
	<b>2,609.7</b>	<b>12.9</b>	<b>107.3</b>		<b>2,729.9</b>
<b>LIABILITIES</b>					
Financial debts				1,790.5	1,790.5
Trade payables				907.2	907.2
Other liabilities				493.4	493.4
				<b>3,191.1</b>	<b>3,191.1</b>

The Freudenberg Group currently does not hold any held-to-maturity investments. The fair values of financial assets and liabilities recognized at amortized cost are approximately equal to their book values.

The fair values of financial instruments held by the Freudenberg Group and measured at fair value were determined on the basis of active markets for identical assets (level 1 inputs) at €12.9 million (previous year: €12.3 million).



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Information on Credit risks

[€ million]	Trade receivables		Other assets	
	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016
<b>Book value</b>	<b>982.2</b>	<b>1,500.9</b>	<b>102.0</b>	<b>140.2</b>
Of which: neither impaired nor past due	795.3	1,261.6	93.7	135.2
Of which: not impaired as at the date of the statement of financial position and past due within the following time				
Up to 60 days	124.1	174.0	5.6	1.9
Between 61 and 120 days	25.5	28.4	0.1	0.2
Between 121 and 180 days	10.7	9.7	0.1	0.2
Between 181 and 360 days	8.6	8.2	0.2	1.6
More than 360 days	9.0	7.6	0.5	0.7

In the case of trade receivables and other assets for which no impairments have been recognized and which are not past due, no defaults are expected. The major part of trade receivables (normally between 70 and 90 percent of each receivable) is covered by credit insurance. Otherwise, the book value represents the maximum credit risk associated with each receivable.

Impairment losses to trade receivables developed as follows:

[€ million]	2015	2016
<b>Impairment losses Jan. 1</b>	<b>23.0</b>	<b>19.4</b>
Changes in consolidated group	-0.4	2.8
Exchange rate differences	0.5	0.0
Additions (expenses for impairments)	7.7	11.8
Amounts used	-2.4	-3.2
Reversals (write-ups)	-9.0	-4.2
<b>Impairment losses Dec. 31</b>	<b>19.4</b>	<b>26.6</b>

Impairment losses to other assets developed as follows:

[€ million]	2015	2016
<b>Impairment losses Jan. 1</b>	<b>2.4</b>	<b>2.3</b>
Changes in consolidated group	0.0	0.4
Exchange rate differences	-0.1	0.0
Additions (expenses for impairments)	0.2	0.0
Amounts used	0.0	0.0
Reversals (write-ups)	-0.2	0.0
<b>Impairment losses Dec. 31</b>	<b>2.3</b>	<b>2.7</b>

In the year under review, impairment losses to receivables totaling €4.2 million (previous year: €9.2 million) were reversed as the reason for the impairment no longer applied and impairment losses in the amount of €11.8 million (previous year: €7.9 million) were set up. These impairment losses were recognized where payments were no longer expected or no longer expected in full.

### Derivative financial instruments

Freudenberg SE is responsible for all the financing activities of the Freudenberg Group and also operates the cash management system for the entire Freudenberg group of companies. Group companies obtain the financing they require via cash pools or internal loans or, in some countries, in the form of bank loans guaranteed by Freudenberg SE.

The limits of action, responsibilities and control procedures in connection with derivative financial instruments are laid down in a binding form in internal directives for Group companies. The Freudenberg Group does not expose itself to additional financial risks through speculation with derivative financial instruments but uses such instruments only for hedging purposes and therefore reducing risks in connection with transactions. Future transactions are only hedged if there is a high probability of occurrence.

As a general principle Freudenberg SE uses derivative financial instruments for hedging interest rate and foreign exchange risks.

Fair values are determined on the basis of quoted prices, accepted market information systems or discounted cash flows.

Derivative financial instruments for hedging recognized assets or liabilities (fair value hedges) are shown in the statement of financial position at fair value. Changes in the fair value are recorded in the statement of profit or loss. Financial instruments for hedging future cash flows (cash flow hedges) are also included in the statement of financial position at fair value, but changes in the fair value of such instruments are recognized without effect on net income under retained earnings, taking into consideration the applicable income taxes. Such changes are recognized in the statement of profit or loss when the underlying transactions concerned are effected. Ineffective portions of hedge transactions are always recognized in the statement of profit or loss.

Derivative financial instruments used for hedging purposes without any eligible underlying transaction are measured at fair value with an impact on net income.

As in the previous year, there were no derivatives entered into for the purpose of interest rate hedging as at December 31, 2016.

As at December 31, 2016, the face value of currency futures concluded for hedging foreign exchange risks and still open was €46.1 million (previous year: €71.1 million). The negative fair value of these instruments as at December 31, 2016 was €1.8 million (previous year: positive fair value of €0.5 million).

Of the total volume of derivatives, 4.8 percent (previous year: 2.1 percent) had a term of more than one year.

The following fair values of derivative financial instruments are included in the other assets and other liabilities respectively:

[€ million]	Dec. 31, 2015	Dec. 31, 2016
<b>OTHER ASSETS</b>		
Currency futures	1.4	0.8
<b>OTHER LIABILITIES</b>		
Currency futures	0.9	2.6

In the reporting year, value changes in the case of currency futures (cash flow hedges) are recognized in equity in the amount of €-1.0 million (previous year: €-0.8 million).

The fair values of currency futures were determined on the basis of the quoted currency future prices for similar financial instruments (level 2 inputs).

### Risks in connection with financial instruments

The Freudenberg Group is exposed to risks resulting from changes in exchange rates and interest rates and, as a general principle, uses conventional derivative instruments such as interest rate swaps, caps and currency futures to hedge risks in connection with business operations and financing to a limited extent. The use of these instruments is governed by Freudenberg Group directives within the risk management system which lay down limits on the basis of the value of the underlying transactions, define approval procedures, exclude the use of



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

derivative instruments for speculative purposes, minimize credit risks and govern internal reporting and the separation of functions. Compliance with these directives and the proper handling and measurement of transactions are regularly verified, observing the principle of separation of functions. Furthermore, risk management for financial instruments is integrated in the Freudenberg Group risk management system.

The risks which are hedged are chiefly as follows:

### Interest rate risk:

In the case of fixed-interest loans or investments, there is a risk that changes in the market interest rate will affect the market value of the item concerned (market value risk contingent on interest rates). In contrast, variable interest loans and investments are not subject to this risk as the interest rate is adjusted to reflect changes in the market situation with a very short delay. However, there is a risk with respect to future interest payments as a result of short-term fluctuations in market interest rates (cash flow risk contingent on interest rates).

Risks associated with interest rate changes mainly affect long-term items. A fall in long-term interest rates results in a decrease in the fair value shown on the statement of financial position for derivative financial instruments concluded for interest rate hedging.

If market interest rates had been 0.5 percentage points higher or lower, on average, as of December 31, 2016, this would have had only an insignificant impact on net income.

As a general principle, external borrowings are repaid when due. The only interest rate risk related to these borrowings is therefore associated with variable-interest borrowings.

### Currency risk:

The primary financial instruments are chiefly held in the functional currency.

Exchange rate differences caused by the conversion of financial statements into the Group currency are not taken into consideration.

If the value of the euro against major currencies (USD, GBP and JPY) had been 10 percent higher as at December 31, 2016, the profit before income taxes would have been €5.4 million (previous year: €5.0 million) lower. If the value of the euro against major currencies (USD, GBP and JPY) had been 10 percent lower as at December 31, 2016, the profit before income taxes would have been €6.6 million (previous year: €6.1 million) higher.

### Liquidity risk:

Risks connected with cash flow fluctuations are identified by the cash flow planning system already in place. As a result of Freudenberg's good rating (A3) and the credit lines granted by banks on a binding basis, Freudenberg can access ample sources of funds at all times.

### Credit risk:

Specific provisions and individualized generic provisions are recognized to take account of identifiable risks not covered by credit insurance. Otherwise, the book value represents the maximum credit risk.

Freudenberg SE only concludes derivative financial instruments with national and international banks of at least investment grade rating. Credit risks are largely eliminated by distributing hedges between several banks and a policy of applying caps to individual banks.

**NOTES TO THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS**
**(13) Sales**

[€ million]	Dec 31, 2015	Dec 31, 2016
Sales from sales of goods	6,175.8	7,628.7
Sales from services	152.2	148.5
Sales from research and development / research and development licenses	26.4	52.8
Sales from production-related licenses	2.8	1.2
Other Sales	53.7	68.9
	<b>6,410.9</b>	<b>7,900.1</b>

Other sales include, inter alia, sales from rental and lease contracts and sales from support and supplementary operations.

**(14) Cost of sales**

Cost of sales, amounting to €5,085.2 million (previous year: €3,950.6 million), indicates the cost of goods and services sold. Apart from individual directly attributable costs, such as personnel expenses and material expenses, overheads, including depreciation/amortization, are also shown under cost of sales. For the first time, the cost of sales includes amortization of capitalized development expenditure, amounting to €1.3 million.

**(15) Selling expenses**

Selling expenses, amounting to €1,298.1 million (previous year: €1,175.8 million) include all expenses incurred in the sales area, for example personnel, advertising, carriage and packaging expenses.

**(16) Administrative expenses**

In 2016, administrative expenses amounted to €600.3 million (previous year: €529.3 million). Administrative expenses include all expenses which cannot be allocated to production, sales or research and development and concern, inter-alia personnel expenses and miscellaneous administrative expenses.

**(17) Research and development expenses**

Apart from personnel and material expenses, research and development expenses chiefly include the cost of licenses and patents occurring in the course of development projects.

**(18) Other income**

[€ million]	Dec 31, 2015	Dec 31, 2016
Exchange rate gains <sup>1</sup>	36.1	8.3
Income from other secondary business	2.4	2.4
Income from disposals of intangible and tangible assets	12.0	15.0
Income from the change in status of investments previously consolidated at-equity	0.0	583.5
Income from disposals of financial assets	17.9	63.7
Income from recharges	11.1	7.9
Miscellaneous income	37.0	61.9
	<b>116.5</b>	<b>742.7</b>

<sup>1</sup> After offsetting against exchange rate losses

Income from the change in status of investments previously consolidated at-equity concerned the deconsolidation profit of Vibracoustic GmbH, at €567.9 million, and Japan Vilene, at €15.6 million, and arose as a result of the change in status of these companies to fully consolidated companies.



Consolidated Financial Statement – Notes to the Consolidated Financial Statements

Income from disposals of financial assets includes income from the disposal of the Freudenberg Schwab Vibration Control Group.

**(19) Other expenses**

[€ million]	Dec 31, 2015	Dec 31, 2016
Losses resulting from disposals of intangible and tangible assets	9.0	6.6
Losses from the change in status of investments previously consolidated at-equity	0.0	5.7
Losses resulting from disposals of financial assets	1.3	0.3
Miscellaneous expenses	99.7	125.3
	<b>110.0</b>	<b>137.9</b>

The losses from the change in status of investments previously consolidated at-equity concerned the de-consolidation loss of the Schneegans Group as a result of its change in status to a fully consolidated company.

The miscellaneous expenses include a wide variety of operating expenses and the impairment loss on the goodwill of the cash-generating unit Freudenberg Oil & Gas Technologies, amounting to €50.9 million (previous year: €33.1 million).

**(20) Income from investments in joint ventures**

The decrease in income from investments in joint ventures from €71.3 million to €54.2 million was caused by the change in status of the Vibracoustic Group to full consolidation as a result of the acquisition of the second 50-percent stake in the company from Trelleborg Holding AB, Trelleborg, Sweden, with effect from July 1, 2016.

**(21) Income from investments in associated companies**

The reduction in income from investments in associated companies from €94.8 million to €47.5 million is a result of the reduced pro rata share in the profit of the associated company NOK Corporation, Tokyo, Japan, and the change in status of Japan Vilene Company to a full consolidation by virtue of the acquisition of control with effect from April 1, 2016.

**(22) Other investment result**

The decrease in the other investment result from €15.5 million to minus €0.7 million was mainly a result of the fact that less income from dividends was realized in the financial year.

**(23) Other interest and similar income**

The reduction in other interest and similar income from €12.0 million to €10.7 million is a result of the reduction in income from other financial investments.

**(24) Interest and similar expenses**

In 2016, interest expenses amounted to €37.8 million (previous year: €38.6 million). This item chiefly includes interest on shareholder's loans in the amount of €12.1 million (previous year: €13.9 million) and interest payable to the Partners of Freudenberg & Co. KG in the amount of €10.9 million (previous year: €11.3 million).

**(25) Income taxes**

This item shows German corporation tax (plus solidarity surcharge) and municipal trade taxes and similar taxes on income payable in other countries.



The figure also includes deferred taxes on temporary differences between the tax balance sheets and commercial balance sheets of individual companies, on adjustments to uniform measurement within the Freudenberg Group and on consolidation transactions.

Deferred taxes are calculated at the tax rates applicable in the countries concerned.

Income taxes break down as follows (expense (-) /income (+)):

[€ million]	2015	2016
Current taxes related to the reporting period	-175.6	-243.1
Current taxes related to prior periods	2.0	-2.8
Deferred taxes	26.8	67.7
	<b>-146.8</b>	<b>176.2</b>

The amount of deferred tax income related to changes in tax rates was €1.6 million (previous year: deferred tax expense of €0.3 million).

In the reporting year, deferred taxes related to transactions recognized directly under equity resulted in an increase in equity of €11.2 million (previous year: reduction in equity of €15.4 million).

As of December 31, 2016, tax losses carried forward amounted to €394.0 million (previous year: €307.5 million). Deferred tax assets were recognized in respect of tax losses carried forward totaling €42.1 million (previous year: €31.5 million). Deferred tax assets were not recognized in respect of tax losses carried forward with a total amount of €351.9 million (previous year: €276.0 million) as it is not expected that these losses will be usable.

Of the tax losses carried forward, €13.0 million (previous year: €8.0 million) will be forfeited in the period up to 2026 if they are not used.

In the reporting year, tax losses carried forward totaling €18.6 million (previous year: €10.7 million) for which no deferred tax assets had been recognized were used.



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

Deferred taxes concern temporary differences and tax losses carried forward with the following amounts:

[€ million]	Deferred tax assets Dec. 31, 2015	Deferred tax liabilities Dec. 31, 2015	Deferred tax assets Dec. 31, 2016	Deferred tax liabilities Dec. 31, 2016
Intangible assets	6.1	90.4	16.1	357.1
Tangible assets	7.5	101.0	9.8	136.0
Financial assets	1.4	1.7	2.3	2.7
Inventories	37.1	0.8	43.9	0.5
Receivables	7.4	4.2	11.3	8.5
Other assets	2.3	0.7	2.4	0.2
Provisions for pensions and similar obligations	102.1	0.0	130.2	0.0
Other provisions	54.2	1.0	88.5	1.3
Liabilities	11.7	20.8	39.8	30.4
Other liabilities	0.2	10.0	0.2	9.7
Tax losses carried forward	8.2	0.0	9.1	0.0
	<b>238.2</b>	<b>230.6</b>	<b>353.6</b>	<b>546.4</b>
Offsetting	-99.4	-99.4	-124.9	-124.9
<b>Recognized in statement of financial position</b>	<b>138.8</b>	<b>131.2</b>	<b>228.7</b>	<b>421.5</b>

No deferred tax items were set up on temporary differences arising from shareholdings totaling €37.0 million (previous year: €44.8 million) as short-term dividend payments are not expected.

**Reconciliation of expected income tax with actual income tax expense**

Freudenberg SE and its German subsidiaries are subject to corporation tax (plus solidarity surcharge) and the municipal trade tax on income. Income realized in other countries is taxed at the rates applicable in the countries concerned. The tax rate of 30.0 percent (previous year: 29.0 percent) used for calculating the expected tax expense is based on the structure of the Freudenberg Group relevant for taxation. It is calculated as the weighted average of the tax rates for the regions in which the Freudenberg Group realized its main income.

[€ million]	2015	2016
Profit before income taxes	667.6	1,265.1
<b>Expected income tax expense (-)/ income (+)</b>	<b>-193.6</b>	<b>-379.5</b>
Different tax rates:		
In Germany	-0.3	0.1
In other countries	3.6	15.8
Tax portion of:		
Non-taxable income	81.0	240.0
Non-deductible expenses	-35.4	-54.0
Current taxes related to prior periods	2.0	-2.8
Tax portion of new tax losses carried forward for which no deferred tax assets were recognized	-7.9	-10.7
Tax portion of tax losses carried forward and used for which no deferred tax assets were recognized	2.5	2.4
Other taxation effects	1.3	10.5
<b>Actual income tax expense</b>	<b>-146.8</b>	<b>-178.2</b>
Effective tax rate (percent)	22.0	14.1

**(26) Profit or loss attributable to non-controlling interests**

[€ million]	2015	2016
Profit	65.6	56.7
Loss	-8.7	-11.5
	<b>56.9</b>	<b>45.2</b>



## NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

### **(27) Cash flow from operating activities**

The cash flow from operating activities takes into account payments for taxes amounting to €216.0 million (previous year: €233.8 million), dividends received from joint ventures totaling €22.8 million (previous year: €158.9 million) and dividends received from associated companies totaling €26.0 million (previous year: €26.9 million) - as well as interest paid of €37.8 million (previous year: €38.6 million) and interest received of €9.4 million (previous year: €9.3 million).

### **(28) Payments to shareholders/non-controlling interests**

Payments to shareholders and non-controlling interests include dividends paid to the shareholder, to the Partners of Freudenberg & Co. KG and to holders of non-controlling interests in Group companies.

### **(29) Changes in cash and cash equivalents with effect on payments**

Freudenberg recognizes checks, cash in hand, cash at bank and short-term securities with an original term of up to three months as cash and cash equivalents. Cash and cash equivalents include funds with an amount of €2.9 million (previous year: €3.1 million) subject to restrictions on use. The funds subject to restrictions on use by Freudenberg largely concern cash and cash equivalents held by Group companies which can only be used with restrictions as a result of exchange controls.



## FURTHER NOTES

### Material expenses

[€ million]	2015	2016
Raw materials, consumables and merchandise purchased	2,265.0	3,007.3
Services purchased	204.3	215.6
	<b>2,469.3</b>	<b>3,222.9</b>

### Workforce and personnel expenses

In the year under review, an average of 40,951 (previous year: 34,312) persons were employed in the following functions:

2016	Germany	Other countries	Total
Production	6,212	20,071	26,283
Sales	1,875	6,005	7,880
Research and development	1,414	1,337	2,751
Administration	1,190	2,847	4,037
	<b>10,691</b>	<b>30,260</b>	<b>40,951</b>

[€ million]	2015	2016
Wages and salaries	1,594.5	1,869.0
Social security contributions and costs of pensions and assistance	386.3	448.8
<b>Personnel expenses</b>	<b>1,980.8</b>	<b>2,317.8</b>

### Research and development

In the year under review, research and development activities amounting to €335.1 million (previous year: €252.7 million) were performed. Of this amount, €52.5 million (previous year: €23.4 million) were charged to third parties. The figure includes government grants for research and development projects totaling €2.5 million (previous year: €1.8 million).



## Consolidated Financial Statement – Notes to the Consolidated Financial Statements

### Related party disclosure

Relations with related parties concern the parent company Freudenberg & Co. KG, joint ventures, associated companies and other related parties.

Other related parties include other participations of the parent company and companies that are not included in the consolidated financial statements for reasons of materiality. Transactions with these parties in the course of the company's ordinary business were as follows:

[€ million]	Sales 2015	Receivables			Payables		
		Residual term up to 1 year	Residual term more than 1 year	Dec. 31, 2015	Residual term up to 1 year	Residual term more than 1 year	Dec. 31, 2015
Parent company	6.3	2.2	0.0	2.2	436.3	300.0	736.3
Joint ventures	62.6	33.7	2.6	36.3	3.2	0.0	3.2
Associated companies	22.9	6.0	0.0	6.0	17.2	0.0	17.2
Other related parties	3.2	2.4	0.0	2.4	29.4	0.0	29.4
	<b>95.0</b>	<b>44.3</b>	<b>2.6</b>	<b>46.9</b>	<b>486.1</b>	<b>300.0</b>	<b>786.1</b>

[€ million]	Sales 2016	Receivables			Payables		
		Residual term up to 1 year	Residual term more than 1 year	Dec. 31, 2016	Residual term up to 1 year	Residual term more than 1 year	Dec. 31, 2016
Parent company	7.6	2.9	0.0	2.9	447.0	300.0	747.0
Joint ventures	51.6	26.9	0.0	26.9	3.1	0.0	3.1
Associated companies	17.3	4.8	0.0	4.8	10.0	0.0	10.0
Other related parties	3.4	1.7	0.0	1.7	37.6	0.0	37.6
	<b>79.9</b>	<b>36.3</b>	<b>0.0</b>	<b>36.3</b>	<b>497.7</b>	<b>300.0</b>	<b>797.7</b>

Related parties also include the members of the Board of Management and the Supervisory Board. The members of these bodies are listed under "Company Boards".

An amount of €48.3 million (previous year: €44.5 million) was assigned to provisions for pension obligations to former members of the Board of Management.

The total remuneration of members of the Board of Management, or expenditure for short-term payments for members of the Board of Management amounted to €8.5 million (previous year: €8.7 million).

Under a service agreement, Freudenberg SE paid an amount of €0.8 million (previous year: €0.8 million) to its parent company for the performance of key management functions.

A current service cost of €3.9 million (previous year: €4.5 million) was incurred with respect to company pensions for Board of Management members.



## Fees of the Auditor

The auditor, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, performed the following services in the 2016 financial year:

[€ million]	2016
Auditing services	2.1
Tax advisory services	0.1
Other services	1.2
	3.4

## Major events after the date of the statement of financial position

In January 2017, Freudenberg Medical Europe GmbH, Kaiserslautern, Germany acquired further shares in VistaMed Ltd., Carrick-on-Shannon, Ireland. In accordance with the provisions of the contract, Freudenberg acquired control over the company with effect from January 1, 2017, from which date the company is included in the consolidated financial statements as a fully consolidated company. VistaMed produces high-quality special catheters and extruded tubes for the medical technology industry and has cooperated with Freudenberg as a joint venture since 2010. In the 2016 financial year, VistaMed reported sales amounting to €29.5 million and profit amounting to €6.3 million.

In the Vibracoustic Group, activities for significant restructuring measures in Germany were initiated to safeguard competitiveness. A total of about 176 employees are affected by these measures.

There were no further events of major significance for the net assets, financial position and results of operations of the Freudenberg Group up to March 23, 2017 (the date when the annual report was approved for publication by the Supervisory Board).

Weinheim, March 23, 2017

Freudenberg SE

The Board of Management



Consolidated Financial Statement – Notes to the Consolidated Financial Statements  
Shareholdings

## SHAREHOLDINGS

AS AT DECEMBER 31, 2016

Company	Location	Country	Share of capital [%]
Freudenberg SE	Weinheim	Germany	-

### I. AFFILIATED COMPANIES

#### Germany

Blaesus Grundstücksverwaltungsgesellschaft mbH & Co. Vermietungs KG	Mainz	Germany	70.47
Burgmann Industries Holding GmbH	Wolfratshausen	Germany	75.00
Burgmann International GmbH <sup>1</sup>	Wolfratshausen	Germany	100.00
Capoi GmbH <sup>1</sup>	Elmshorn	Germany	100.00
Carl Freudenberg KG	Weinheim	Germany	100.00
Chem-Trend (Deutschland) GmbH <sup>1</sup>	Maisach-Gernlinden	Germany	100.00
Corteco GmbH <sup>1</sup>	Weinheim	Germany	100.00
CT Beteiligungs-GmbH <sup>1</sup>	Munich	Germany	100.00
Dichtomatik Vertriebsgesellschaft für technische Dichtungen m.b.H	Hamburg	Germany	100.00
DS Beteiligungs-GmbH <sup>1</sup>	Weinheim	Germany	100.00
DS Holding-GmbH <sup>1</sup>	Weinheim	Germany	100.00
DS Verwaltungs-GmbH	Weinheim	Germany	100.00
EagleBurgmann Espesey GmbH <sup>1</sup>	Moers	Germany	75.00
EagleBurgmann Germany GmbH & Co. KG <sup>1</sup>	Wolfratshausen	Germany	75.00
EagleBurgmann Germany Verwaltungs-GmbH	Wolfratshausen	Germany	75.00
Externa Handels- und Beteiligungsgesellschaft mit beschränkter Haftung <sup>1</sup>	Weinheim	Germany	100.00
FCS-Munich GmbH <sup>1</sup>	Weinheim	Germany	100.00
FFT Beteiligungs-GmbH <sup>1</sup>	Weinheim	Germany	100.00
FHP Export GmbH <sup>1</sup>	Weinheim	Germany	100.00
FHP Holding GmbH <sup>1</sup>	Weinheim	Germany	100.00
FIT Service GmbH <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Chemical Specialities SE & Co. KG <sup>1</sup>	Munich	Germany	100.00
Freudenberg Dichtungs- und Schwingungstechnik GmbH <sup>1</sup>	Berlin	Germany	100.00
Freudenberg DS Tooling Center GmbH & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Filtration Technologies SE & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Handels- und Beteiligungs-GmbH <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Haushaltsprodukte Augsburg GmbH <sup>1</sup>	Augsburg	Germany	100.00
Freudenberg Home and Cleaning Solutions GmbH <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg IT GmbH & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Medical Europe GmbH <sup>1</sup>	Kaiserslautern	Germany	100.00
Freudenberg Oil & Gas GmbH <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Performance Materials Apparel SE & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Performance Materials Holding SE & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Performance Materials Logistics SE & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Performance Materials SE & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Performance Materials Service SE & Co. KG <sup>1</sup>	Kaiserslautern	Germany	100.00
Freudenberg Process Seals GmbH & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Real Estate GmbH <sup>1</sup>	Weinheim	Germany	100.00



Company	Location	Country	Share of capital [%]
Freudenberg Sealing Technologies GmbH <sup>1</sup>	Hamburg	Germany	100.00
Freudenberg Sealing Technologies GmbH & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Technology Innovation SE & Co. KG <sup>1</sup>	Weinheim	Germany	100.00
Freudenberg Verwaltungs- und Beteiligungs-GmbH	Weinheim	Germany	100.00
Freudenberg Wohnbauhilfe GmbH	Weinheim	Germany	100.00
FV Beteiligungs-GmbH <sup>1</sup>	Weinheim	Germany	100.00
Hemoteq AG	Würselen	Germany	74.97
Integral Accumulator GmbH & Co. KG <sup>1</sup>	Weinheim	Germany	75.00
Kaul GmbH	Elmshorn	Germany	100.00
Klüber Lubrication Deutschland SE & Co. KG <sup>1</sup>	Munich	Germany	100.00
Klüber Lubrication GmbH <sup>1</sup>	Weinheim	Germany	100.00
Klüber Lubrication München SE & Co. KG <sup>1</sup>	Munich	Germany	100.00
Lederer GmbH <sup>1</sup>	Öhringen	Germany	100.00
OKS Spezialschmierstoffe GmbH <sup>1</sup>	Maisach-Gernlinden	Germany	100.00
PTFE Compounds Germany GmbH	Bördeland	Germany	100.00
Schneegans Freudenberg GmbH & Co. KG <sup>1</sup>	Emmerich am Rhein	Germany	51.00
SF GmbH	Emmerich am Rhein	Germany	51.00
SurTec Deutschland GmbH <sup>1</sup>	Zwingenberg	Germany	100.00
SurTec International GmbH <sup>1</sup>	Bensheim	Germany	100.00
Trelleborg Automotive Germany GmbH	Breuberg	Germany	100.00
Vibracoustic Asia Holding GmbH	Weinheim	Germany	100.00
Vibracoustic CV Air Springs GmbH	Hamburg	Germany	65.07
Vibracoustic Europe GmbH	Darmstadt	Germany	100.00
Vibracoustic GmbH	Darmstadt	Germany	100.00
Vibracoustic GmbH & Co. KG	Weinheim	Germany	100.00
Vieda Gesellschaft mit beschränkter Haftung <sup>1</sup>	Weinheim	Germany	100.00
<b>Other countries</b>			
Freudenberg S.A. Telas sin Tejer	Buenos Aires	Argentina	100.00
Klüber Lubrication Argentina S.A.	Buenos Aires	Argentina	100.00
Chem-Trend Australia Pty Ltd	Thomastown	Australia	100.00
EagleBurgmann Australasia Pty. Ltd.	Ingleburn	Australia	25.00
Freudenberg Filtration Technologies (Aust) Pty. Ltd.	Braeside	Australia	100.00
Freudenberg Household Products Pty. Ltd.	Surrey Hills	Australia	100.00
Freudenberg Pty. Ltd.	Thomastown	Australia	100.00
Freudenberg Sealing Technologies Pty. Ltd.	Brendale	Australia	100.00
Klüber Lubrication Australia Pty. Ltd.	Thomastown	Australia	100.00
EagleBurgmann Belgium B.V.B.A.	Sint-Job-in-'t-Goor	Belgium	75.00
FHP Vileda S.C.S.	Verviers	Belgium	100.00
Klüber Lubrication Belgium Netherlands S.A.	Dottignies	Belgium	100.00
Klüber Lubrication Benelux S.A./N.V.	Dottignies	Belgium	100.00
Chem-Trend Industria e Comercio de Produtos Químicos Ltda.	Valinhos	Brazil	100.00
EagleBurgmann do Brasil Vedacoes Ltda.	Campinas	Brazil	75.00
Freudenberg Nao-Tecidos Ltda.	Jacaré	Brazil	100.00
Freudenberg Produtos do Lar Ltda.	São Paulo	Brazil	100.00



## Consolidated Financial Statement – Shareholdings

Company	Location	Country	Share of capital [%]
Freudenberg Servicos Corporativos da America do Sul Ltda.	Barueri	Brazil	100.00
Freudenberg-NOK-Componentes Brasil Ltda.	Diadema	Brazil	75.00
Klüber Lubrication Lubrificantes Especiais Ltda.	Barueri	Brazil	100.00
SurTec do Brasil Ltda.	Valinhos	Brazil	100.00
Vector Tecnologia do Brasil Ltda.	Rio de Janeiro	Brazil	99.90
Vibracoustic South America Ltda	Guarulhos	Brazil	100.00
Hänsel Textil Bulgaria ood	Rousse	Bulgaria	100.00
Freudenberg Productos del Hogar Ltda.	Santiago de Chile	Chile	100.00
Klüber Lubrication Chile Ltda.	Santiago de Chile	Chile	100.00
Burgmann Dalian Co. Ltd.	Dalian	China	40.00
Burgmann Shanghai Ltd.	Shanghai	China	40.00
Changchun Integral Accumulator Co., Ltd.	Changchun	China	75.00
Chem-Trend (Shanghai) Trading Co. Ltd.	Shanghai	China	100.00
Chem-Trend Chemicals (Shanghai) Co., Ltd.	Shanghai	China	100.00
Dichtomatik (China) Co., Ltd.	Shanghai	China	100.00
EagleBurgmann Technology (Shanghai) Co., Ltd.	Shanghai	China	50.00
EagleBurgmann Technology (Tianjin) Co., Ltd.	Tianjin	China	50.00
Freudenberg & Vilene Filter (Changchun) Co., Ltd.	Changchun	China	65.63
Freudenberg & Vilene Interlinings (Nantong) Co. Ltd.	Nantong	China	87.50
Freudenberg & Vilene International (Shanghai) Trading Co., Ltd.	Shanghai	China	87.50
Freudenberg & Vilene Nonwovens (Suzhou) Co. Ltd.	Suzhou	China	87.50
Freudenberg Household Products (Suzhou) Co., Ltd.	Suzhou	China	100.00
Freudenberg IT (Suzhou) Co., Ltd.	Suzhou	China	100.00
Freudenberg Management (Shanghai) Co. Ltd.	Shanghai	China	100.00
Freudenberg Medical Plastic & Metal Manufacturing (Shenzhen) Co., Ltd.	Shenzhen	China	100.00
Freudenberg Politex Ltd.	Shanghai	China	100.00
Freudenberg Real Estate (Yantai) Co. Ltd.	Yantai	China	100.00
Freudenberg Spunweb (Shanghai) Trading Co., Ltd.	Shanghai	China	67.69
Freudenberg Vilene Filter (Chengdu) Co. Ltd.	Chengdu	China	87.50
Klüber Lubrication (Shanghai) Co., Ltd.	Shanghai	China	100.00
Klüber Lubrication Industries (Shanghai) Co., Ltd.	Shanghai	China	100.00
Ningbo E&J Brushes Co Ltd	Ningbo	China	100.00
SurTec Metal Surface Treatment Technology Co. Ltd.	Hangzhou	China	100.00
Tianjin VIAM Automotive Products Co., Ltd.	Tianjin	China	75.00
Trelleborg Automotive Design (Shanghai) Co. Ltd.	Shanghai	China	100.00
Vibracoustic (Shanghai) Sales and Trading Co., Ltd.	Shanghai	China	100.00
Vibracoustic (Yantai) Co., Ltd.	Yantai	China	100.00
Vibracoustic CV Air Springs (Yantai) Co., Ltd.	Yantai	China	65.07
Wuxi Trelleborg Vibration Isolators Co. Ltd.	Wuxi	China	100.00
Zhangjiagang Trelleborg Kunhwa Automotive Components Co. Ltd.	Zhangjiagang	China	51.00
Freudenberg Medical srl.	San José	Costa Rica	100.00
Chem-Trend A/S	Copenhagen	Denmark	100.00
EagleBurgmann KE A/S	Vejen	Denmark	75.00
EBI Atlantic A/S	Vejen	Denmark	75.00
EBI Middle-East A/S	Vejen	Denmark	60.00



Company	Location	Country	Share of capital [%]
Klüber Lubrication Nordic A/S	Skovlunde	Denmark	100.00
SPECI-TEX ApS	Vejen	Denmark	75.00
SurTec Scandinavia ApS	Fredericia	Denmark	100.00
OÜ Merinvest	Lääne-Saare vald	Estonia	100.00
Freudenberg Filtration Technologies Finland Oy	Naantali	Finland	100.00
Freudenberg Home and Cleaning Solutions Oy	Helsinki	Finland	100.00
KE-Burgmann Finland Oy	Vantaa	Finland	75.00
Chem-Trend France S.A.S.U.	Entzheim	France	100.00
Corteco SAS	Nantiat	France	100.00
Dichtomatik S.A.S	Mâcon Loché	France	100.00
EagleBurgmann France S.A.S.	Sartrouville	France	75.00
FHP Vileda S.A.	Asnières Sur Seine	France	100.00
Freudenberg Evolon S.A.S.U.	Colmar	France	100.00
Freudenberg Filtration Technologies SAS	Les Ulis	France	100.00
Freudenberg Immobilier SAS	Chamborêt	France	100.00
Freudenberg Joints Elastomères SAS	Langres	France	100.00
Freudenberg Joints Plats SAS	Chamborêt	France	100.00
Freudenberg Politex S.A.	Colmar	France	100.00
Freudenberg Sealing Technologies SAS	Langres	France	100.00
Klüber Lubrication France S.A.S.	Valence	France	100.00
SurTec France S.A.S.	Toulouse	France	100.00
Trelleborg Automotive France SAS	Carquefou	France	100.00
Trelleborg Modyn SAS	Carquefou	France	100.00
FHP Hellas S.A.	Kifissia, Athens	Greece	100.00
Aquabio Ltd.	Worcester	United Kingdom	100.00
Auto Suppliers Limited	Kidderminster	United Kingdom	100.00
Capol (U.K.) Limited	Huddersfield	United Kingdom	100.00
Chem-Trend (UK) LP	Huddersfield	United Kingdom	100.00
Chem-Trend (UK) Ltd.	Huddersfield	United Kingdom	100.00
Chem-Trend China Investments Ltd.	Huddersfield	United Kingdom	100.00
Corteco Ltd.	Lutterworth	United Kingdom	100.00
Dichtomatik Ltd.	Derby	United Kingdom	100.00
EagleBurgmann Industries UK LP	Warwick	United Kingdom	75.00
EagleBurgmann Industries UK Ltd.	Warwick	United Kingdom	75.00
Filtamark Ltd.	Crewe	United Kingdom	100.00
Freudenberg Filtration Technologies UK Limited	Crewe	United Kingdom	100.00
Freudenberg Household Products LP	Rochdale	United Kingdom	100.00
Freudenberg Limited	Littleborough	United Kingdom	100.00
Freudenberg Oil & Gas Technologies Ltd.	Port Talbot	United Kingdom	100.00
Freudenberg Oil & Gas UK Ltd.	Aberdeen	United Kingdom	100.00
Freudenberg Performance Materials LP	Littleborough	United Kingdom	100.00
Freudenberg Sealing Technologies Limited	North Shields	United Kingdom	100.00
Freudenberg Technical Products LP	North Shields	United Kingdom	100.00
Freudenberg Technical Products Ltd.	North Shields	United Kingdom	100.00
Freudenberg Vileda Ltd.	Rochdale	United Kingdom	100.00



## Consolidated Financial Statement – Shareholdings

Company	Location	Country	Share of capital [%]
KE-Burgmann UK Ltd.	Congleton	United Kingdom	75.00
Klüber Lubrication Great Britain Ltd.	Huddersfield	United Kingdom	100.00
Polymer Health Technology Limited	Ebbw Vale	United Kingdom	100.00
Techlok Limited	Port Talbot	United Kingdom	100.00
Freudenberg Textile Technologies, S.A.	Guatemala City	Guatemala	100.00
APEC (Asia) Limited	Hong Kong	Hong Kong	100.00
Freudenberg & Vilene Int. Ltd.	Hong Kong	Hong Kong	87.50
Freudenberg Household Products Ltd.	Hong Kong	Hong Kong	100.00
Freudenberg Trading (Hongkong) Ltd.	Hong Kong	Hong Kong	100.00
Japan Vilene (Hong Kong) Ltd.	Hong Kong	Hong Kong	75.00
Jump (Asia) Distributors Ltd	Hong Kong	Hong Kong	100.00
Klüber Lubrication China Ltd.	Hong Kong	Hong Kong	100.00
Vibracoustic Hong Kong Holdings Ltd.	Hong Kong	Hong Kong	100.00
Chem-Trend Chemicals Co. Pvt. Ltd.	Bangalore	India	100.00
Dichtomatik India Seals Private Limited	Bangalore	India	100.00
EagleBurgmann India Pvt. Ltd.	Pune	India	50.00
EagleBurgmann KE Pvt. Ltd.	Chennai	India	75.00
EagleBurgmann Mascot India Private Limited	Thane	India	50.00
Freudenberg Filtration Technologies India Private Limited	Pune	India	100.00
Freudenberg Gala Household Product Pvt. Ltd.	Mumbai	India	60.00
Freudenberg Performance Materials India Pvt. Ltd.	Chennai	India	100.00
Freudenberg Regional Corporate Center India Pvt. Ltd.	Bangalore	India	100.00
Gimi India Pvt. Ltd.	Bangalore	India	77.00
Klüber Lubrication India Pvt. Ltd.	Bangalore	India	90.00
SurTec Chemicals India Pvt. Ltd.	Bangalore	India	100.00
Trelleborg Automotive (India) Pvt. Ltd.	Noida	India	100.00
TrelleborgVibracoustic (India) Pvt. Ltd.	Mohali	India	100.00
PT EagleBurgmann Indonesia	Cikarang - Bekasi	Indonesia	24.98
PT Klüber Lubrication Indonesia	Jakarta	Indonesia	100.00
Chem-Trend Italy del Dr. Gian Franco Colori S.a.s.	Milan	Italy	100.00
Corteco S.r.l. (a socio unico)	Pinerolo	Italy	100.00
Dichtomatik S.a.s. di Externa Italia S.r.l.	Genoa	Italy	100.00
EagleBurgmann BT S.p.A.	Arcugnano	Italy	75.00
EagleBurgmann Italia S.r.l.	Osnago	Italy	75.00
Externa Holding S.r.l.	Milan	Italy	100.00
Externa Italia S.r.l.	Pinerolo	Italy	100.00
FHP di R. Freudenberg S.A.S.	Milan	Italy	100.00
Freudenberg Italia S.a.s. di Freudenberg S.p.A.	Milan	Italy	100.00
Freudenberg S.p.A.	Milan	Italy	100.00
Freudenberg Sealing Technologies S.a.s. di Externa Italia S.r.l.u.	Pinerolo	Italy	100.00
Freudenberg Technologie di Filtrazione S.a.s. di Externa Holding S.r.l.	Milan	Italy	100.00
Gimi S.p.a.	Monselice	Italy	100.00
Hänsel Textil Italia S.a.s. di Externa Holding S.r.l.	Rho	Italy	100.00
Klüber Lubrication Italia S.a.s. di G. Colori	Milan	Italy	100.00
Marelli & Berta Interfodere S.a.s. di Externa Holding S.r.l.	Milan	Italy	100.00



Company	Location	Country	Share of capital [%]
Marelli & Berta S.A.S. di Externa Holding s.r.l.	Sant' Omero	Italy	100.00
Monterico S.p.a.	Milan	Italy	100.00
Politex S.a.s. di Freudenberg Politex s.r.l.	Novedrate	Italy	100.00
Chem-Trend Japan K.K.	Kobe	Japan	100.00
EagleBurgmann Japan Co., Ltd.	Tokyo	Japan	25.00
Freudenberg Spunweb Japan Company, Ltd.	Osaka	Japan	67.69
Japan VIAM Co., Ltd.	Moriyama	Japan	75.00
Japan Vilene Company Ltd.	Tokyo	Japan	75.00
Oshitari Laboratory, Inc.	Sayama	Japan	75.00
Oyama Chemical Co., Ltd.	Oyama	Japan	75.00
Pacific Giken Co., Ltd.	Yasu	Japan	75.00
SurTec MMC Japan KK	Tokyo	Japan	56.00
Vibracoustic Japan KK	Yokohama	Japan	100.00
Vilene Create Co., Ltd.	Tokyo	Japan	75.00
VIS Co., Ltd.	Tokyo	Japan	75.00
Freudenberg Vileda Jordan Ltd.	Amman	Jordan	51.00
Dichtomatik Canada, Inc.	Markham	Canada	100.00
EagleBurgmann Canada Inc.	Milton	Canada	75.00
Freudenberg Filtration Technologies Inc.	London	Canada	100.00
Freudenberg Household Products Inc.	Laval	Canada	100.00
Freudenberg Oil & Gas Canada Inc.	Nisku	Canada	100.00
Freudenberg-NOK Inc.	Tillsonburg	Canada	75.00
TOO Freudenberg Oil & Gas	Atyrau	Kazakhstan	100.00
EagleBurgmann Colombia, S.A.S.	Bogotá	Colombia	75.00
SurTec d.o.o.	Split	Croatia	100.00
EagleBurgmann (Malaysia) SDN. BHD.	Shah Alam	Malaysia	25.00
Freudenberg Household Products (Malaysia) Sdn Bhd	Petaling Jaya	Malaysia	100.00
Freudenberg Oil & Gas Technologies Sdn. Bhd.	Kuala Lumpur	Malaysia	100.00
Freudenberg-NOK St Malaysia Sdn. Bhd.	Kuala Lumpur	Malaysia	75.00
Klüber Lubrication (Malaysia) Sdn. Bhd.	Petaling Jaya	Malaysia	100.00
Chem-Trend Comercial, S.A. de C.V.	Querétaro	Mexico	100.00
Dichtomatik de Mexico S.A. de C.V.	Querétaro	Mexico	95.50
EagleBurgmann Mexico S.A. de C.V.	Cuautitlán	Mexico	75.00
Freudenberg Filtration Technologies, S.A. de C.V.	León	Mexico	100.00
Freudenberg IT, S.A. de C.V.	Mexico City	Mexico	100.00
Freudenberg Productos del Hogar, S.A. de C.V.	Mexico City	Mexico	100.00
Freudenberg-NOK Sealing Technologies de Mexico, S.A. de C.V.	Cuautla	Mexico	75.00
Klüber Lubricacion Mexicana S.A. de C.V.	Querétaro	Mexico	100.00
Trelleborg Automotive Mexico SA de CV	Toluca	Mexico	100.00
Trelleborg Automotive Toluca SA de CV	Toluca	Mexico	100.00
VIAM Manufacturing Mexico S.A. de C.V.	Aguascalientes	Mexico	75.00
Vibracoustic de Mexico SA de CV	Lerma	Mexico	100.00
Vitechmex Nonwovens S.A. de C.V.	Aguascalientes	Mexico	75.00
Dichtomatik BV.	Zwolle	Netherlands	100.00
EagleBurgmann Netherlands BV.	Veenendaal	Netherlands	75.00



## Consolidated Financial Statement – Shareholdings

Company	Location	Country	Share of capital [%]
Freudenberg Household Products BV.	Arnhem	Netherlands	100.00
SurTec Benelux BV.	Reuver	Netherlands	100.00
EagleBurgmann Norway AS	Skedsmokorset	Norway	75.00
Freudenberg Home and Cleaning Solutions AS	Skedsmokorset	Norway	100.00
Freudenberg Oil & Gas Technologies AS	Drammen	Norway	100.00
Vestpak AS	Sandnes	Norway	100.00
Dichtomatik Handelsgesellschaft mbH	Vienna	Austria	100.00
EagleBurgmann Austria GmbH	Salzburg	Austria	75.00
EagleBurgmann Production Center Judenburg GmbH	Judenburg	Austria	75.00
Freudenberg Austria GmbH	Kufstein	Austria	100.00
Freudenberg Sealing Technologies Austria GmbH & Co. KG	Kufstein	Austria	100.00
Klüber Lubrication Austria Ges.m.b.H.	Salzburg	Austria	100.00
Schneegans Freudenberg Silicon Ges.m.b.H	Losenstein	Austria	51.00
SurTec Produkte und Systeme für die Oberflächenbehandlung GesmbH	Salzburg	Austria	100.00
EagleBurgmann Philippines, Inc.	Cavite	Philippines	25.00
Chem-Trend Polska Sp. z o.o.	Kobylnica	Poland	100.00
Chem-Trend Polska sp. z o.o. spółka komandytowa	Kobylnica	Poland	100.00
EagleBurgmann Poland sp. z o.o.	Warsaw	Poland	75.00
FHP Vileda Sp. z o.o.	Warsaw	Poland	100.00
FIM Polska Sp. z o.o.	Środa Śląska	Poland	100.00
Freudenberg Sealing Technologies Sp. z o.o.	Warsaw	Poland	100.00
Freudenberg Vilese Sp. z o.o.	Lodz	Poland	100.00
Klüber Lubrication Polska Sp. z o.o.	Kobylnica	Poland	100.00
SurTec Polska Sp. z o.o.	Wroclaw	Poland	100.00
Vibracoustic Polska Sp. z o.o.	Środa Śląska	Poland	100.00
ST Ibérica Sociedade Unipessoal, LDA	Albergaria-a-Velha	Portugal	100.00
Chem-Trend Romania s.r.l.	Bucharest	Romania	100.00
Freudenberg Household Products SRL	Braşov	Romania	100.00
Freudenberg Household Products Vileda Societate in Comandita	Braşov	Romania	100.00
Freudenberg Management Imobiliär SRL	Braşov	Romania	100.00
Freudenberg Performance Materials SRL	Braşov	Romania	100.00
Hänsel Textilrom srl	Bucharest	Romania	100.00
SurTec Romania s.r.l.	Braşov	Romania	100.00
Trelleborg Automotive Dej S.r.l.	Dej	Romania	100.00
EagleBurgmann OOO	Moscow	Russian Federation	75.00
Freudenberg Filtration Technologies OOO	Nizhniy Novgorod	Russian Federation	100.00
Freudenberg Household Products Eastern Europe OOO	St. Petersburg	Russian Federation	70.00
Freudenberg Politex OOO	Zavolzhye	Russian Federation	100.00
Freudenberg Vileda Eastern Europe OOO	Moscow	Russian Federation	100.00
Klüber Lubrication OOO	Moscow	Russian Federation	100.00
OOO Freudenberg Sealing Technologies	Moscow	Russian Federation	100.00
OOO SurTec	Moscow	Russian Federation	100.00
Trelleborg Automotive OOO	Zavolzhye	Russian Federation	100.00
EagleBurgmann Saudi Arabia Ltd.	Al-Khobar	Saudi Arabia	51.00
Dichtomatik A.B.	Landskrona	Sweden	85.00



Company	Location	Country	Share of capital [%]
EagleBurgmann Sweden AB	Norrköping	Sweden	75.00
Freudenberg Home and Cleaning Solutions AB	Norrköping	Sweden	100.00
Freudenberg Sealing Technologies AB	Stockholm	Sweden	100.00
Trelleborg Automotive Forsheda AB	Forsheda	Sweden	100.00
Vibracoustic China Holding AB	Forsheda	Sweden	100.00
Vibracoustic Sweden Holding AB	Trelleborg	Sweden	100.00
Vibracoustic Wuxi Holding AB	Forsheda	Sweden	100.00
EagleBurgmann (Switzerland) AG	Höri	Switzerland	75.00
Freudenberg Gygli AG	Zug	Switzerland	100.00
Freudenberg Sealing Technologies AG	Zurich	Switzerland	100.00
Klüber Lubrication AG (Schweiz)	Zurich	Switzerland	100.00
Freudenberg proizvodni za domacinstvo d.o.o.	Belgrade	Serbia	100.00
SurTec Cacak d.o.o.	Čačak	Serbia	100.00
Chem-Trend Singapore Pte. Ltd.	Singapore	Singapore	100.00
EagleBurgmann KE Pte. Ltd.	Singapore	Singapore	75.00
EagleBurgmann Singapore Pte. Ltd.	Singapore	Singapore	25.00
EBI Asia Pacific Pte. Ltd.	Singapore	Singapore	25.00
EBI Asia Pte. Ltd.	Singapore	Singapore	50.00
Freudenberg Oil & Gas Pte. Ltd.	Singapore	Singapore	100.00
Klüber Lubrication South East Asia Pte. Ltd.	Singapore	Singapore	100.00
Freudenberg Filtration Technologies Slovensko, s.r.o.	Potvorice	Slovakia	90.00
Freudenberg Immobilienmanagement Slovakia, s.r.o	Potvorice	Slovakia	100.00
Freudenberg IT, s.r.o.	Košice	Slovakia	100.00
SurTec SK s.r.o.	Vráble	Slovakia	100.00
Freudenberg Gospodinjski Proizvodi d.o.o.	Maribor	Slovenia	100.00
SurTec Adria d.o.o.	Ljubljana	Slovenia	100.00
EagleBurgmann Ibérica S.A.	Madrid	Spain	75.00
Freudenberg Espana S.A.	Parets del Vallès	Spain	100.00
Freudenberg Espana S.A., Telas sin Tejer, S.en C.	Parets del Vallès	Spain	100.00
Freudenberg Home and Cleaning Solutions Iberica, S.LU.	Parets del Vallès	Spain	100.00
Freudenberg Sealing Technologies, S.LU.	Parets del Vallès	Spain	100.00
Klüber Lubrication GmbH Ibérica S.en C.	Parets del Vallès	Spain	100.00
Trelleborg Automotive Cascante SAU	Cascante	Spain	100.00
Trelleborg Automotive Spain SAU	Martorell	Spain	100.00
Trelleborg Participaciones SLU	Martorell	Spain	100.00
Freudenberg & Vilene International Lanka (Private) Limited	Colombo	Sri Lanka	87.50
Hänsel Textil Lanka PVT Ltd.	Colombo	Sri Lanka	87.50
EagleBurgmann Seals South Africa (Pty) Ltd.	Edenvale	South Africa	75.00
Freudenberg Filtration Technologies (Pty) Ltd.	Cape Town	South Africa	100.00
Freudenberg Nonwovens (Pty) Ltd.	Cape Town	South Africa	100.00
Klüber Lubrication (Pty) Ltd.	Alrode Alberton	South Africa	100.00
SurTec South Africa Pty. Ltd.	Pretoria	South Africa	100.00
TrelleborgVibracoustic-Ikhwezi (Proprietary) Ltd.	East London	South Africa	70.00
Chem-Trend Korea Ltd.	Anseong-si	South Korea	100.00
EagleBurgmann Korea Co., Ltd.	Osan	South Korea	25.00



## Consolidated Financial Statement – Shareholdings

Company	Location	Country	Share of capital [%]
Freudenberg Home and Cleaning Solutions Korea Ltd.	Seoul	South Korea	100.00
Korea Filtration Technologies Co., Ltd.	Seoul	South Korea	87.50
Korea Vilene Co., Ltd.	Pyungtaek-si	South Korea	87.50
SurTec Korea Co., Ltd.	Changwon-si	South Korea	100.00
Vibracoustic Kunhwa Co. Ltd.	Gyeongsan-si	South Korea	51.00
EagleBurgmann Taiwan Co., Ltd.	Kauohsiung	Taiwan	25.00
Freudenberg & Vilene Nonwovens (Taiwan) Co. Ltd.	Taoyuan	Taiwan	87.50
Freudenberg Far Eastern Spunweb Comp. Ltd.	Taoyuan	Taiwan	67.69
Freudenberg Household Products (Taiwan) Co., Ltd.	Taipei	Taiwan	100.00
Chem-Trend Trading (Thailand) Co. Ltd.	Bangkok	Thailand	100.00
EagleBurgmann (Thailand) Co., Ltd.	Rayong	Thailand	25.00
Freudenberg & Vilene Filter (Thailand) Co. Ltd.	Chonburi	Thailand	87.50
Jump Distributors (Thailand) Co Ltd	Nonthaburi	Thailand	100.00
Klüber Lubrication (Thailand) Co., Ltd.	Bangkok	Thailand	100.00
Lucky Gecko Co Ltd	Bangkok	Thailand	100.00
TrelleborgVibracoustic (Thailand) Ltd.	Sriracha	Thailand	100.00
VIAM Manufacturing (Thailand) Co., Ltd.	Prachin Buri	Thailand	75.00
Accu-Tech s.r.o.	Chrastava	Czech Republic	36.75
ALUCON s.r.o.	Lázně Bělohrad	Czech Republic	100.00
EagleBurgmann Czech s.r.o.	Prague	Czech Republic	75.00
Freudenberg Potreby pro domácnost, k.s.	Prague	Czech Republic	100.00
Klüber Lubrication CZ, s.r.o.	Brno	Czech Republic	100.00
SurTec CR s.r.o.	Vrané Nad Vltavou	Czech Republic	100.00
Těsnění a pružné elementy, k.s.	Opatovice nad Labem	Czech Republic	100.00
TPE správní s.r.o.	Opatovice nad Labem	Czech Republic	100.00
Vibracoustic CZ s.r.o.	Melník	Czech Republic	100.00
Beltan Vibracoustic Titresim Elemanlari Sanayi ve Ticaret A.S.	Bursa	Turkey	100.00
Blacktech Otomotiv Sanayi ve Ticaret A.S.	Bursa	Turkey	65.07
EagleBurgmann Endüstriyel Sızdırmazlık Sanayi ve Ticaret Ltd.	Istanbul	Turkey	75.00
Freudenberg Household Products Evici Kullanım Araçları Sanayi ve Ticaret A.S.	Istanbul	Turkey	100.00
Freudenberg Sealing Technologies Sanayi ve Ticaret A.S.	Bursa	Turkey	100.00
Freudenberg Vilene Tela Sanayi ve Ticaret A.S.	Istanbul	Turkey	100.00
Klüber Lubrication Yağlama Ürünleri Sanayi ve Ticaret A.S.	Istanbul	Turkey	100.00
Trelleborg Cerkezköy İthalat ve İhracat Otomotiv Ticaret AS	Çerkezköy	Turkey	100.00
Trelleborg Cerkezköy Otomotiv Sanayi Ve Ticaret A.S.	Çerkezköy	Turkey	100.00
Vibracoustic CV Air Springs Otomotiv Sanayi ve Ticaret A.S.	Gemlik	Turkey	65.07
Dichtomatik Kft.	Budapest	Hungary	100.00
EagleBurgmann Hungaria Kft.	Budapest	Hungary	75.00
Freudenberg Háztartási Cikkek Kereskedelmi BT	Budapest	Hungary	100.00
Freudenberg IM Hungária Kft.	Nyíregyháza	Hungary	100.00
Freudenberg Sealing Technologies Kft.	Kecskemét	Hungary	100.00
Freudenberg Tömítés Ipari Kft.	Lajosmizse	Hungary	100.00
Vibracoustic CV Air Springs Magyarország Kft.	Nyíregyháza	Hungary	65.07
Capo! LLC	Deerfield	USA	100.00
Chem-Trend Holding LP	Howell	USA	100.00



Company	Location	Country	Share of capital [%]
Chem-Trend Limited Partnership	Howell	USA	100.00
Dichtomatik Americas, L.P.	Shakopee	USA	100.00
EagleBurgmann Industries Inc.	Houston	USA	75.00
EagleBurgmann Industries LP	Houston	USA	75.00
EagleBurgmann KE, Inc.	Lakeside	USA	75.00
FCS Holding Inc.	Wilmington	USA	100.00
Freudenberg Business Services LP	Plymouth	USA	100.00
Freudenberg Filtration Technologies LP	Hopkinsville	USA	100.00
Freudenberg Household Products Inc.	Aurora	USA	100.00
Freudenberg Household Products LP	Aurora	USA	100.00
Freudenberg IT LP	Durham	USA	100.00
Freudenberg Medical MIS, Inc.	Jeffersonville	USA	100.00
Freudenberg Medical, LLC	Carpinteria	USA	100.00
Freudenberg North America Limited Partnership	Plymouth	USA	100.00
Freudenberg Oil & Gas, LLC	Houston	USA	100.00
Freudenberg Performance Materials LP	Durham	USA	100.00
Freudenberg Real Estate LP	Wilmington	USA	100.00
Freudenberg Texbond L.P.	Macon	USA	100.00
Freudenberg-NOK General Partnership	Plymouth	USA	75.00
Freudenberg-NOK Holdings, Inc.	Wilmington	USA	75.00
International Seal Company, Inc.	Santa Ana	USA	75.00
Intpacor Inc.	Plymouth	USA	100.00
Klüber Lubrication NA LP	Tyler	USA	100.00
Pellon Corporation	Plymouth	USA	100.00
SurTec, Inc.	Brunswick	USA	100.00
Tobul Accumulator Incorporated	Bamberg	USA	75.00
Trelleborg Automotive USA Inc.	South Haven	USA	100.00
Upper Bristol Ramp, LLC	Wilmington	USA	75.00
VIAM Holding, Inc.	Manchester	USA	75.00
VIAM Manufacturing, Inc.	Manchester	USA	75.00
Vibracoustic CV Air Springs USA Inc.	Wilmington	USA	65.07
Vibracoustic North America Holdings Inc.	Plymouth	USA	100.00
Vibracoustic North America LP	Plymouth	USA	100.00
VICAM Inc.	Manchester	USA	75.00
VITECH Manufacturing L.P.	Hopkinsville	USA	75.00
VITECH Manufacturing, Inc.	Hopkinsville	USA	75.00
EagleBurgmann Venezuela, C.A.	Caracas	Venezuela	41.25
EagleBurgmann Middle East FZE	Dubai	United Arab Emirates	60.00
Freudenberg Oil and Gas FZE	Dubai	United Arab Emirates	100.00
Chem-Trend Vietnam Company Limited	Ho Chi Minh City	Vietnam	100.00
EagleBurgmann Vietnam Company Limited	Ho Chi Minh City	Vietnam	25.00
SurTec Viet Nam Co., Ltd.	Ho Chi Minh City	Vietnam	100.00



## Consolidated Financial Statement – Shareholdings

Company	Location	Country	Share of capital [%]
<b>II. INVESTMENTS IN JOINT VENTURES (CONSOLIDATED BY EQUITY METHOD)</b>			
<b>Germany</b>			
<b>Other countries</b>			
Cambus Teoranta	Spiddal	Ireland	50.00
VistaMed Ltd.	Carrick-on-Shannon	Ireland	50.00
Corfina s.r.l.	Pinerolo	Italy	50.00
NOK-Freudenberg Asia Holding Co. Pte. Ltd. <sup>2</sup>	Singapore	Singapore	50.00
TETL Holdings, LLC	Dover	USA	41.25
TTKKE Holdings, LLC	Dover	USA	30.00
<b>III. INVESTMENTS IN ASSOCIATED COMPANIES (CONSOLIDATED BY EQUITY METHOD)</b>			
<b>Germany</b>			
<b>Other countries</b>			
Bicomfiber S.A.	Buenos Aires	Argentina	24.00
Hikotomi Industrial Co., Ltd.	Hikone	Japan	24.98
NOK Corporation	Tokyo	Japan	25.10
NOK Klüber Co., Ltd.	Tokyo	Japan	49.00
Shinwa Products Co., Ltd.	Tsuzuranuki	Japan	34.13
ZET Gaskets Sp.z.o.o.	Śnieciska	Poland	35.00
Klüber Lubrication Korea Ltd.	Seoul	South Korea	48.00
Dawson Manufacturing Company	Benton Harbor	USA	45.00
Ishino Gasket North America L.L.C.	Plymouth	USA	37.50
ISE Industrial Sealing Equipment JLT	Dubai	United Arab Emirates	36.75
SurTec Middle East (L.L.C.)	Sharjah	United Arab Emirates	35.00

<sup>1)</sup> Application of Sec. 264 (3), HGB (=Handelsgesetzbuch, "German Commercial Code") and Sec. 264b, HGB

<sup>2)</sup> Consolidated financial statements including  
 Changchun NOK-Freudenberg Oilseal Co., Ltd., Changchun, China  
 Corteco China Co. Ltd., Guangzhou, China  
 Merkel NOK-Freudenberg Co. Ltd., Taicang, China  
 NOK-Freudenberg Group Sales (China) Co., Ltd., Shanghai, China  
 NOK-Freudenberg Group Trading (China) Co., Ltd., Shanghai, China  
 Wuxi NOK-Freudenberg Oilseal Co., Ltd., Wuxi, China  
 NOK-Freudenberg Hong Kong Ltd., Hong Kong, Hong Kong  
 Sigma Freudenberg NOK PVT. Ltd., New Delhi, India



## AUDIT OPINION

We have audited the Consolidated Financial Statements prepared by the Freudenberg SE, Weinheim, comprising the Consolidated Statement of Financial Position, the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated Statement of Cash Flows, the Consolidated Statement of Changes in Equity and the Notes to the Consolidated Financial Statements, together with the Group Management Report for the fiscal year from January 1 to December 31, 2016. The preparation of the Consolidated Financial Statements and the Group Management Report in accordance with IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB ["Handelsgesetzbuch": "German Commercial Code"] are the responsibility of the parent company's management. Our responsibility is to express an opinion on the Consolidated Financial Statements and on the Group Management Report based on our audit.

We conducted our audit of the Consolidated Financial Statements in accordance with Sec. 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the Consolidated Financial Statements in accordance with the applicable financial reporting framework and in the Group Management Report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the Consolidated Financial Statements and the Group Management Report are examined primarily on a test basis within the framework of the audit.

The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the Consolidated Financial Statements and the Group Management Report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the Consolidated Financial Statements comply with IFRSs as adopted by the EU, the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The Group Management Report is consistent with the Consolidated Financial Statements, complies with legal requirements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.

Mannheim, March 23, 2017

Ernst & Young GmbH

Wirtschaftsprüfungsgesellschaft

Prof. Dr. Wollmert

Wirtschaftsprüfer  
[German Public  
Auditor]

Matischiok

Wirtschaftsprüfer  
[German Public  
Auditor]



EDITORIAL INFORMATION

Freudenberg Group  
Hoehnerweg 2 – 4  
69469 Weinheim, Germany

PUBLISHED BY:  
Freudenberg & Co. Kommanditgesellschaft  
Corporate Communications  
Phone: +49 6201 80 0  
CorporateCommunications@freudenberg.com  
www.freudenberg.com

April 2017  
Item No. FRE1031EN

PROJECT TEAM:  
Corporate Communications:  
Cornelia Buchta-Noack (Lead)  
Andreas Baldauf  
Angela Gerhardt  
Katrin Jacobi

Corporate Controlling  
and Accounting:  
Volker Christ (Lead)  
Katrin Fanenbruck  
Tobias Feldrappe  
Ellen Fichtner  
Martina Franke  
Tanja Heilmann  
Marcella Nagel Brinschwitz  
Bodo Peisch  
Florian Wätzig  
Define Yalcinkaya  
Markus Ziegler

DESIGN:  
m&s communication, Düsseldorf, Germany  
Realization with firesys

PHOTOS:  
Freudenberg Group, Weinheim, Germany  
Axel Heiter, Mannheim, Germany  
Martin Joppen, Frankfurt, Germany  
Andreas Pohlmann, Munich, Germany  
Mike Roberts, Marden Park, United Kingdom  
Gerald Schilling, Ketsch, Germany  
Marco Schilling, Weinheim, Germany  
Xiaoxin Wang, Shanghai, China

PRODUCTION:  
ABT Print und Medien, Weinheim, Germany



