

## OVERVIEW OF 2016

**Revenue and EBIT higher than in previous year** Despite the market environment remaining difficult and companies still being reluctant to invest, we were able to expand our volume of business in the reporting year. Revenue rose by a moderate 1.0 per cent to €1,260.2 million. Unit sales fell by 3.8 per cent to 132,539 engines. There was a big increase in operating profit (EBIT), which climbed by €18.5 million to €23.4 million. This underlines the effectiveness of our measures aimed at increasing profitability.

**Reporting changes** We have divided our former Mobile Machinery application segment into two parts. From the 2016 financial year, information is provided for the Construction Equipment and Material Handling application segments. We are thus increasing transparency and reflecting the significance of various customer industries.

**Steps to increase efficiency on schedule** The measures aimed at comprehensively optimising our network of sites in Germany are now either complete or well advanced. The transfer of crankshaft and camshaft production from Cologne-Deutz to the new shaft centre in Cologne-Porz was finished in February 2017. Assembly and order management have already been relocated to Ulm from Übersee on Lake Chiemsee, and all other functions will move during the course of 2017.

**Positive market response to products** Our TCD engines equipped with a diesel particulate filter in the 2.9 to 7.8 litre cubic capacity range already meet EU Stage V, the next European emissions standard, which comes into effect in 2019. This benefits our customers, for whom we again launched many new products last year. The engines that we unveiled in 2016 to expand our portfolio at the upper and lower end of the power output range, including a new TCD 5.0 engine, gas variants and a DEUTZ powerpack, were well received.

**New Chairman of the Board of Management appointed** Dr Frank Hiller was appointed as a member of the Board of Management of DEUTZ AG and its Chairman with effect from 1 January 2017. He succeeds Dr Helmut Leube, who retired on 31 December 2016.

## FUNDAMENTAL FEATURES OF THE GROUP

### BUSINESS MODEL AND SEGMENTS

DEUTZ is one of the world's leading engine manufacturers and was founded in 1864 by Nicolaus August Otto, developer of the four-stroke engine, and Eugen Langen. Since then, DEUTZ has been supplying reliable drive systems for mobile and standalone static applications. We are an independent producer of diesel and gas engines with a power output of 25 kW up to 520 kW for on-road and off-road use. The DEUTZ Group's customers include manufacturers of construction equipment, forklift trucks, tractors and other equipment as well as the buyers of such machines. Operating activities are divided into two segments: DEUTZ Compact Engines and DEUTZ Customised Solutions. The DEUTZ Compact Engines segment comprises liquid-cooled engines with capacities of up to 8 litres. The DEUTZ Customised Solutions segment specialises in air-cooled engines and large liquid-cooled engines with capacities of more than 8 litres. Operating under the name DEUTZ Xchange, the DEUTZ Customised Solutions segment also supplies reconditioned engines and parts.

DEUTZ also offers its customers advice and support on installing the engines and operating the machinery. Our services are closely aligned with each of our customers' individual needs. We actively assist customers with the repair, maintenance and servicing of their vehicles and machines fitted with DEUTZ engines. The global DEUTZ service network, which comprises subsidiaries, service centres and authorised agents, guarantees a reliable and rapid supply of spare parts.

### MAIN SITES AND SCOPE OF CONSOLIDATION

DEUTZ maintains a comprehensive presence in the global market: with 13 sales companies, seven sales offices and over 800 sales and service partners in more than 130 countries, we can offer our customers service and support virtually anywhere with very short response times. DEUTZ AG is the executive and operating parent company in the DEUTZ Group; it is headquartered in Cologne, Germany, and has various domestic and foreign subsidiaries. The subsidiaries include several companies that perform sales and service functions plus a production facility in Spain. The equity-accounted joint venture DEUTZ Dalian in China produces diesel engines that are primarily destined for the Chinese market.

In addition to DEUTZ AG, seven German companies (31 December 2015: six) and 12 foreign companies (31 December 2015: twelve) were included in the consolidated financial statements as at 31 December 2016. A complete list of DEUTZ AG shareholdings as at 31 December 2016 is given in the annex to the notes to the consolidated financial statements on page 119.

Overview of 2016

Fundamental features of  
the Group

Internal control system

**DEUTZ AG****DEUTZ Compact Engines**

- Liquid-cooled engines of up to 8 litres cubic capacity

**DEUTZ Customised Solutions**

- Air-cooled engines
- Liquid-cooled engines of more than 8 litres cubic capacity

**MARKET AND COMPETITIVE ENVIRONMENT**

DEUTZ manufactures diesel engines for professional applications used in countries with stringent emissions standards, in particular EU Stage III A, III B and IV (as well as the equivalents in the US and other countries). These technically sophisticated applications include construction equipment, agricultural machinery, lifting and material handling equipment, pumps, gensets, medium-duty trucks and buses. The market for DEUTZ engines is therefore separate from the market segments for diesel engines used in passenger cars and small commercial vehicles up to a permissible gross weight of 3.5 tonnes. Engines that rely on outdated technology and that are intended for use in applications in countries or application segments with only very low requirements in terms of product quality, emissions and fuel consumption also do not feature in our target market. The market for technically sophisticated diesel engines can be divided into the captive segment and the non-captive segment. The captive segment comprises equipment manufacturers who produce their own engines; some of these manufacturers are also active as engine suppliers in the market. The non-captive segment is made up of equipment manufacturers who for the most part do not produce their own engines and who, therefore, buy in engines from suppliers. It is in this non-captive market that DEUTZ sells high-value engines with outputs between 25 kW and 520 kW around the globe.

We have attained a good position as one of the biggest suppliers in the non-captive market. We face competition from rival engine suppliers in western Europe, North America and Asia, but none of these competitors can offer an identical product range to DEUTZ in terms of the power outputs and application segments that they cover.

**Main competitors**

Application segments	Applications	Main competitors (in alphabetical order)
<b>Construction Equipment</b>	Excavators	Cummins, USA
	Wheel loaders	Isuzu, Japan
	Pavers	Weichai, China
<b>Material Handling</b>	Mining equipment	Yanmar, Japan
	Forklift trucks	Cummins, USA
	Telehandlers	VW, Germany
	Lifting platforms	Yanmar, Japan
<b>Agricultural Machinery</b>	Ground support equipment	Zhejiang Xinchai, China
	Tractors	Deere, USA
	Harvesters	Kubota, Japan
<b>Stationary Equipment</b>	Gensets	Cummins, USA
	Pumps	Kubota, Japan
	Compressors	Perkins, UK
<b>Automotive</b>	Rolling stock	Yanmar, Japan
	Special vehicles	Cummins, USA
	Trucks	Fiat Powertrain, Italy
	Buses	MAN, Germany
		Mercedes, Germany

**INTERNAL CONTROL SYSTEM****RESPONSIBLE CORPORATE MANAGEMENT  
BASED ON TRANSPARENT PERFORMANCE  
INDICATORS**

The DEUTZ Group defines its budget targets and medium-term corporate targets using selected key performance indicators (KPIs). In order to increase profitability and achieve sustained growth, we manage the Group on the basis of the following financial performance indicators:

		2016	2015
Revenue growth	%	1.0	-18.5
EBIT margin (before exceptional items)	%	1.9	0.4
Working capital ratio <sup>1)</sup> (average)	%	17.9	17.6
ROCE (before exceptional items) <sup>1)</sup>	%	3.1	0.6
R&D ratio	%	4.0	3.3
Free cash flow <sup>1)</sup>	€ million	4.7	35.0

<sup>1)</sup> These KPIs are alternative performance measures that are not defined in the International Financial Reporting Standards (IFRS). A reconciliation of these KPIs to the amounts recognised in the financial statements is provided below.