Knorr-Bremse Group

Facts & Figures 2011

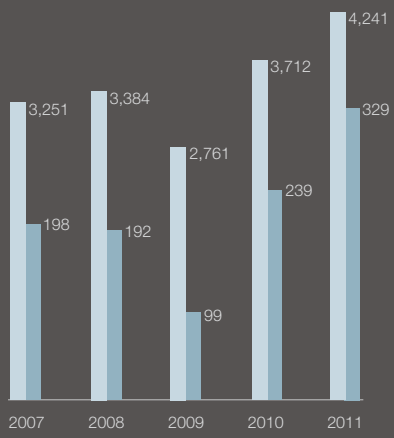
KNORR-BREMSE

At a Glance

KNORR-BREMSE GROUP		2007	2008	2009	2010	2011
Sales	EUR mill.	3,251	3,384	2,761	3,712	4,241
Net income	EUR mill.	198	192	99	239	329
Employees (as per Dec. 31)*		15,235	15,890	15,613	18,053	20,050
Personnel costs	EUR mill.	622	686	641	721	805
Balance-sheet total	EUR mill.	1,735	1,788	1,664	2,194	2,530
Equity	EUR mill.	566	639	533	754	902
Capital expenditure**	EUR mill.	140	134	101	113	159
Depreciation**	EUR mill.	113	115	118	147	165
Incoming orders	EUR mill.	3,767	3,209	3,185	4,040	4,073
Research and development expenditure	EUR mill.	159	171	153	175	209

* incl. Leasing

**not including investments in financial assets



Sales and net income for the Knorr-Bremse Group in EUR millions

Sales Net income

Consolidated sales by region

Global Presence

Knorr-Bremse has
over 85 locations in
27 countries
around the world.

Company profile

Making mobility safe – this is the daily mission of Knorr-Bremse.

The Knorr-Bremse Group, with its company headquarters in Munich, is the world's leading manufacturer of braking systems for rail and commercial vehicles. For more than 100 years now the company has pioneered the development, production, marketing and servicing of state-of-the-art braking systems.

In the area of rail vehicles, the long-established company supplies highly-developed products to both rail vehicles used in local transport, such as subways and streetcars, as well as to freight trains, locomotives and passenger and high-speed trains. In addition to braking systems, the company also supplies intelligent door systems, air conditioning systems, control components and windscreen wipers, as well as platform screen doors. Knorr-Bremse also offers driving simulators and e-learning systems for optimum train crew training.

In the area of commercial vehicles, the bandwidth of innovative solutions ranges from complete braking systems including driver assistance systems (for example, ABS and ESP) through torsional vibration dampers to powertrain-related solutions, and transmission control systems. All of these solutions focus on increased efficiency and reduced fuel consumption.

With all its products, Knorr-Bremse makes a significant contribution to safety on rail and road all over the world. More than a billion people worldwide rely daily on Knorr-Bremse systems.

Contents

History

1905

Georg Knorr founds Knorr-Bremse GmbH in Berlin.

1918 – 1926

Knorr-Bremse sets new technological standards for freight trains with its pneumatic brakes. Knorr-Bremse becomes Europe's biggest manufacturer of brake systems for rail vehicles.

1922

Development of pneumatic brake system for commercial vehicles begins.

1931 – 1939

The Hildebrand-Knorr brake system for rail vehicles (HIK brake) sweeps the market and becomes the standard system in 17 different countries. By 1939, 90% of all German trucks from 7 t – 16 t are equipped with Knorr-Bremse brakes.

1945

The Knorr-Bremse plant in Berlin is confiscated and dismantled at the end of the 2nd World War.

1945 – 1953

Development and manufacture of braking equipment resumes in the western part of Germany. Company headquarters move to Munich.

1960 – 1980

Knorr-Bremse plays a leading role in the development of braking technology for rail and commercial vehicles. Knorr-Bremse establishes the new UIC standard with its KE control valve.

1985

Heinz Hermann Thiele acquires the majority of the shares previously held by Dr. Jens von Bandemer and gradually becomes sole owner of Knorr-Bremse. Together with the company's international orientation, the focus on the two divisions, Rail Vehicle Systems and Commercial Vehicle Systems, that Thiele initiated make Knorr-Bremse the world's leading manufacturer of braking systems in both sectors.

1996

Series production of pneumatic disc brakes for commercial vehicles begins.

1999

The commercial vehicle brakes division of Robert Bosch GmbH is integrated into Knorr-Bremse, complementing the company's activities in the field of electronic brake control.

2002

In 2002 Knorr-Bremse acquires Bendix Commercial Vehicle Systems, one of the leading U.S. manufacturers of air brakes

and ABS anti-lock braking systems for commercial vehicles.

2005

The Knorr-Bremse Group celebrates its centenary.

2009

The company celebrates the 150th anniversary of the birth of its founder Georg Knorr.

2010

Knorr-Bremse strengthens its air conditioning systems area through the strategic acquisition of the Sigma Cochair Group.

Knorr-Bremse opens new production plants in the Czech Republic and Hungary, using the most state-of-the-art production and logistics concepts.

Knorr-Bremse signs on to the UN Global Compact and adopts a Group-wide Corporate Social Responsibility Strategy.

2011

30 years ABS and 10 years ESP – Knorr-Bremse celebrates two important anniversaries.

Knorr-Bremse receives certification for a specific distributor valve for the Russian market.

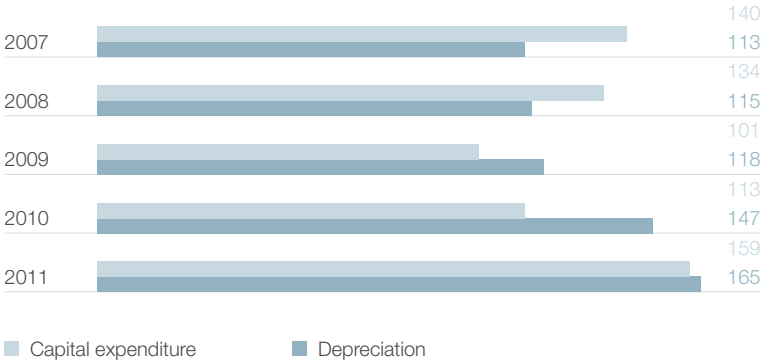
At a Glance

In an economic environment that remained volatile, the company benefited from its strong strategic position with the two business divisions, Rail Vehicle Systems and Commercial Vehicle Systems. In an economic environment that remained volatile, the company benefited from its strong strategic position with the two business divisions, Rail Vehicle Systems and Commercial Vehicle Systems

Annual net income for the Knorr-Bremse Group increased by 37.6% in 2011 to 329.3 million euros (previous year: 239.4 million euros). The return on sales after taxes was 7.8% (previous year: 6.4%).

The Knorr-Bremse Group's investments in fixed assets and intangible assets increased by 40,1% over the previous year with 158.9 million euros (previous year: 113.4 million euros). This development goes hand in hand with the positive sales development in the financial year 2011.

Depreciation on intangible and fixed assets showed a slight increase across the Group, rising from EUR 146.9 million in 2010 to EUR 164.6 million in the year under review.



Consolidated capital expenditure and depreciation in EUR millions

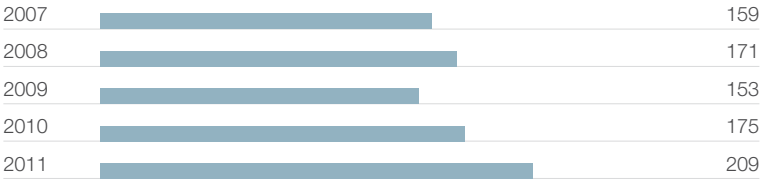
Research & Development

In 2011, Knorr-Bremse continued expanding its research and development activities as one of the leading technological companies in the rail and commercial vehicle market. Research and development expenditure in 2011 amounted to 208.8 million euros, which equates to 4.9% of sales.

As the global technology leader in the fields of braking systems for rail and commercial vehicles, Knorr-Bremse develops innovative products distinguished by their safety, high quality, reliability and customer benefits.

Criteria such as energy and resource efficiency and environmental compatibility are also becoming increasingly important for both products and production processes. Knorr-Bremse is therefore concentrating on developing manufacturing processes and product applications that have a minimal impact on the environment.

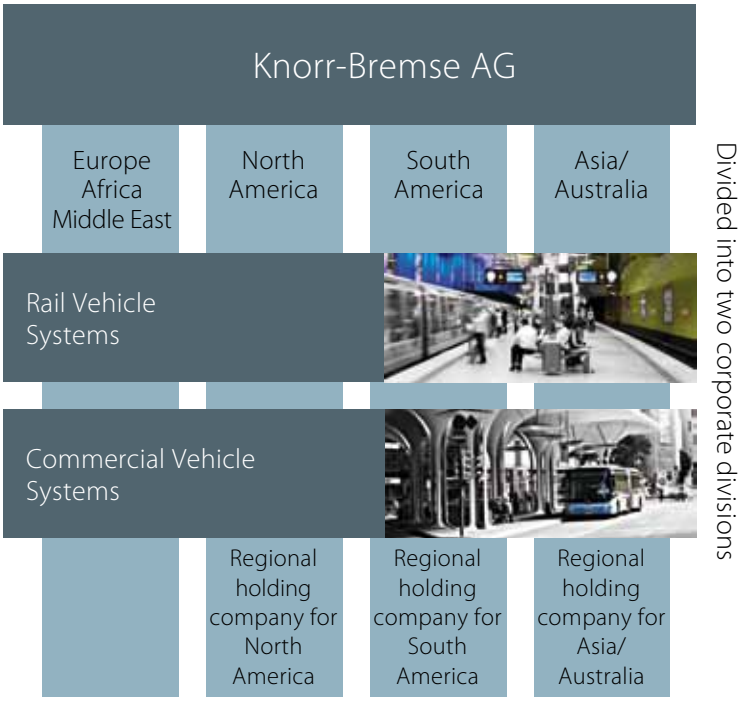
In 2011 the Group continued to pursue its ambition of realizing innovative solutions that meet local market and customer requirements, and of continuously improving these solutions in the interests of its customers, as evidenced by an impressive number of innovations and awards.



Consolidated research and development expenditure in EUR millions

Organizational Structure

The Knorr-Bremse Group is structured both divisionally and regionally. Under the umbrella of Knorr-Bremse AG are, on one side, the cross-regional Group divisions Rail Vehicle Systems and Commercial Vehicle Systems and, on the other side, the regional companies in Europe, North America, South America, and the Asia-Pacific region. This structure allows Knorr-Bremse to meet the specific requirements of the markets in these regions while at the same time realizing cross-location and cross-regional synergy effects.



Regionalization and globalization

Executive Board & Supervisory Board

Executive Board

Klaus Deller

Dr. Dieter Wilhelm

Dr. Lorenz Zwingmann
Spokesman of the Executive Board since October 10, 2011

Dr. Raimund Klinkner
Chairman of the Executive Board until October 10, 2011

Supervisory Board

Heinz Hermann Thiele
Munich
Chairman, Entrepreneur

Dr. Eduard Gerum*
Rosenheim
1st Deputy Chairman, Consultant to the Executive Board of Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

Manfred Wennemer
Bensheim
2nd Deputy Chairman, Former Chairman of the Executive Board of Continental AG

Dr. Hans-Peter Binder
Berg
Retd. Member of the Board of Management of Deutsche Bank AG, Munich Branch

Dr. Martin Kimmich*
Munich
IG Metall Trade Union Secretary, Munich Office

Heinz Hausner*
Salzweg
Assistant Representative of the IG Metall Trade Union, Passau Office

Wolfgang Hubert*
Munich (since March 18, 2011)
Representative of the disabled, Chairman of the Works Council of Knorr-Bremse Systeme für Schienenfahrzeuge GmbH, Knorr-Bremse AG, KB-Media GmbH, Knorr-Bremse IT-Services GmbH

Dr. Kurt Kiethe
Munich
Attorney at law

Dr. Wolfram Mörsdorf
Essen
Retd. Member of the Executive Board of ThyssenKrupp AG

Werner Ratzisberger*
Munich
Project engineer, mechanical surface treatment, Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

Günter Wiese*
Berlin (since March 18, 2011)
Full-time Chairman of the Works Council of Knorr-Bremse Systeme für Schienenfahrzeuge GmbH, Berlin plant

Dr. h. c. Horst Zimmer
Lampertheim-Hofheim
Retd. Member of the Board of Management of Mercedes-Benz AG

Frank Hellmer*
Munich (until March 18, 2011)
Test engineer, Knorr-Bremse Systeme für Schienenfahrzeuge GmbH

Klaus Gegenfurtner*
Aidenbach (until March 18, 2011)
Toolmaker, Knorr-Bremse Systeme für Nutzfahrzeuge GmbH

* Employee representative

Rail Vehicle Systems

Knorr-Bremse Rail Vehicle Systems is the world's leading manufacturer of braking systems for mass transit and long-distance rail networks. Knorr-Bremse braking systems are used in high-speed trains as well as locomotives, multiple units, subways, street cars and freight vehicles. At the end of 2011, the Rail Vehicle Systems division employed over 11.000 people and achieved annual sales of 2.19 billion euros.

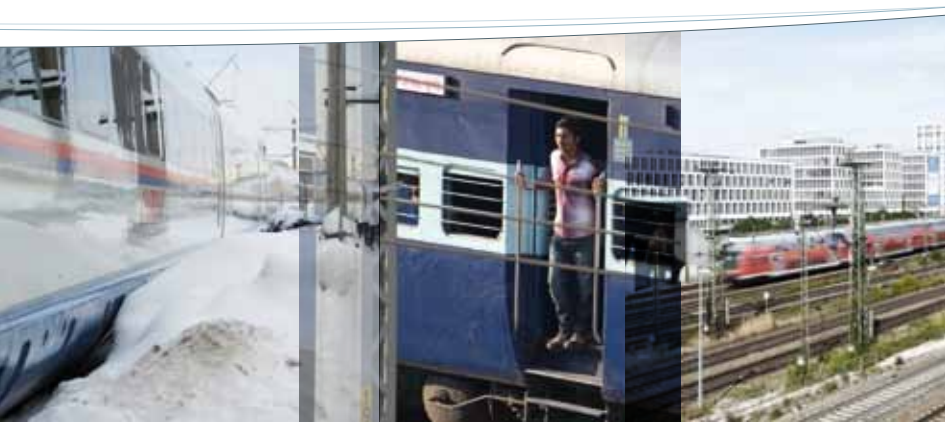
Safety, customer benefits, innovation

Systems from Knorr-Bremse are used around the globe and provide more safety and comfort in rail traffic. Knorr-Bremse offers individual solutions for every type of vehicle and every area of application worldwide. Braking systems for the OEM market have undergone extensive development with a series of innovations for increased customer benefits and the market position was further developed.

Its innovative products for 2011 included, for example, COMORAN, a system that forms the basis for the situation-dependent maintenance of truck components. In addition, COMORAN reliably and at an early stage detects blocking or derailed wheels, unstable running or overheating, thus fulfilling the high safety requirements for the monitoring of the gears of high speed trains, as prescribed by the European Directive TSI High Speed. In addition, a distributor valve especially developed for local freight traffic was approved for field testing in Russia in 2011. The certification was preceded by several years of development focusing particularly on the tremendous demands associated with functioning in frigid conditions. In Russia, the valves must withstand temperatures as low as -55° C.

Along with braking systems, innovative train entrance systems from IFE, platform screen doors from Westinghouse Platform Screen Doors, air conditioning systems from the subsidiary Merak, and driving simulators from Sydac are other specialties in the range of services from the Knorr-Bremse

Worldwide sales figures for the Rail Vehicle Systems division in EUR millions



Group. The Rail Vehicles product portfolio also includes sanding units, modern driver assistance systems, and auxiliary equipment such as derailment detectors.

Products

Air supply
- Compressors
- Air dryers
- Air supply units

Bogie equipment
- Brake discs
- Brake calipers
- Brake cylinders
- Slack adjusters
- Magnetic track brakes
- Eddy-current brakes

Brake control
- Control units
- Brake control units
- Sensors and diagnostics

Hydraulics
- Hydraulic units
- Brake actuators
- Hydraulic suspension systems

Auxiliary equipment
- Sanding systems
- Brake testing equipment
- Derailment detectors

Further products
- Automatic door systems
- Platform screen doors
- Air conditioning systems
- Power metering
- Power resistors
- Rail vehicle driving simulators
- LEADER® driver assistant
- COMORAN bogie monitoring and diagnostics
- Video surveillance systems
- On-board network and passenger information systems
- Bogie diagnostics
- Windscreen wiper and wash systems
- Signal systems for railroad crossings
- Railway signals
- On-board computers
- Current and voltage transformers

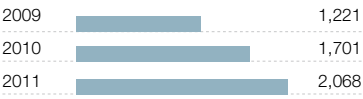
Commercial Vehicle Systems

Knorr-Bremse Commercial Vehicle Systems offers its customers braking systems for trucks, buses, trailers, and agricultural machinery. In the area of chassis systems, Knorr-Bremse is a leader in both electronic controls and driver assistance systems, as well as in air treatment, and makes a significant contribution to safety on the road. Additional product areas are power train systems, and torsional vibration dampers for diesel engines. With over 8,600 employees, the division achieved sales of 2.07 billion euros in 2011.

Safety and efficiency through innovation

As experienced manufacturer of safety-relevant brake systems for commercial vehicles, Knorr-Bremse sees it as its responsibility to make a significant contribution to road safety. Electronic systems play an ever larger role here. Knorr-Bremse has been active for several years in the development of driver assistance systems. In 2011, Knorr-Bremse celebrated two important anniversaries – 30 years of the anti-blocking system ABS and ten years of the electronic stability program ESP. The first ABS for agricultural machinery also commenced production in 2011. This ensures dependable braking and high driving security of tractors which are increasingly made to be faster and more efficient.

The reduction of energy and resource consumption continues to grow in significance from an economic and environmental perspective. With the electronic air treatment unit EAC2, Knorr-Bremse has developed a system that combines pneumatic components with intelligent electronics. If the EAC2 is used together with the compressor with coupling in the vehicle, the result is savings of several hundreds of liters of fuel per year along with a reduction in CO_2 emission of several tons per truck. In the field of disk brakes, a significant weight reduction was realized with the introduction of the



Worldwide sales figures for the Commercial Vehicle Systems division in EUR millions

new generation SM and SL disk brakes, which in turn also made a considerable contribution to fuel savings. Knorr-Bremse works intensively on continued innovations to optimize energy efficiency and thus the profitability of commercial vehicles even further.

Products

Torsional vibration dampers
Compressors
Coupling operation and transmission control
Air treatment
- Air dryers
- EAC (electronic air treatment unit)

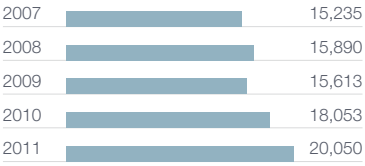
Electronic systems
- ABS (anti-lock system)
- ACC (adaptive cruise control)
- AEBS (autonomous emergency brake system)
- ASR (traction control)
- EBS (electronic braking)
- ELC (electronic level control)
- ESP (electronic stability program)
- RSP (roll stability program)
- TPMS (tire pressure monitoring system)
- TRM (trailer roadtrain module)

Valves
Disc brakes
Drum brakes
Slack adjusters
Cylinders

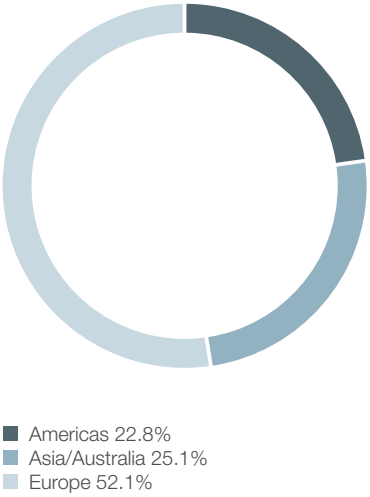
People and Careers

Thanks to the outstanding work ethic and motivation of its employees, in 2011 Knorr-Bremse again achieved significant sales growth in both its divisions. Knorr-Bremse sees this work ethic as the basis for its long-term success. During the year under review the Group therefore made significant efforts to further enhance its attractiveness as an employer.

At the end of 2011, the Knorr-Bremse Group recorded a growth of 1,997 employees from the previous year, to a total of 20,050 employees. Thus, there were 11.1% more employees in the year under report than in 2010. With 3,848 employees (previous year: 3,431), just under one fifth of employees were in Germany.



Group workforce on Dec. 31, 2011 * incl. leasing



Group workforce acc. to regions on Dec. 31, 2011

Human Resources Development

Outstanding, globally recognized products, processes and services can only be delivered by an outstanding workforce. The human resources policy plays a vital supporting role here by providing systematic and targeted HR development and placing particular emphasis on international job assignments around the entire globe. The company offers its employees extensive and targeted development opportunities both in the professional and personal area, thus resulting in a high number of highly qualified and motivated employees.

Management Evolution Program (MEP)

Knorr-Bremse has been running its successful Management Evolution Program (MEP) for 13 years now, giving recent graduates the opportunity to participate in three important projects as management trainees, gaining valuable insights into operations in different parts of the Group. The trainees spend six months on each of the three projects and during this time they are able to further develop their technical and social skills in a professional manner. Direct project responsibility and a structured, rotating training program teach the young people how to handle responsibility in an international environment at an early stage in their career.

In order to keep up with the company's continuing internationalization, the number of trainees was considerably increased in 2011.

Talent Management

A comprehensive talent management program, which was further enhanced during the year under review, develops qualified successors for key management positions and offers high potentials attractive career opportunities across the whole of the Group. Development Centers are held several times each year, allowing Knorr-Bremse to identify individual strengths and areas for improvement and to define targeted and systematic professional development measures for each participant.

Focus on leadership

Good leadership is the basis for a contented workforce and efficient teamwork. Numerous studies have also demonstrated a significant correlation between leadership and corporate success. Leadership Development was therefore one of the top priorities of Knorr-Bremse's HR policy during 2011, with greater emphasis placed on this topic across a diverse range of HR instruments in order to strengthen and enhance the Group's management culture.

Cooperation in Research & Development

For Knorr-Bremse as a leading technology group – which has significantly advanced and influenced the development, production, and marketing of modern braking systems for over 100 years – it is important to stay up-to-date and promptly pursue both technological and socio-cultural developments. That is why Knorr-Bremse seeks targeted cooperation with selected partners in the areas of research & development, skills development, and training.

Cooperation partners

Budapest University of Technology and Economics
Joint projects: Vehicle stability control concepts, video recognition systems, testing procedures for electronic brake systems

Berlin Technical University
The EU MODBRAKE project

Munich Technical University
Collaboration with various university departments

Germany's national research center for aeronautics and space
Joint projects: Development of innovative braking systems for rail vehicles

Munich University of Applied Sciences
Collaboration with various university departments

Rhenish-Westfalian Technical University in Aachen
Cooperation with the Institute for Rail Vehicles and Materials Handling Technology

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