Annual Report 2017













LIEBHERR

Annual Report 2017

Introductory Remarks by the Family Shareholders	6
Brief Portrait of the Group	9
Progress and Outlook	17
The Group in 2017 The 2018 Business Year	18 26
Reports on the Divisions	29
Earthmoving Mining Mobile Cranes Tower Cranes Concrete Technology Maritime Cranes Aerospace and Transportation Systems Machine Tools and Automation Systems Domestic Appliances Components	30 32 34 36 38 40 42 44 46 48
Group Companies	51
Consolidated Financial Statements	59
Consolidated Balance Sheet Consolidated Income Statement Consolidated Statement of Comprehensive Income Consolidated Statement of Changes in Equity Consolidated Cash Flow Statement Notes to the Consolidated Financial Statements Report of the Statutory Auditor Five-Year Summary	60 61 62 62 63 64 80 81

Introductory Remarks by the Family Shareholders

The 2017 Business Year

Dear readers.

We are delighted to say that our family company achieved a record turnover in the last financial year. The majority of our divisions performed extremely well, with the result that, at the year end, turnover stood at €9,845 million. The continuing recovery in the extraction industry was particularly encouraging. Consequently, there has been a promising improvement in our Mining division's order books.

Our success in the 2017 financial year shows that our company is charting a stable course into the future. We are particularly indebted to our customers for this pleasing performance. At this point, we would like to thank them most sincerely for the trust they place in us and for what are often long-standing partnerships. We will continue to work hard to offer high-quality products and solutions with tangible added value and – if necessary – redefine the limits of what is possible.

We would be unable to live up to such an ambitious claim without our highly qualified and motivated workforce. We would therefore also like to extend our heartfelt thanks to our 44,000 employees. Day in, day out, they approach their tasks with enthusiasm, commitment and imagination.

We have our sights set firmly on the future. This is evident from the various trail-blazing development projects that we pressed ahead with in 2017. We continued to focus on issues such as increasing energy efficiency, networking, automation and lightweight product design. At Bauma 2019, our soLITE® high-strength fibre rope will open up a new chapter in crane technology in terms of lightweight design and durability. In the aerospace segment, we have stepped up our basic research in the field of fully electrical components for the aircraft of the future. The first prototypes of electrical air-conditioning and de-icing systems have already been developed. Progress has also been made on the development of the largest crane Liebherr has ever built. This HLC 295000 heavy-lift crane is intended for use in the installation of wind farms and the dismantling of offshore installations.



The family shareholders active in the Group (from left to right): Jan Liebherr, Stéfanie Wohlfarth, Sophie Albrecht, Philipp Liebherr, Patricia Ruef, Johanna Platt, Isolde Liebherr, Willi Liebherr

We have always pursued the goal of making a decisive contribution to shaping technological progress in sectors relevant to us. The strategic integration of innovation in the company is enormously important to us in this regard. We are therefore delighted that last year our Domestic Appliances division was awarded the "European Innovation Impact Award" in the "Best Innovation Management" category for its work in this area.

As an independent family company, we think and act long-term. In the past financial year, we have ensured the continued success of our Group with investments totalling ${\in}\,749$ million. Our new production site for refrigeration equipment in Aurangabad will give us easier access to the promising Indian market. Furthermore, a new production facility for components such as hydraulic cylinders and dampers is being established at our site in Oberopfingen (Germany).

In order to be a reliable partner for our customers, in 2017 we once again invested in the expansion of our global distribution and service network. New subsidiaries have been established in the Kuzbass region in Russia, as well as in southern France. We have also further expanded our footprint in the USA.

We are looking forward to 2018 with great confidence. Global economic growth will continue, and the markets relevant to us will see renewed growth. This year we will also be launching onto the market a large number of new products, technologies and solutions which live up to our aspirations to deliver top quality for the benefit of our customers.

In view of the favourable economic climate and our full order books, we anticipate a further rise in turnover in the current financial year, coupled with a slight increase in the number of employees.

We are therefore looking forward with great confidence to 2018, which will be another successful year for the Liebherr Group.

& Fidohar W. alebem

Dr. h.c. Dipl.-Kfm. Isolde Liebherr Dr. h.c. Dipl.-Ing. (ETH) Willi Liebherr

Presiding Committee of the administrative board of Liebherr-International AG

Brief Portrait of the Group

Brief Portrait

The Liebherr Group

Hans Liebherr established the company that bears his name in 1949. Since then it has grown into a Group of more than 130 companies on all continents, employing 43,869 people at the latest count.

Today, Liebherr is not only among the world's largest manufacturers of construction machinery, but is an acknowledged supplier of technically advanced, useroriented products and services in many other fields of activity as well. The Group's holding company Liebherr-International AG, which is based in Bulle, Switzerland, is wholly owned by members of the Liebherr family. The Liebherr Group's corporate culture has been determined from its earliest days by its family ownership. For more than 60 years, Liebherr has demonstrated what this means in terms of stability and trustworthiness, and has striven for a close long-term relationship with its customers and business associates.

Liebherr shapes technological progress and aims to retain its position at the leading edge of future technology. All its activities have top quality as their central element. This principle is upheld by all the Group's employees in their day-to-day work. Liebherr's products are the outcome of its passion and dedication: tailor-made solutions that take the customer's needs and wishes as their starting point.





The Group's Divisions



Earthmoving



Mining



Mobile Cranes



Tower Cranes



Concrete Technology



Maritime Cranes



Aerospace and Transportation Systems



Machine Tools and **Automation Systems**



Domestic Appliances



Components



Hotels

Self-conception

The Liebherr Group is wholly owned by members of the Liebherr family, and this situation is not about to change. The Group and the family are inseparable. Valueoriented corporate culture ensures close links among the employees, and inspires confidence among customers and business associates.

Hans Liebherr established the original company, and his ideas and untiring personal effort were the elements that led to its successful growth and sound structural basis. Liebherr has demonstrated its stability and trustworthiness for more than 60 years, and these vital factors derive from the personal efforts of its proprietors and the corporate character of a family-owned business enterprise, the independence of which gives Liebherr ample freedom

in all its actions and the decisions it takes. The share-holders in the family-owned group are Hans Liebherr's children and grandchildren, who play an active part in the management of various Group divisions. They uphold his tradition and ensure security and continuity.

The family, as the Group shareholders, is conscious of its business responsibility and pursues a clear, wellstructured path that points the way toward sound ongoing development. Job security for the workforce and consistent integrity in business activity are elements of major importance in corporate management.

Liebherr-International AG: Company information

Elobrion intomational real company in	Torriador.
Head-office	CH-1630 Bulle/FR
Share capital	CHF 100,000,000
Shareholders	Liebherr family (100%)
Administrative board	Dr. h.c. Willi Liebherr, Chairman Dr. h.c. Isolde Liebherr, Vice-Chairman Hubert Liebherr Sophie Albrecht Jan Liebherr Patricia Ruef Stéfanie Wohlfarth Johanna Platt Philipp Liebherr
Managing directors	Andreas Boehm Stefan Heissler Stephan Raemy Uwe Rechtsteiner
Auditors	Ernst & Young AG, Berne

From generation to generation

Liebherr is thus an independent family-owned business enterprise that is now managed jointly by members of the second and third generation. This continuity is a characteristic of the Group and a firm foundation for its success. The highest level of decision-taking and management within the Group is a committee of partners made up entirely of members of the Liebherr family. All fundamental and strategic questions come before this body.

In addition to Dr. h. c. Willi Liebherr and his sister Dr. h. c. Isolde Liebherr, members of this policy-making body are Jan Liebherr, Stéfanie Wohlfarth, Sophie Albrecht, Patricia Ruef, Johanna Platt and Philipp Liebherr, all representing the third Liebherr family generation. The active part played by the children and grandchildren of company founder Dr.-Ing. E. h. Hans Liebherr guarantees management continuity and will ensure that the Group remains insolubly linked with the Liebherr family in the future.

The family shareholders active in the Liebherr Group



Dr. h. c. Willi Liebherr Chairman of the administrative board of Liebherr-International AG



Dr. h. c. Isolde Liebherr Vice-Chairman of the administrative board of Liebherr-International AG



Jan Liebherr Member of the administrative board of Liebherr-International AG



Stéfanie Wohlfarth Member of the administrative board of Liebherr-International AG



Sophie Albrecht Member of the administrative board of Liebherr-International AG



Member of the administrative board of Liebherr-International AG



Johanna Platt Member of the administrative board of Liebherr-International AG



Philipp Liebherr Member of the administrative board of Liebherr-International AG

The Group's business model

User value

For more than 60 years, Liebherr, as an independent family-owned group of companies, has stood for a high standard of user-oriented products and services in many technical areas. The Group offers customers all over the world, and in many different business sectors, access to leading-edge, innovative technologies with all the benefits of tailor-made solutions and genuine user benefits in the product and service areas.

Products and customer segments

The Group offers customers from the construction industry a construction machinery range that is unmatched in its breadth and depth. Liebherr develops, produces and distributes an extensive range of large hydraulic excavators and large mining trucks for the extraction industry. The Group also develops, produces and distributes a wide variety of cranes for material handling in the maritime sector. In the machine building and plant construction fields, the Group's activities extend to machine tools, automation systems and engineering projects. The aerospace and transportation systems segment covers equipment for aircraft, rail vehicles and buses. In addition, Liebherr produces a wide variety of refrigeration and freezing equipment for domestic and commercial use. In the components field, the Group specialises in mechanical, hydraulic and electrical drive systems and control technology products that are used in a wide range of industries. Liebherr also operates six hotels in Ireland, Germany and Austria.

Distribution channels

Products and services are supplied by way of a widespread network of Group-owned sales and service companies, and also through reputable partners with which Liebherr has enjoyed many years of loyal cooperation.

Customer relations

Liebherr aims to build up and maintain close cooperation with its customers and business associates over a period of years or decades. Its aim is to respond quickly, flexibly and reliably to their needs and satisfy them by supplying top-quality technologies. This close relationship with customers and the high value that Liebherr attaches to user benefit are keys to the Liebherr Group's success and a firm element in its corporate tradition as a family-owned business.

Key activities

The Liebherr Group develops, produces and sells innovative products and services.

Key resources/added value chain and key partnerships Liebherr invests considerably in research and development. To develop its capabilities, the Group undertakes partnerships with universities of applied science and similar institutions all over the world.

A network of more than 40 ultramodern production plants in 17 countries and many years of cooperation with suppliers within and outside the Liebherr Group have put it in a position to offer innovative products of impressive quality at competitive prices. Well-planned parts supply logistics and high standards of after-sales service are the final decisive links in the Liebherr business model.

Liebherr dedicates itself to mastery of key technologies down to the smallest detail, and can therefore claim a high degree of independence in technological areas.

Liebherr has a high equity ratio and operates on the principle that the Group's growth should be predominantly organic, achieved through its own intrinsic strength.

Earnings and cost structure

Liebherr generates its earnings from product sales and rentals and from the supply of services.

Certain divisions within the Liebherr Group profit from economies of scale as their production volume rises. Others are more closely focused on the development of tailor-made solutions for individual customers. In such cases Liebherr concentrates on the creation of additional premium value for its customers and supplies services with a high degree of specific client relevance. The Liebherr Group benefits from synergies that derive from its broad product portfolio, its mastery of key technologies and other factors. The supply chain is global in character.

With its eleven divisions the Group pursues a policy of diversification that makes it independent of economic fluctuations in individual business sectors or markets. The

profits earned by the Group are re-invested internally with the aim of achieving long-term success in line with its management perspective.

Organisational structure

The Group's holding company is Liebherr-International AG with its registered office in Bulle, Switzerland. The corporate structure ensures a unified approach to guestions of central importance and permits a rapid response to market requirements at divisional level. The Group's decentralised structure offers a number of advantages. Besides customer proximity, the ability to adapt quickly to changes is made possible, since a minimum of hierarchical levels encourages the implementation of new ideas with no loss of time. Divisional management companies are responsible for overall operative management in the various product areas.



A Liebherr service engineer at a customer's site in Sweden

Progress and Outlook

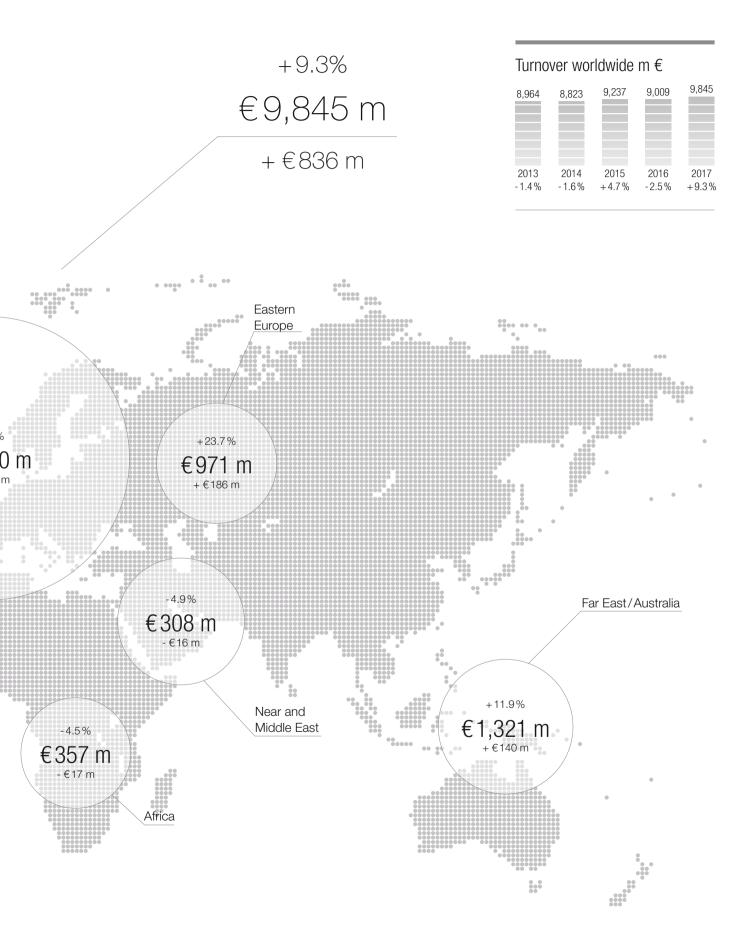
The Group in 2017	1
The 2018 Business Year	2

Business Performance

The Group in 2017

In 2017, Liebherr achieved the highest turnover in the Group's history, of €9,845 million. Compared to the previous year, this represents an increase of €836 million or 9.3 %.





In 2017, global economic growth stood at 3.7 % and was thus only slightly above the previous year's level. The economy in the industrialized countries recovered and, at 2.2%, growth returned to the 2015 level. In the newly industrialized and developing countries, the economy grew more dynamically than in the previous year, at 4.6%. With a few exceptions, the global economy experienced a boom in 2017. This is expected to continue into the first half of 2018.

Sales performance by region

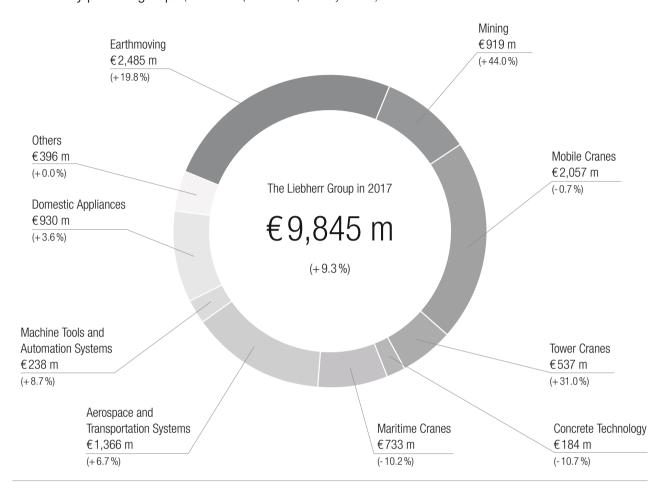
There were marked differences in sales performance between the various regions. In Western Europe, Liebherr's most important sales region, turnover increased significantly. This was due in part to renewed growth in Germany, Liebherr's largest market, as well as to upward trends in France. In the UK, turnover remained at the previous vear's level.

Sales performance in Eastern Europe, particularly in Russia, was encouraging. In Poland, by contrast, a decline in turnover was recorded. In the Far East/Australia and America, revenues were also above the previous year's level. The Near and Middle East and Africa, however, recorded a fall.



Liebherr had a 4,600 m² stand at the Conexpo trade fair for construction machinery in Las Vegas (NV/USA)

Turnover by product groups (variation compared to the previous year in %)



Sales performance by product area

In the construction machinery and mining segments, as well as in other product areas, Liebherr recorded an increase in turnover. Sales of construction machinery and mining equipment rose by €782 million or 14.5% to €6,182 million. This figure includes sales by the Earthmoving, Mobile Cranes, Tower Cranes, Concrete Technology and Mining divisions. In the Maritime Cranes, Aerospace and Transportation Systems, Machine Tools and Automation Systems, Domestic Appliances and Components and Hotels divisions overall turnover was up by €54 million or 1.5%, to €3,663 million.

Net result for the vear

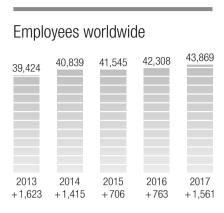
In 2017, the Liebherr Group achieved a net result for the year of €331 million. Compared to the previous year, this represented an increase of €33 million or 11.1%. In the reporting year, there was a significant improvement in the operating result. Following the positive effects of currency movements in the previous year, the financial result, on the other hand, fell sharply.

Employees

The qualifications, enthusiasm and commitment of the Group's employees make a key contribution to its business success. Liebherr's long-term commitment to its employees is in keeping with its tradition as a family-owned company.

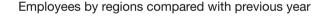
2017 saw a further increase in the workforce. The Liebherr Group had 43,869 employees worldwide. This represents an increase on the previous year of 1,561 or 3.7%. While the number of employees in Liebherr companies in Europe, America and the Far East/Australia rose, in Africa and the Middle East there was a fall in the size of the workforce.

Various employer branding measures were implemented worldwide in the reporting year, in order to further strengthen the Group's employer brand. Basic and advanced training is of vital importance to the Group. Considerable sums were therefore invested in training during the reporting year.



43,869 employees

+1,561





Eastern Europe 4,330 employees (+221)

> Near and Middle East 272 employees (-27)

Far East/Australia 3,370 employees (+104)

Sustainability

The Group aspires to generate sustainable value for its employees, customers and suppliers and for society as a whole. As an independent family company with a longterm focus, Liebherr is aware of its responsibilities and is committed to sustainable development. Its products, processes and infrastructure are geared to the minimum possible consumption of resources. The focus in all areas is on safety, efficiency and environmental sustainability. Last year, a large number of the Group's companies worked on projects looking at social, environmental and economic aspects of sustainability.

Research and development

As a high-tech company, Liebherr pursues the goal of making a decisive contribution to shaping technological progress in sectors relevant to the Group. Liebherr invested €558 million in research and development last year. The bulk of this was used in the development of new products. A large number of joint research projects with universities, other higher education institutions and research institutes were initiated and continued. For example, last year Liebherr Hausgeräte GmbH was awarded the "European Innovation Impact Award" in the "Best Innovation Management" category for this strategic integration of innovation.

Important issues across the wide range of products and services include, as they have done for many years, increasing energy efficiency, networking, automation and lightweight product design. The first field tests of soLITE® high-strength fibre rope began in 2016. Compared with steel ropes, the high-strength fibre rope is not only lighter, but also more durable. This new rope technology will probably be launched onto the market at Bauma 2019. In the aviation field, Liebherr is conducting research into fully electric components for the aircraft of the future. The first system demonstrators for fully electric air-conditioning and de-icing systems were developed in 2017.

Another important project was the development of the HLC 295000 heavy-lift crane. This heavy-lift crane, with a load capacity of 5,000 tonnes and a maximum lifting height of more than 170 m, will be the largest crane Liebherr has ever developed. It is intended for use in the installation of wind farms, in the decommissioning of offshore installations and in the oil and gas sector.



Testing soLITE® fibre rope



The new component plant in Oberopfingen (Germany)

Investments

The Group has traditionally emphasised the importance of making regular investments in its production facilities and its global distribution and service networks. Last year, the Group invested €749 million, a slight decrease of 0.3%. Offset against this was depreciation of €485 million.

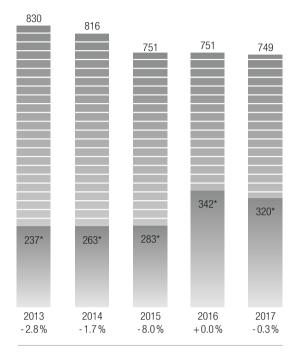
Liebherr is entering the promising Indian market, with a new production facility for refrigeration equipment in Aurangabad. The new plant is to produce refrigeration equipment specifically tailored to meet the requirements of this region.

Further substantial investments have been made in expanding additional sites in Germany. A new components plant in Oberopfingen has doubled Liebherr's production

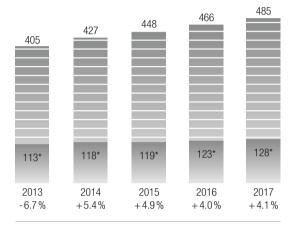
capacity for hydraulic cylinders, dampers and system solutions. Work started on the construction of a training and exhibition building in Ochsenhausen. From spring 2019, customers will be able to experience live demonstrations of numerous domestic appliances at the 350 m² site. In Biberach, preparations are underway for the construction of 3,400 m² hall for surface coating antifriction bearings.

Liebherr invested in the sales and service organisations in various sales regions. A new repair and service centre in the Kuzbass region provides reliable customer service even in this remote area of Siberia. Liebherr opened a new sales and service subsidiary in Rognac, in the south of France. Liebherr has also made further investments in its rental fleet. This chiefly comprises machines manufactured by Liebherr and used by customers under short-term to long-term leasing agreements.

Investments m €



Depreciation m €



* of which, rental fleet

Risk management system and internal control system

In order to ensure the sustainable success of the Group, opportunities and risks are identified at an early stage to be evaluated and controlled. The Group has a continually-optimised risk management procedure in place, and an internal control system to help it meet operational, market-related and legal requirements.

To ensure the integrated recording, analysis and evaluation of risks, all managers responsible for the risk management and internal control systems used in the individual Group companies are involved. Risks are identified and assessed locally in the individual companies, then countermeasures to limit the risks are introduced and the impacts are evaluated.

This localised approach also makes it possible to identify and assess areas of opportunity efficiently. The information gained about market-related and technological developments is used in opportunities management to reach decisions about future areas of business and production processes.

At the corporate level, the current risk situation is regularly reviewed and the effectiveness of the systems and processes used is assessed. The internal audit department monitors compliance with Group guidelines and the implementation of the risk management and internal control systems.

Supplementary report

Events of particular significance which occur after the reporting date should be recorded here, together with their expected impact on the Group's assets, financial position and earnings. The Liebherr Group had no such events to report after the end of the 2017 business year.

Outlook The 2018 Business Year

According to current forecasts, the global economy will grow even more strongly this year than it did last year. Growth, in the newly industrialized and developing countries in particular, will increase, while economic growth in the industrialized countries will remain at the previous year's level.



A Liebherr tower crane in action at Principal Tower in London (UK)

The International Monetary Fund predicts global economic growth of 3.9% for 2018 and thus expects it to be similar to the previous year's level. For newly industrialized and developing countries, growth of 4.9% is forecast. In particular, Brazil is expected to continue its recovery, while a slight slowdown in the growth rate is forecast for China and Russia. According to forecasts, growth in the industrialized countries will remain at the previous year's level of 2.3%.

After a very strong year, the World Trade Organization is forecasting a moderate decline in trade growth in 2018, from 3.6% to 3.2%. By contrast, the positive trend in the construction sector is set to continue. The construction industry is expected to continue to grow both in Germany and in other European countries. The International Air Transport Association (IATA) anticipates another strong year for the aviation industry.

According to World Bank forecasts, moderate price increases are expected in 2018 for energy-based commodities (+4.0%) and non-energy-based commodities (+1.0%).

Individual opportunities and risks

In order to illustrate the individual opportunities and risks, similar types of risks and opportunities have been grouped together.

Macroeconomic opportunities will arise in particular from the continued buoyancy of the global economy, positive expectations for GDP growth in the eurozone and the expected increase in investment in Germany. The situation in the Middle East, the increasingly protectionist US trade policy and the UK's announcement that it is to leave the European Union are creating geopolitical uncertainties. In addition, the global economy is already in the ninth year of its longest growth phase since the Second World War. It is impossible to predict how long this phase will last.

The sections on each of the divisions contain reports on the opportunities and risks relevant to that division. Specific cost changes due to increasing macroeconomic uncertainty or cyclical factors which cannot be directly passed on through contractual price indexation may pose risks that affect the Group's performance.

Operational business harbours market price risks, in particular due to exchange rate and interest rate fluctuations. Liebherr monitors these risks continuously and uses appropriate financial instruments to hedge selected transactions. The Group enters into financial transactions only where these are linked to its operational business activity or are for hedging purposes. On principle, Liebherr does not conduct transactions of a speculative nature.

The global nature of our business activities, together with our broadly-diversified product base and the risk management system in the Group in place, ensure that the relevant risks are kept under control. Based on the currently available information, there are no further identifiable risks which could have a substantial detrimental effect on Liebherr's assets, financial position and earnings in the 2018 business year and threaten the survival of the Group as a whole.

Forecast for the Group

The Group expects a further increase in turnover for 2018. Liebherr anticipates growth in the construction machinery and mining segment, as well as in the other product areas. Appreciable gains are forecast in the Mining, Concrete Technology, Machine Tools, Automation Systems and Earthmoving divisions. This is clear from the order book for 2018, which is already looking very good.

The Liebherr Group will also continue to invest substantially in its international production facilities and in its distribution and service network. The number of people employed by Liebherr companies will again rise slightly.

Reports on the Divisions

Earthmoving	30
Mining	32
Mobile cranes	34
Tower cranes	36
Concrete technology	38
Maritime Cranes	40
Aerospace und Verkehrstechnik	42
Werkzeugmaschinen und Automationssysteme	44
Domestic appliances	46
Komponenten	48



The Earthmoving division posted total revenues of €2,485 million for 2017, showing a clear increase of €411 million, or 19.8 %.

2017 was a year of very positive signals for the earthmoving sector. The global market experienced an enormous growth of 35.0% compared with last year, which posed entirely new challenges to the supply chain throughout the sector. Europe in particular served as a stabilising force and engine for the global economy.

This is also clearly reflected in the Earthmoving division's business development. Revenues in Western Europe rose to €1,503 million in total, representing a 20.6% increase. With sales volumes of €571 million, Germany remains one of the key markets for earthmoving machinery. Business also showed very positive development in France. There, sales rose by 27.0% compared to 2016 levels.

Sales revenues in Eastern Europe also showed very positive development, which can be attributed in particular to the ongoing favourable growth in sales in Russia. In the Near and Middle East, Liebherr even succeeded in more than doubling its revenues.

The Far East/Australia region was influenced by the recovery in the Chinese market, where Liebherr achieved a respectable sales increase of 31.5% with its earthmoving programme. In the Americas, business developments were also positive. Both in the South American markets of Brazil and Argentina and in the highly competitive US market there were favourable increases in revenues. Business on the African continent however slightly decreased.



The division booked strong growth in nearly every product group. Business with dozers rose by 30.4%, sales in wheel loaders were up by 23.9%. The past financial year also showed positive developments in the segments of hydraulic excavators with crawler excavators and mobile excavators. With its materials handling equipment, Liebherr achieved a 26.2% boost in sales. Meanwhile. sales in special heavy construction rose by €26 million or 19.8%.

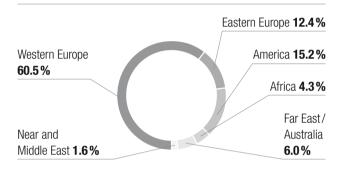
With the PR 776 Litronic, the division expanded its dozer portfolio in the 70-tonne class. The PR 766 Litronic - the next smaller model, with operating weights of between 46 and 54 tonnes - is the successor to the popular PR 764 Litronic. It is acclaimed, among other things, for its proactive power adjustment and increased comfort. Last autumn. Liebherr also unveiled the R 918 Litronic, a new. highly versatile crawler excavator designed, among other things, for use in sewage construction works. In November 2017, sales of telescopic handlers and wheel loaders through the agricultural machinery maker Claas began. In the special heavy construction segment, Liebherr unveiled the LRB 16, a new, universal piling and drilling rig, featuring sophisticated control assistance systems and obstacle recognition for pile wall construction. The flagship among duty-cycle crawler cranes, the HS 8300 HD, was successfully positioned for use in dredging in Italy in 2017. With its 300-tonne load capacity, this machine is one of the largest of its kind in the world.

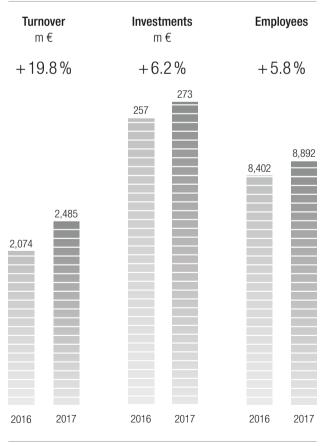
Over the past financial year, Liebherr laid the cornerstone for a new development and demonstration centre for earthmoving and materials handling equipment in Kirchdorf an der Iller (Germany). With this investment, the division expands its key competencies in these product areas for the future while also paying tribute to this location's rich tradition.

In terms of product development, the past year was influenced by the formal EU decree to introduce Stage V emissions standards. The first machines that comply with this standard will be released in 2019. In technology development, Liebherr has its sights on the topics of automation and self-driving vehicles, as well as on the path to the digitalised construction site. The goal is to increase comfort and safety through operator assistance systems. A further focus for the Earthmoving division in 2018 will be an ongoing improvement in delivery capacities. The strong increase in demand for earthmoving equipment has placed pressure on the supply chain, which is responsible for producing the necessary quantities of parts and components rapidly and with optimal quality.

Despite the somewhat uncertain political climate at the moment, the division is looking forward to the financial year 2018 with full confidence and optimism.

Turnover by sales regions







After a lengthy consolidation phase, the mining industry recovered in 2017. The Mining division also benefited from this, increasing its sales by \in 281 million, or 44.0%, compared with the previous year. In total, the division achieved revenues to the amount of \in 919 million.

In 2017, the international mining industry saw an upward movement for the first time in five years. Amidst rising prices of raw materials, the sector's companies also showed greater willingness to invest in trucks and excavators. They purchased new machines while also resuming operation of machines that had been placed on standstill. Additionally, companies took long overdue action to modernise their fleets. In general, a clear trend towards new purchases could be seen. Many investments focussed on increasing productivity – a clear reversal of the trend from previous years in which the focus had been on cost savings.

As a result, the Mining division also saw an upward development. With double-digit percentage increases in sales for large hydraulic excavators as well as mining trucks, the division outperformed the market level to gain new market shares. Once again, the most significant sales region turned out to be the Far East/Australia. There, as in nearly all other regions, the division reported substantial growth. Business in the key individual markets of Australia, Russia, Indonesia, South Africa and Canada was particularly favourable.



The division successfully passed multiple milestones last vear in the mining truck product range. For example, with the delivery of five T 264 mining trucks to clients in Asia, Russia and Australia, the division entered the market seament for 220-tonne class machines. The division also celebrated the premiere of the T 236, the first Liebherr truck in the 100-tonne class. Immediately after conclusion of the initial phase of testing and validation, the first of these trucks was ready for delivery to the Erzberg mine in Austria, where it proved itself during field tests. The T 236 offers an excellent cost-per-tonne ratio, thanks to its innovative Litronic Plus Generation 2 electric drive system.

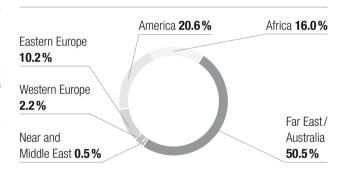
The division also successfully concluded testing and validation of the T 276, which can handle load capacities of 290 to 300 tonnes. At the end of the year, this heavyweight mining truck proved itself on Liebherr's internal testing ground. Furthermore, the Mining division made substantial progress in working on the product specification for the T 246, as well as in other ongoing development projects in the field of self-driving vehicles.

The division also made advances in the development of its large hydraulic excavators. For example, engineers reworked the R 9100 and R 9150 models. The revisions not only allow for greater productivity, but also perfectly align these models with mining trucks with 60- and 100-tonne load capacities. Another large hydraulic excavator, the R 9600, was assembled as a prototype and prepared for initial testing. Overarching development projects focussed on the areas of energy management and efficiency, machine diagnostics, assistance systems, lightweight construction and the integration of the new D98 series of Liebherr diesel engines. Meanwhile, the division worked to expand its remanufacturing programme, with a focus on suspension components and parts for power electronics, among others.

The division invested in optimising and further automating its production facilities, including two fully automated welding cells at the Newport News (VA/USA) site. In Colmar (France), it laid the organisational groundwork to start serial production of the T 236 mining truck in the year ahead. Developments in the field of quality management included pushing forward the implementation of the new version of the ISO 9001:2015 standard, as well as certification processes for various sites.

Thanks to its full order books and a considerable investment backlog among operators of mining machinery, the division is optimistic as it looks forward to the financial year 2018. As long as the price development of raw materials remains stable, the division expects to see significant growth in revenues. The potentials that the newly developed products bring with regard to opening up new market segments make the expectations even greater. Also in the area of replacement parts and service, new opportunities for growth await.

Turnover by sales regions



Turnover m €		Investments m €		Employees	
+44.0%		+42.9%		+8.9%	
638	919	21	30	3,166	3,448
2016	2017	2016	2017	2016	2017



The Mobile Cranes division achieved revenues of \leq 2,057 million in the financial year 2017. This represents a slight drop of - \leq 15 million, or - 0.7%, compared with the previous year.

The sideways trend on the world market for mobile cranes continued in 2017. The global demand for crawler cranes in 2017 was slightly above the level of the previous year. For Liebherr, this was particularly noticeable with crawler cranes in the 300-tonne-plus class. Here, the division expanded its share of the global market to 47.9%. By contrast, there was a decline in demand for mobile cranes under 300 tonnes. The LR 1300 remained the best-selling lattice boom crawler crane. Liebherr's worldwide share of the market for all-terrain cranes stood at 52.4%, slightly below the previous year's level. The strongest demand recorded was for machines in the 3-axle to 6-axle classes.

In Western Europe, the division slightly increased its sales compared with the year before. Particularly in Germany, the market was highly dynamic. Despite the Brexit debate, demand in the United Kingdom even exceeded the previous year's level. However, sales took a slight downturn in Denmark, Austria and Belgium. Southern Europe saw a positive development, particularly in Italy. In Eastern Europe, sales were at the previous year's level.

In the Far East/Australia region, sales increased significantly. Notably, Japan and Australia saw outstanding development. The generally positive development in the Far East/Australia region stands in contrast to the significant



downturn in sales in the Near and Middle East. Sales generally decreased in the Americas as well. In the USA. the already high demand for mobile cranes continued to rise, while crawler crane sales declined. The Argentinian and Canadian markets recovered in comparison with the previous year. Mexico, however, witnessed a downturn following strong development the year before.

The number of new machines sold increased last year. Meanwhile, the trend towards smaller machines continued in 2017. Sales figures for used machines also exceeded the level from the year before.

During the reporting year, Liebherr expanded its product portfolio to include the new LRT 1090-2.1 and LRT 1100-2.1 rough-terrain cranes. These new models were unveiled at the 2017 Conexpo trade fair in Las Vegas (NV/USA). Based on extensive analyses, they are tailor-made for the requirements of rough-terrain cranes in the key market of North America. The four-axle LTM 1090-4.2, which features variable axle loads, was also launched at Conexpo.

Furthermore, the LTM 1450-8.1 mobile crane, first announced in 2016, was successfully brought onto the market. This eight-axle model features the world's longest telescopic boom, which is capable of travelling on public roads with a 12-tonne axle load.

Among the developments in the mobile crane series last year, Liebherr also continued to focus on a one-engine strategy and the intelligent drive train system ECOmode. With these improvements, cranes like the LTM 1090-4.2 or LTM 1450-8.1 have become more fuel efficient and therefore more environmentally friendly.

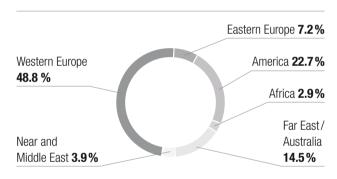
In 2017, the division reworked LR crawler cranes weighing below 300 tonnes, with an increased focus on machine safety. Depending on their use, crawler cranes must meet various safety-related standards. New operating modes, as well as corresponding capacity load curves and load moment limitations, now make it easier to meet these standards when using grappling and floating devices, as well as during foundations works and when lifting people.

In addition, with Crane Planner 2.0, Liebherr released a revised version of its planning software for cranes to the market. This tool combines interactive 3D modelling with all the relevant planning data. Any change in the crane's geometry prompts an immediate recalculation of the data. Furthermore, the division expanded its VarioBase® support base range and VarioBallast® ballast design to include additional crane models.

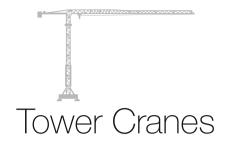
Over the last year, the Mobile Cranes division invested primarily in properties, office and plant equipment, as well as machinery and plants.

The division's sales for 2018 are expected to outperform the 2017 level. Order volume is already at an outstanding level for the beginning of 2018.

Turnover by sales regions



Turnover m €		Inv	Investments m €		Employees	
-0.7%		+	+15.1%		+3.6%	
2,072	2,057	53	61	4,602	4,767	
2016	2017	201	6 2017	2016	2017	



In the 2017 financial year, the Tower Cranes division achieved sales revenues of €537 million. This represents a € 127 million (or 31.0 %) sales increase compared to the previous year.

The business climate for the Tower Cranes division in 2017 was marked by renewed intensification in price pressure. This is primarily due to the decline in investment appetite outside Europe. Furthermore, the industry-wide trend towards more rental and used machinery continued, which also had an impact on business development.

Positive influences on sales primarily consisted of rising construction volumes in Germany, the Benelux and Scandinavia, as well as the implementation of several maior projects, including "Grand Paris" in France, For these reasons, business was very favourable in general. At the end of the financial year, sales figures had reached a total of approximately €537 million, representing a nearly 31.0% increase.

In terms of regional developments, sales growth was clearly concentrated in the Western European markets. In Germany, the division even reported a 41.8% or €47 million increase in sales. There was hardly any increase in demand in Eastern Europe, even the turnover in Russia grew by 40.2%. On the American continent the revenue increased by 18.6%, in the Far East/Australia as well as the Near and Middle East, the Tower Cranes division achieved a sales increase of about 15%, respectively.



New equipment sales were critical to the division's growth, with a €64 million increase over the year before. Outstanding performers included bottom-slewing cranes, top-slewing cranes as well as mobile construction cranes. There was a slight downturn only in the sale of luffing jib cranes. The division also succeeded in significantly increasing revenues with rental and used machinery. The individual projects business, which led to several major contracts in recent years, was largely absent last year.

In product development, the division reached several milestones last year. Prototype construction for a new, large bottom-slewing crane completed, along with the development of the 190 HC-L and 230 HC-L top-slewing cranes. Development of the first flat-top crane in the new EC-B series also wrapped up. Despite significant reductions in the weight of the components, maximum load capacities were successfully increased by 19.0%. Development is also under way for the second model in the new EC-B series.

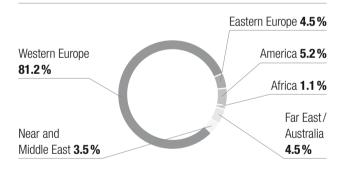
Development for the high-strength fibre rope soLITE® is now nearly completed. At the moment, the new rope technology is being tested in the field to gather additional data in anticipation of the 2019 market launch at the Bauma trade fair.

Furthermore, the division's experts kicked off last year by developing crane software for a new control generation. The control hardware was developed in-house by Liebherr and is now being used by multiple plants within the Group. This project aims to standardise input devices, such as displays, throughout all crane series, establishing uniform menu navigation for many Liebherr machines.

With an investment volume of around €70 million in the reporting year, the Tower Cranes division maintained the same level of investment as 2016. In particular, investments were devoted to expanding the rental park.

Business is expected to develop at a similar high level in the year ahead, thanks to the high volume of orders on hand and a stable business environment in the core region of Western Europe.

Turnover by sales regions



Turnover m €		Investn m 4		Employees		
+31.0%		+18.	+18.0%		9%	
410	537	61	72	2,259	2,347	
2016	2017	2016	2017	2016	2017	



Revenues in the Concrete Technology division topped out at €184 million for the business year 2017, representing a decline of €22 million or 10.7 %.

The concrete industry saw very mixed performances globally and regionally in 2017. Stronger investments in real estate, particularly in Germany, but also in other Western European countries, greatly increased the demand for concrete. In North America, the sector benefited from very strong business activity.

In the Near and Middle East, the sector continued to suffer, due in particular to the ongoing conflicts in the region. Thanks to large infrastructure projects, the Eastern European EU countries have positive prospects for the future.

All of the division's product areas performed successfully in Western Europe, despite heavy competition in the market. The strongest growth was seen in Germany, Belgium and France. A slow recovery for the division was also seen in Eastern Europe. While the Russian market for truck mixers showed only moderate development, the markets in Poland and Ukraine saw favourable growth.

The poor underlying conditions in the Near and Middle East also left their mark on the division. In the key markets of Saudi Arabia, Algeria and Egypt, demand slowed at times to a complete halt. Drops in sales were also reported in the Far East/Australia and the Americas.



Overall, the division was able to strike a positive balance with the truck mixer product range. Especially in Europe. Liebherr sold significantly more truck mixers than in the previous year. The mixing plants segment, on the other hand, performed slightly below the previous year's level. The clear growth in revenues in Western Europe, particularly in Germany, was unable to fully compensate for downturns in other markets.

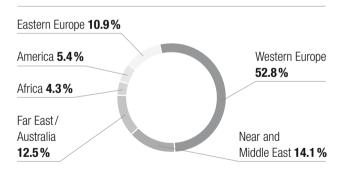
In the truck mixer segment, 2017 was defined by the market launch of Generation 05, which was introduced to the market during the reporting year following its successful unveiling at Bauma 2016. Clients have reacted very favourably, particularly to its innovative platform design, simple cleaning options and reduced weight. Among the horizontal mixing plants, the Compactmix 1.0 and the modular Betomix series are still trendsetters in their segment. In mixing technologies, the ring-pan mixer RIV 2.5-D was developed and launched in response to increasingly complex concrete formulas.

Another highlight of the past year was the design of a fully electric truck mixer drive train. The battery system is installed on the semitrailer and recharged at each concrete loading cycle. Additionally, the division is working with the Institute for System Dynamics on optimising vibration absorption and boom control in concrete pumps. The division is also taking part in the "Betonfahrbahn" 4.0" (Concrete Motorway 4.0) project of the German Federal Highway Research Institute, which focusses on process-based motorway construction. The research institute aims to improve the durability of motorways in order to minimise roadworks. This is expected to contribute to increased traffic safety.

To position itself for the future, the division invested above all in optimising production in 2017. At the Bad Schussenried site (Germany), a new workshop was opened to allow for flow-oriented production and additional production capacities. Furthermore, a new logistics centre is under construction, which will contribute to increased efficiency.

Due to the steady business climate in Europe and expected easing of the Russian and Chinese markets, a growth in sales is expected for 2018. Nonetheless, there are still risks due to the increased competition and the resultant pressure on prices. As such, it should be assumed that 2018 will experience difficult development, similar to the previous financial year.

Turnover by sales regions



Turnover m €			stments n €	Emp	Employees		
-10.7%		- 9	.1 %	+().2%		
206	184	11	10	1,474	1,477		
2016	2017	2016	2017	2016	2017		



The Maritime Cranes division achieved revenues of €733 million in the financial year 2017. This represents a downturn of €83 million (10.2%) compared with its performance in the year before.

Over the past year, the Maritime Cranes division faced a difficult business climate. As a result of tonnage overcapacities, investments in new vessels stalled at the low level of the previous year. As a result, the demand for ship cranes was similarly low. The market for offshore cranes also saw sales figures stagnate. Primarily, the oversupply in crude oil led to low levels of investment and kept demand from picking up. The markets for container cranes, mobile harbour cranes, floating cranes and reachstackers showed stable development.

Despite the lack of tailwinds in the markets, the Maritime Cranes division maintained sales levels for Western Europe at the previous year's level. Sales in Germany and Belgium in particular showed positive development. In contrast, growth dynamics were notably low in the Americas. Far East/Australia and Africa. Business in Eastern Europe and the Near and Middle East was extremely favourable.

The global market for mobile harbour cranes was marked by concentration tendencies, new competitors entering the market and low-level growth. Despite these conditions, Liebherr further established its position as the global market leader. Sales grew strongly, especially in South America and Eastern Europe, For container cranes, the division achieved a very strong position on the American market with strong sales and new orders. One of the highlights was the delivery of five Megamax container class in Hamburg (Germany).



For offshore and ship cranes, the market development was impacted by a downturn, falling to a near total standstill in investment activity. Liebherr also experienced a drop in sales in both of these product areas. However, there were positive signs of a growing market interest in large cranes in the offshore and shipbuilding industries.

Deliveries for large-dimension cranes included three fully constructed container bridges from Ireland to Puerto Rico and two electric rubber tyre stacker cranes to Russia. Attesting to the development in automation, three rubber tyre stacking cranes fitted with automation packages were delivered to the USA.

In 2017, the division pushed forward with numerous development projects. For example, engineers continued work to increase the efficiency of machines and introduce alternative drive concepts. At the same time, the design for the reachstacker LRS 545-31 was developed further, allowing Liebherr to offer this machine in additional variations to customers in the future.

In the offshore cranes product line, an important development project was to optimise the basic design of three general-purpose cranes. In the heavy-load segment, engineers focussed on developing the HLC 295000, which specialises in the installation of wind farms and the demolition of offshore facilities. With a maximum lifting capacity of up to 5,000 tonnes at 35 m and a lifting height of more than 170 m, it is the largest crane ever built by Liebherr.

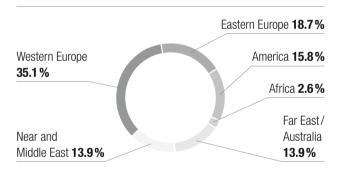
The division also made progress in expanding its portfolio of service products. Among the new releases was the training simulator for the CBG 350/360 ship crane. Using the LiDAT smartApp telematics system, users can analyse process and performance data in real time to use their handling equipment more efficiently.

The division also focused on its product and portfolio policy. As such, it closed minor gaps in the mobile harbour crane product portfolio.

Since July 2017, the division has been marketing the new four-rope grab ship crane, CBG 360, which is gradually replacing its predecessor, the CBG 350.

Forecasts show that overcapacities and low oil prices will continue to influence market conditions for the Maritime Cranes division in 2018. This will also dictate developments in the demand for offshore and ship cranes. On the other hand, there are opportunities for the FCC and TCC series (permanently installed or rail-mounted harbour cranes), as well as for mobile harbour cranes. Under these circumstances, the division expects sales in the coming year to remain at around 2017 levels. By further boosting activities in product development and digitalisation, as well as targeted training and education of staff, the division will equip itself for future growth.

Turnover by sales regions



Turnover m €		Inve	Investments m €		Employees	
- 10.2 %			-1.4%		.7 %	
816	733	70	69	4,488	4,410	
2016	2017	2016	2017	2016	2017	



Aerospace and Transportation Systems

The Aerospace and Transportation Systems division increased its sales once again in 2017.

Revenues reached €1,366 million, an increase of €86 million, or 6.7 %.

The aerospace industry's international growth curve continued last year. However, performance was highly variable among the individual market segments. While the commercial aircraft segment developed positively, a sideways movement could be felt in regional and military aircraft. The markets for helicopters and business aircraft took a slight downturn. The rail transport industry continued on a course of moderate growth in 2017.

Liebherr managed to firmly defend its market position as a system supplier for the air traffic industry in the reporting year. For example, French aircraft manufacturer ATR has contracted the division with developing, manufacturing and supplying a new generation air management system for aircraft models ATR 42 and ATR 72. The system includes various subsystems for bleed air, climatisation and cabin pressure control.

A highlight of 2017 was the successful maiden flight of the C919 passenger aircraft from COMAC. On board was a landing gear system and integrated air management system developed and produced by Liebherr. The division also developed the air management and landing gear systems for the new C Series of Bombardier planes. To enable just-in-time delivery of landing gear systems directly to the aircraft final-assembly line for Bombardier the division invested in a landing gear assembly plant in Laval, Canada.



Together with Rolls-Royce, Liebherr wrote a new chapter in aerospace history in 2017; the companies partnered to create the world's most powerful jet engine power gearbox, reaching 70,000 horsepower at the Rolls-Royce test facility in Dahlewitz (Germany). The power gearbox is a key component in the future UltraFan® geared engine programme from Rolls-Royce. The engine manufacturer is working on a joint venture with Liebherr-Aerospace to develop the capabilities and capacities to produce the new power gearbox.

Meanwhile, Liebherr is also setting new standards in flight control. The division successfully completed type certification for the flap and slat control system for the E2 E-jet from Embraer in record time. In addition, Liebherr is responsible for the air management system of this Brazilian medium-range aircraft. Liebherr will also be supplying a new rudder servo control for the A320neo from Airbus. In addition to development and production, the division is also taking charge of the integrated logistics support as well as customer service across the entire product life cvcle.

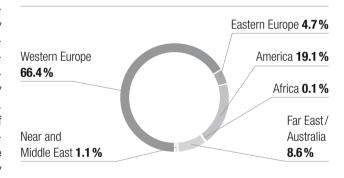
In the transportation systems segment, Liebherr has also won multiple new contracts. The German railway company Deutsche Bahn has contracted the division to supply 120 CO₂ sensors to sustainably reduce energy consumption in its railway vehicles. The sensors will be retroactively installed into 60 double-deck wagons from the 1994 and 2003 models. Another contract involves the supply of 400 level control systems for CRRC Sifang America. These adjust the vehicle's entrance to the height level of the platform at the stations, enabling barrier-free boarding and disembarking. The systems will be built into the new 7000 series trains for the Chicago Transit Authority (CTA) before the end of 2020. The contract also includes an option for over 400 more level control systems.

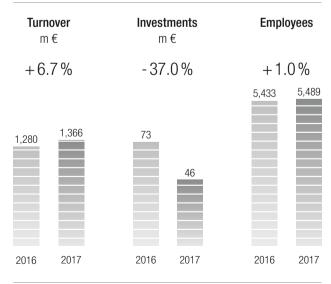
During the reporting year, the division continued to focus its research and development efforts on new production processes. The result was a world premiere: the first flight of a 3D-printed component in an A380 test aircraft. The valve block made from titanium powder is part of the spoiler actuator and undertakes important primary flight control functions. The division is already working using 3D-printing to produce other parts for landing gear and flight control systems as well as air management systems. Another focal point for research has been fully electric systems and components for the next generation of aircraft. Liebherr has developed the first system demonstrations for fully electric climatisation and de-icing systems.

Over the past year, the division invested in expanding its alobal service network and in building new production lines. In Lindenberg (Germany) investments were also made in test stands for Boeing and Embraer.

For 2018, the Aerospace and Transportation Systems division predicts revenues to remain consistent with last vear's level.

Turnover by sales regions







Machine Tools and **Automation Systems**

The Machine Tools and Automation Systems division achieved total revenues of €238 million in the financial year 2017. This represents a sales increase of €19 million, or 8.7%, compared with the previous year.

The inflow of orders to the German machine tools industry in 2017 remained at the high levels seen in the previous year. According to the German Machine Tool Builders' Association, the increase in orders from abroad has successfully compensated for the downturn in domestic orders. There was a particularly strong increase in orders from Asia and North America. However, the growth dvnamics in Europe were notably less favourable.

The financial year saw varying performances among the individual product ranges within the Machine Tools and Automation Systems division. While sales in machine tools rose by 16.5% compared with the previous year, automation systems reported a nearly 10.8% drop. The tools business dipped slightly, while contract manufacture achieved a 13% sales increase.



Liebherr's sales developed differently among the various regions. While business in Germany slightly declined, in the remaining Western European markets, the division saw sales increases, some of which were substantial. Italy and Spain saw particularly strong growth. In the Far East/Australia region, the division reported a €9 million (11.3%) increase in sales, ending the year at €84 million. The financial year was also marked by particularly strong development in the USA, where the division achieved a sales increase of 37.9%.

The average, global market share for Liebherr gear cutting machines amounted to around 17% in 2017, though it accounted for up to 40% in certain markets. Liebherr is one of the world's three leading suppliers in the field of automation systems, where it holds an average market share of 35%.

The Machine Tools and Automation Systems division once again developed and introduced numerous new products during the past financial year. Among the gear cutting machines, the LS 180E, a fully electronic gear shaping head for spur and helical gears, was presented at EMO, the leading trade show in Hanover (Germany). A further innovation is the LC 280-alpha hobbing machine which offers quick and attractive delivery times thanks to its modular building block system.

Liebherr also expanded its portfolio of automation systems. For example, the LP 100 gantry robot system was specially developed for use in engine construction, where a strong trend towards downsizing drive-train technologies is under way.

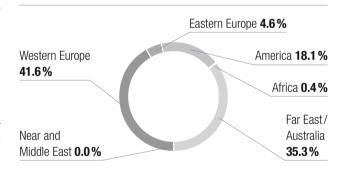
The past year also saw a new focus on the areas of pallet-handling systems and robot applications. The first orders have already been received in these product ranges. The presentation at EMO in Hanover (Germany) had a particularly positive effect on demand for the new PHS Allround pallet handling system.

The division also made progress with Skiving³, a gear skiving process that was developed to market readiness in 2017. At EMO. Liebherr debuted this full-service solution, consisting of a machine, tool and process. Meanwhile, automated bin-picking for handling unmachined parts continues to be met with great interest. As a result, developments have continued in this area, such as the integration of an optical sensor with stereo camera technology.

Currently, preparations are under way in China for the possibility of local production. Customer proximity and a local presence will sustainably strengthen the division's competitiveness in the Chinese market.

The Machine Tools and Automation Systems division invested €5 million over the past year, including in new measuring technology for use in production. For the financial year 2018, the Machine Tools and Automation Systems division expects continued growth in sales.

Turnover by sales regions



	nover n €	Investr m		Empl	oyees
+8	.7 %	- 44.	4 %	+7.	0%
219	238	9	5	1,402	1,500
2016	2017	2016	2017	2016	2017



The Domestic Appliances division achieved sales of €930 million in 2017. This represents an increase of €32 million, or 3.6%, compared with the previous year.

The global market saw moderate growth, both in large electrical appliances as well as the consumer appliances range of refrigeration and freezing. This can be attributed to the generally positive development of the global economy. The market for refrigerators and freezers continues to move in a heavily competitive environment.

The division was able to maintain sales in Western Europe in 2017. Growth was seen in the key market of Germany. By contrast, growth took a downturn in the Italian, Swiss, Denmark and French markets.

Business showed positive development once again in Eastern Europe. In particular, Russia and Bulgaria contributed to the growth in this region. In the Americas, the Middle East as well as the Far East/Australia, the division also succeeded in increasing sales.

Demand for household refrigerators and freezers was stagnant overall. Turnover decreased most notably for freezers. In contrast, sales of built-in appliances rose. In the commercial range, demand rose for refrigerators, particularly for use in laboratories.

Increasing digitalisation in all areas of life poses new challenges for refrigerator and freezer manufacturers. According to the motto "Making your life smarter", Liebherr presented technologies at last year's IFA in Berlin (Germany) that give a preview of the digital future of household appliances. Liebherr already offers over 120 network-connecting appliances, spanning all price classes. SmartDevice technology opens up a new dimension in food storage. A camera can in the future detect what is inside the refrigerator, prepare stock lists and help write shopping lists. The refrigerator can also suggest recipes



that are perfectly catered to match the ingredients found in the refrigerator. Plus, it can provide extensive information about the various food items. Through its presentation at the 2017 IFA, the division brought attention to its pioneering role in the field of digital business models.

The past financial year was marked by many ongoing development projects: in total, the division gave a facelift to 102 built-in appliances. In addition, it introduced a complete BioFresh built-in appliance which combines a wine cabinet and refrigerator to create an innovative home dining centre. The BluPerformance-series was expanded to include two new side-by-side models, among others. Furthermore, series production kicked off for the Value-Line family, which consists of five new combination refrigerator/freezers in two colours, with NoFrost technology. Another highlight for the division is the new Monolith-series which will first be launched in the North American market in 2018. With this series of appliances, Liebherr presents an entirely new dimension in food storage, featuring not only impressive, unique design, but also unprecedented technologies in the field of refrigeration.

In the commercial range, series production of the new DisplayCooler generation started. These high-efficiency appliances will feature a new design, tailored to the latest requirements of the beverages industry. Models have also been reworked in the laboratory and medical appliances range, which also introduced a total of four new, explosion-proof appliances.

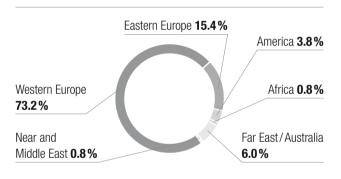
To develop a suitable measurement methodology for improving the quality of food storage, the division is collaborating with various research institutions. Current research projects concentrate on noise reduction in refrigerators and freezers.

In addition to expanding its collaborations with universities and other research institutes, the division is also stimulating innovative ideas internally. For its efforts in this area, Liebherr-Hausgeräte GmbH received the "European Innovation Impact Award" last year.

The division's most important investment was the construction of a new production facility in Aurangabad (India), which was completed in 2017. The refrigerators that will be produced there starting in 2018 are being specially designed for the requirements of the Indian market. Additionally, Liebherr-Hausgeräte GmbH invested in a new training and exhibition hall at the site in Ochsenhausen (Germany).

For 2018, Liebherr expects a slight increase in refrigerator and freezer sales. Particularly the debut of the Monolith series in the North American market promises further growth. Meanwhile, sinking market price levels and the intensification of competition pose risks.

Turnover by sales regions



Turnover m €			Investments m €		Employees	
+3.	6%	+4	+4.8%		0.6%	
898	930	63	66	6,035	6,072	
2016	2017	2016	2017	2016	2017	



The Components division develops and produces individual components and system solutions for use in Liebherr products and for external clients. In 2017, the division reported numerous sales successes. Many new clients were gained, especially in the segments of large-diameter bearings, drive trains and combustion engines.

The division benefited in the reporting year from strong growth in the wind industry. In particular, there was demand for large-diameter bearings among clients from the wind power industry. 2017 also saw the first deliveries of crankshaft bearings for wind power facilities. For testing and validating these constantly rotating bearings, Liebherr launched a specially designed endurance test stand. The series qualification of roller bearing slewing rings as wind turbine blade bearings now cements Liebherr's position as a strong partner in the wind power industry.

The development of the first prototypes for three-row roller bearing slewing rings for ship propulsion systems, also known as thrusters, opens the division up to an additional field with strong potential for growth. Furthermore, Liebherr secured deals with various major clients for the supply of bearings for tunnel boring machines. Another highlight of 2017 was the delivery of a one-piece large-diameter bearing with a 7.5 m diameter.

In the diesel engines segment, the division successfully rounded up multiple projects in 2017. In February, the 12-cylinder D9812 diesel engine from the new engine series was named "Diesel of the Year 2017" in the highest power range of up to 4.5 MW. In addition, the engine portfolio for stage V was expanded to include the D964, D956 and D966 models.



In August 2017, the division announced that it would team with an engine manufacturer for the distribution and service of a total of four Liebherr engine models in the 200 to 620 kW power range. In the agricultural sector, the division secured a contract for the serial delivery of V8 engines to a major client. Production of the D96 diesel engine series also kicked off as part of a partnership with a power set manufacturer. In the gas engines segment, the improved G96 engine series was unveiled. Meanwhile, the 20-cylinder G9620 gas engine marked the division's entry into the segment for power ranges up to 1 MW.

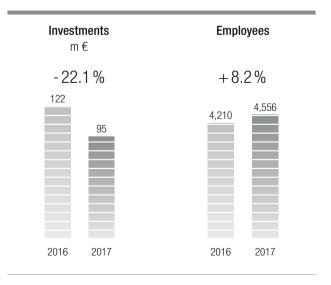
The division expanded their portfolio in 2017 to include additionally optimised servo cylinders as well as cylinders produced in accordance with the standards for the ISO 6022 industrial series. Furthermore, the division integrated the LiView position transducer into its first test applications for clients. This sensor solution enables clients to precisely determine the position and speed of pistons in hydraulic cylinders.

In addition, research projects in 2017 continued to focus on optimisation and automation of hydraulics using smart electronic sensors and actuators. At Agritechnica 2017 in Hanover (Germany), the division unveiled for the first time its telematics portfolio for mobile work machines.

There was a clear increase in demand for propulsion systems in the earthmoving and maritime industries over the last year. In the drive train and control technology segments, the division forged an international partnership to develop a hybrid ship propulsion system starting from 200 kW power per drive. Another focus for development was electric travel drives. The product range was expanded to include three new gearbox sizes. Now, clients are offered a full series of electric travel drives, including permanent magnet motors.

The division concentrated its investments in 2017 on expanding production facilities. The works expansion announced in the previous year for Oberopfingen (Germany) as well as the expansion of the production floor in Ettlingen (Germany) were successfully completed. Furthermore, Liebherr pushed forward with the internationalisation of its remanufacturing business. Additional plants for remanufacturing components were set up in Canada and Russia. Remanufacturing also commenced at the Guaratinguetá, Brazil site, according to plan. Now, Liebherr offers its clients in these countries the possibility of economically and sustainably remanufacturing their used propulsion system components into parts that are as good as new.

The division will continue its growth in 2018, particularly in the engines and propulsion systems segments. The recovery of the mining industry after years of difficulties will also contribute to this development. Business relationships with external clients will continue to increase in 2018.



Group Companies

The Group

Summary of Group Companies

Western Europe

Austria

Hotel Löwen Schruns GmbH

Schruns

Interalpen-Hotel Tyrol GmbH

Liebherr-Hausgeräte Lienz GmbH

Lienz

Liebherr-International Austria GmbH

Bischofshofen

Liebherr-MCCtec GmbH

Nenzing

Liebherr-Transportation Systems GmbH & Co KG

Korneubura

Liebherr-Werk Bischofshofen GmbH

Bischofshofen

Liebherr-Werk Nenzing GmbH

Nenzina

Liebherr-Werk Telfs GmbH

Telfs Denmark

Liebherr-Danmark ApS

Hedensted

Finland

Liebherr-Finland Oy Ab

Helsinki France

Liebherr-Aerospace Toulouse SAS

Toulouse

Liebherr-Aerospace & Transportation SAS

Toulouse

Liebherr-Components Colmar SAS

Colmar

Liebherr-France SAS

Colmar

Liebherr-Grues à Tour SAS

Niederhergheim

Liebherr-Grues Mobiles SAS

Niederheraheim

Liebherr-Location France SAS

Niederhergheim

Liebherr-Malaxage & Techniques SAS

Niederhergheim

Liebherr-Mining Equipment Colmar SAS

Colmar

Liebherr-Mining Equipment SAS

Liebherr-Nenzing Equipements SAS

Niederhergheim

Germany

Liebherr-Aerospace Lindenberg GmbH

Lindenbera

Liebherr-Baumaschinen

Vertriebs- und Service GmbH Kirchdorf an der Iller

Liebherr-Betonpumpen GmbH

Neu-Ulm

Liebherr-Components GmbH

Biberach an der Riss

Liebherr-Components Biberach GmbH

Biberach an der Riss

Liebherr-Components Deggendorf GmbH

Deggendorf

Liebherr-Components Kirchdorf GmbH

Kirchdorf an der Iller

Liebherr-Elektronik GmbH

Lindau

Liebherr-EMtec GmbH Kirchdorf an der Iller Liebherr-Ettlingen GmbH

Ettlingen

Liebherr-Hausgeräte GmbH

Ochsenhausen

Liebherr-Hausgeräte Ochsenhausen GmbH

Ochsenhausen

Liebherr-Hydraulikbagger GmbH

Kirchdorf an der Iller

Liebherr-International Deutschland GmbH

Biberach an der Riss

Liebherr-IT Services GmbH

Kirchdorf an der Iller

Liebherr-Logistics GmbH

Kirchdorf an der Iller

Liebherr-MCCtec Rostock GmbH

Rostock

Liebherr-Mietpartner GmbH

Ludwigshafen am Rhein

Liebherr-Mischtechnik GmbH

Bad Schussenried

Liebherr-Nenzing Service GmbH

Hamburg

Liebherr-Purchasing Services GmbH

Biberach an der Riss

Liebherr-Transportation Systems

Mannheim GmbH

Mannheim

Liebherr-Verzahntechnik GmbH

Kempten

Liebherr-Werk Biberach GmbH

Biberach an der Riss

Liebherr-Werk Ehingen GmbH

Ehingen/Donau

Liebherr-Wohnungsbau GmbH

Kirchdorf an der Iller

Ireland

Killarney Hotels Ltd.

Liebherr-Construction Equipment Ireland Limited

Rathcoole

Liebherr Container Cranes Ltd.

Killarney

Italy

Liebherr-EMtec Italia S.p.A.

Liebherr-Italia S.p.A.

Monfalcone

Liebherr-Utensili s.r.l.

Colleano Netherlands

Liebherr-Maritime Benelux B.V.

Amersfoort

Liebherr-Nederland B.V.

Amersfoort Portugal

Liebherr-Máquinas de Construção Portugal, Lda.

Benavente

Spain

Liebherr Iberica, S.L. Azuqueca de Henares

Liebherr Industrias Metálicas, S.A.

Pamplona

Sweden

Liebherr-Sverige AB

Västerås Switzerland

Liebherr-Baumaschinen AG

Reiden

Liebherr-Components AG

Nussbaumen

Liebherr-Component Technologies AG

Liebherr-Export AG

Nussbaumen

Liebherr-Hotels AG

Bulle

Liebherr-Industrieanlagen AG

Bulle

Liebherr-International AG

Bulle

Liebherr-Intertrading AG

Bulle

Liebherr Machines Bulle SA

Bulle

Liebherr-Service AG

Nussbaumen

Turkey

Liebherr Makine Ticaret Servis Limited Şirketi

Istanbul United Kingdom

Liebherr-Great Britain Ltd.

Biggleswade

Liebherr-Rental Ltd.

Biggleswade

Liebherr Sunderland Works Ltd.

Sunderland

Eastern Europe

Azerbaijan

Liebherr-Azeri LLC

Baku

Bulgaria

Liebherr-Hausgeräte Marica EOOD

Radinovo

Liebherr-Transportation Systems Marica EOOD

Radinovo

Czechia

Liebherr-Stavební stroje CZ s.r.o.

Brno

Hungary

Liebherr-Építöipari Gépek Magyarország Kft.

Györ

Kazakhstan

Liebherr Kasachstan TOO

Almaty

Poland

Liebherr-Polska sp. z o.o.

Ruda Śląska

Romania

Liebherr-Romania S.R.L.

Bucharest

Russia

Liebherr-Aerospace Nizhny Novgorod OOO

Nizhny Novgorod (75.1%)

Liebherr-Nizhny Novgorod OOO

Nizhny Novgorod

Liebherr-Russland 000

Moscow

Near and Middle East

Saudi Arabia

Saudi Liebherr Company Ltd.

Jeddah (60%)

United Arab Emirates

Liebherr Middle East FZE

Dubai

America

Argentina

Liebherr-Argentina S.A.

Buenos Aires

Brazil

Liebherr Aerospace Brasil Ltda.

Guaratinguetá

Liebherr Brasil Ltda.

Guaratinguetá

Canada

Liebherr-Canada Ltd.

Burlington, ON

Chile

Liebherr Chile SpA

Santiago de Chile

Colombia

Liebherr Colombia SAS

Bogotá D.C.

Mexico

Liebherr Mexico, S. de R.L. de C.V.

Mexico City

Liebherr Monterrey, S. de R.L. de C.V.

Monterrey

Liebherr Servicios Monterrey, S. de R.L. de C.V.

Monterrev

Panama

Liebherr Panama S.A.

Panama City

Peru

Liebherr Distribuidora Peru S.A.C.

Lima

USA

HL Farm, LLC

Newport News, VA

Liebherr Aerospace Saline, Inc.

Saline, MI

Liebherr Automation Systems Co.

Saline, MI

Liebherr Gear Technology, Inc.

Saline, MI

Liebherr Mining & Construction Equipment, Inc.

Newport News, VA

Liebherr Mining Equipment Newport News Co.

Newport News, VA Liebherr USA, Co. Newport News, VA

Africa

Algeria

Liebherr Algérie, EURL

Algier

Ghana

Liebherr-Ghana Ltd.

Accra

Morocco

Liebherr-Maroc SARL

Casablanca Mozambique

Liebherr-Mozambique, Lda.

Maputo

Nigeria

Liebherr-Nigeria Ltd.

Abuja (90%)

South Africa

Liebherr-Africa (Pty) Ltd

Springs

Zambia

Liebherr Zambia Ltd.

Lusaka

Far East/Australia

Australia

Liebherr-Australia Pty. Ltd.

Adelaide

India

Liebherr Appliances India Private Limited

Mumba

Liebherr CMCtec India Private Limited

Pune

Liebherr India Private Limited

Mumbai

Liebherr Machine Tools India Private Limited

Bangalore (60%)

Indonesia

PT. Liebherr Indonesia Perkasa

Balikpapan

Japan

Liebherr Japan Co., Ltd.

Yokohama

Malaysia

Liebherr Appliances Kluang SDN. BHD.

Kluang

Liebherr Sales Kluang SDN. BHD.

Kluang

New Caledonia

Liebherr-Nouvelle-Calédonie SAS

Nouméa

PR China

Liebherr (HKG) Limited

Hong Kong SAR

Liebherr LAMC Aviation (Changsha) Co., Ltd.

Changsha (50%)

Liebherr Machinery (Dalian) Co., Ltd.

Dalian

Liebherr Machinery (Xuzhou) Co., Ltd.

Xuzhou

Liebherr Machinery Service (Shanghai) Co., Ltd.

Shanghai

Liebherr Purchasing (Dalian) Co., Ltd.

Dalian

Xuzhou Liebherr Concrete Machinery Co., Ltd.

Xuzhou (50%)

Zhejiang Liebherr Zhongche

Transportation Systems Co., Ltd.

Zhuji (70%)

Singapore

Liebherr-Singapore Pte Ltd

Singapore

South Korea

Liebherr Machine Tools and Automation Korea Ltd.

Seoul (70%)

Liebherr Mobile Cranes Korea Ltd.

Seoul

Thailand

Liebherr (Thailand) Co., Ltd.

Rayong

Consolidated Financial Statements

Consolidated Balance Sheet	60
Consolidated Income Statement	61
Consolidated Statement of Comprehensive Income	62
Consolidated Statement of Changes in Equity	62
Consolidated Cash Flow Statement	63
Notes to the Consolidated Financial Statements	64
Report of the Statutory Auditor	80
Five-Year Summary	81

Consolidated Balance Sheet

Assets in m €	Notes	Dec. 31, 2017	%	Dec. 31, 2016	%
Intangible assets	3.1	27	0.2	34	0.3
Tangible assets	3.2	3,622	27.8	3,654	28.8
Shares joint ventures and associated companies	3.5	12	0.1	14	0.1
Non-current financial assets	3.6	192	1.5	125	1.0
Deferred tax assets	8	215	1.7	262	2.1
Non-current assets		4,068	31.3	4,089	32.3
Inventories	4.1	3,634	27.9	3,530	27.9
Receivables	4.2/4.3	2,202	16.9	1,958	15.5
Income tax receivables	8	94	0.7	91	0.7
Current financial assets	4.5	1,223	9.4	1,267	10.0
Liquid funds	4.6	1,796	13.8	1,726	13.6
Current assets		8,949	68.7	8,572	67.7
Total assets		13,017	100.0	12,661	100.0
Equity and Liabilities in m €					
Subscribed capital		62	0.5	62	0.5
Renvenue reserves	2.3/5	7,318	56.2	6,973	55.1
Equity of Liebherr-International AG shareholders		7,380	56.7	7,035	55.6
Non-controlling interests		16	0.1	16	0.1
Equity		7,396	56.8	7,051	55.7
Non-current financial liabilities	6	1,230	9.5	1,800	14.2
Post-employment benefits	9	710	5.5	713	5.6
Deferred tax liabilities	8	67	0.5	48	0.4
Non-current provisions	10	32	0.2	38	0.3
Other non-current liabilities	7	133	1.0	142	1.1
Non-current liabilities		2,172	16.7	2,741	21.6
Current financial liabilities	6	1,169	9.0	680	5.4
Payments received in advance		324	2.5	270	2.1
Income tax liabilities	8	85	0.7	61	0.5
Current provisions	10	524	4.0	533	4.2
Other current liabilities	7	1,347	10.3	1,325	10.5
Current liabilities		3,449	26.5	2,869	22.7
Total equity and liabilities		13,017	100.0	12,661	100.0

Consolidated Income Statement

inm€	Notes	Dec. 31, 2017	%	Dec. 31, 2016	%
Sales revenue	11	9,845	94.2	9,009	93.1
Increase or decrease of work in progress and finished goods		35	0.3	62	0.6
Other own work capitalised		329	3.2	418	4.3
Other operating income		237	2.3	197	2.0
Operating income		10,446	100.0	9,686	100.0
Cost of materials		- 5,184	- 49.6	- 4,914	-50.7
Personnel expenses		-2,538	-24.3	-2,413	- 24.9
Depreciation on non-current assets	3	-485	- 4.6	-466	-4.8
Other operating expenses		- 1,630	- 15.6	- 1,484	- 15.3
Operating expenses		-9,837	-94.1	-9,277	-95.7
Operating result		609	5.9	409	4.3
Finance income		537	5.1	548	5.6
Finance cost		- 571	-5.5	-485	-5.0
At equity result		1	0.0	1	0.0
Finance result		-33	-0.4	64	0.6
Result before tax		576	5.5	473	4.9
Taxes on income	8	- 245	-2.3	- 175	- 1.8
Result after tax		331	3.2	298	3.1
of which shareholders of Liebherrr-International AG		330	3.2	297	3.1
of which non-controlling interests		1	0.0	1	0.0

Consolidated Statement of Comprehensive Income

in m €	Dec. 31, 2017	Dec. 31, 2016
Result after tax	331	298
Post-employment benefits	10	- 59
Deferred tax	-4	15
Items not recycled to profit or loss	6	-44
Foreign exchange translation differences	-59	59
Changes of fair value in cash flow hedges	133	6
Deferred tax	- 42	-5
Items recycled to profit or loss	32	60
Other comprehensive income	38	16
Comprehensive income	369	314
of which shareholders of Liebherr-International AG	368	312
of which non-controlling interests	1	2

Consolidated Statement of Changes in Equity

in m €	Subscribed capital	Value fluctuations on financial instruments	Foreign exchange translation differences	Other revenue reserve	Equity of Liebherr- International AG shareholders	Non- controlling interests	Group equity
Dec. 31, 2015	62	-50	56	6,678	6,746	15	6,761
Result after tax				297	297	1	298
Other comprehensive income		1	58	- 44	15	1	16
Comprehensive income		1	58	253	312	2	314
Dividends				- 23	-23	-1	-24
Dec. 31, 2016	62	- 49	114	6,908	7,035	16	7,051
Result after tax				330	330	1	331
Other comprehensive income		91	-59	6	38	0	38
Comprehensive income		91	-59	336	368	1	369
Dividends				- 23	-23	-1	-24
Dec. 31, 2017	62	42	55	7,221	7,380	16	7,396

Consolidated Cash Flow Statement

in m €	Dec. 31, 2017	Dec. 31, 2016
Result after tax	331	298
Depreciation on non-current assets	485	466
Value fluctuations marketable securities (current assets)	-38	- 18
Gain/Loss on disposal of non-current assets	-1	17
Change of provisions and post-employment benefits	2	70
Other non-liquid expenses/income	301	- 114
Change of stock	-209	- 23
Change of receivables and other current assets	-384	- 60
Change of other liabilities	135	- 75
Change of rental fleet	- 128	- 161
Net cash flow from operating activities	494	400
Payment for investments in intangible assets	-9	- 14
Payment for investments in tangible assets	- 419	- 395
Payment for investments in marketable securities in current assets	-56	- 80
Proceeds from sales of intangible assets	0	3
Proceeds from sales of tangible assets	13	12
Proceeds from sales of financial assets	2	0
Proceeds from sales of marketable securities (current assets)	133	70
Net cash flow from investing activities	-336	-404
Dividends paid, other distributions and equity capital repaid	-24	- 24
Proceeds from current or non-current financial liabilities	397	757
Repayment of current or non-current financial liabilities	-434	- 667
Net cash flow from financing activities	-61	66
Net decrease/increase in liquid funds	97	62
Foreign exchange translation difference on liquid funds at beginning of period and on cash flows	-27	0
Liquid funds at beginning of period	1,726	1,664
Liquid funds at end of period	1,796	1,726
Income tax paid and reimbursed	-206	- 197
Interest paid/Interest received	5	-3
Investments in leased assets	0	1

Notes to the consolidated financial statements

1 Corporate information and business activity

The company was founded in 1949 by Dr. Hans Liebherr. Currently, the family business has more than 43,000 employees working in more than 130 companies around the world. The share capital of Liebherr-International AG, Bulle, Switzerland, amounting to 62 million € (100 million CHF) is held exclusively by the Liebherr family.

For the construction sector and the mining industry, the Group develops, produces and distributes construction cranes, mobile cranes, crawler cranes, hydraulic excavators, material handlers, duty cycle crawler cranes, wheel loaders, crawler loaders and tractors, pipelayers, telescopic handlers, mining trucks as well as concrete mixing plants, concrete pumps and truck mixers worldwide. In addition, Liebherr develops, produces and distributes ship cranes, floating cranes, offshore cranes, container and mobile harbour cranes for the cargo handling industry worldwide. The activities range across machine tools, automation systems and engineering projects in the machine and plant construction industry, and landing gears, flight control and actuation systems as well as air management systems in the aerospace industry. Furthermore, Liebherr manufactures equipment for rail vehicles in the transportation technology area. For household and commercial refrigeration and freezing, Liebherr produces a variety of products with high benefits for the end users. In the component area the Group specialises in the development, design and manufacture of products in the mechanical, hydraulic and electric drive and control categories. Moreover, Liebherr operates six hotels in Ireland, Austria and Germany.

2 Accounting policies

2.1 General principles

The Group's consolidated financial statements for the year ended December 31, 2017 are prepared following the standards of the International Accounting Standards Board (IASB) in London.

They are in accordance with all International Financial Reporting Standards (IFRS) and interpretations by the International Financial Reporting Interpretations Committee (IFRIC) applicable for annual periods beginning on or after January 1, 2017.

The accounting and reporting principles applied to these consolidated financial statements comply with Swiss Corporation Law as well as with IFRS. The prior year values are prepared in accordance with the same principles, insofar as newly applicable standards also apply to prior periods.

The annual financial statements are prepared according to the historical cost principle with transactions being recognised and reported in the period when they occur. Any divergence from this principle is specifically mentioned. The reporting period of Liebherr-International AG and its subsidiaries ends on December 31. The functional currency is the Euro, as it is the predominant currency in the Group.

To improve comprehensibility and relevance, several details required by IFRS are summarised in the notes. These details are disclosed correctly in the audited group consolidated financial statements.

2.2 Basis of consolidation

The consolidated financial statements are prepared based on the individual financial statements of Liebherr-International AG and its subsidiaries, which are audited by independent auditors and prepared using consistent accounting policies. The consolidated financial statements include the annual financial statements of Liebherr-International AG as a parent company and of all subsidiaries in which Liebherr-International AG directly or indirectly holds a majority of voting rights, or otherwise controls according to IFRS 10.

The following companies have newly been established during the financial year 2017 by means of start-up, acquisition or restructuring:

- Liebherr Panama S.A., Panama City, Panama,
- Liebherr-Components GmbH, Biberach an der Riss, Germany.

Acquired companies are fully consolidated from the time when the Group has control according to IFRS 10. They are accounted for using the purchase method under which identifiable assets, liabilities and contingent liabilities are measured at fair value on the date of acquisition. Any remaining residual value is recorded as goodwill in the respective functional currency of the company acquired. Any goodwill is not systematically amortised, but is reviewed for impairment at least on an annual basis.

Sold companies are deconsolidated at the time the Group ceases to have control and any gain or loss is recognised in the income statement.

Investments for which the Group does not exercise control but a significant influence are classified as associates or joint ventures and accounted for using the equity method according to IFRS 11. The Group's share of net assets is presented in the balance sheet under shares joint ventures and associated companies and the share of profit of joint ventures and associates is shown in the income statement under at equity result.

The consolidated financial statements include investments in joint ventures and associate companies. Material investments are as follows:

- Fors AG, Studen, Switzerland,
- Somatel-Liebherr Spa, Ain Smara, Algeria,
- Aerospace Transmission Technologies GmbH, Friedrichshafen, Germany.

2.3 Translation of foreign currency

Foreign currency transactions are converted at the spot rate as of the transaction date. Monetary assets and liabilities in foreign currency are translated at the balance sheet date exchange rate. All gains and losses are recognised in the income statement. Assets and liabilities in financial statements of subsidiaries are converted to euro using the balance sheet date exchange rate. For the translation of the income statement and the cash flow statement the average exchange rate of the annual period is used. Exchange rate differences arising from the conversion of the income statement of affiliated companies are recognised separately in the other comprehensive income until disposal.

For the most significant currencies, the following exchange rates have been applied:

				2017	2016		
			Year end rate in €	Average rate in €	Year end rate in €	Average rate in €	
Switzerland	CHF	1	0.8546	0.9007	0.9312	0.9173	
USA	USD	1	0.8338	0.8874	0.9487	0.9041	
Great Britain	GBP	1	1.1271	1.1420	1.1680	1.2246	
Australia	AUD	1	0.6516	0.6798	0.6851	0.6723	
Russia	RUB	1	0.0144	0.0152	0.0156	0.0136	

2.4 Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Purchases and sales of financial instruments are recognised using the trading date.

Financial assets and liabilities are recognised when the Liebherr Group becomes a party to the contractual obligations of the instrument. Financial assets are derecognised when the contractual rights to receive cash flows are fully transferred to a third party or they have expired. In cases the rights to receive cash flows are neither transferred nor retained, a derecognition is only relevant to the extent control has been transferred. If the Group retained control, the Group continues to recognise the instrument to the extent of its continuing involvement. A financial liability is not derecognised until the liability is extinguished, i.e. when the obligation specified in the contract is discharged or cancelled or expires.

The initial and subsequent measurement of the various financial instruments used by the Liebherr Group depends on the classification in accordance with IAS 39.

Financial instruments at fair value through profit or loss

This category includes financial assets and liabilities designated upon initial recognition at fair value through profit or loss and financial assets, inclusive of derivatives, held for trading. Derivatives designated as hedging instrument as defined by IAS 39 are excluded. All financial instruments in this category are measured at fair value with gains or losses arising from changes in fair value recognised in the income statement in the relevant period (finance income or finance cost). In general, the fair value of the financial instrument base on market prices (Level 1 Inputs and Level 2 Inputs of the IFRS 13 fair value hierarchy). Valuation techniques (IFRS 13 Level 3 Inputs) using non observable input parameters are not applied. There were no financial instruments whose fair values could not be determined with sufficient reliability.

Loans and receivables

This category represents loans granted by the Group and accounts receivable trade. Financial assets within this category are recognised at fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset upon initial recognition and subsequently measured at amortised cost. At each balance sheet date or under certain circumstances (e.g. significant financial difficulties of the debtor), the carrying amount of the financial instruments in this category are assessed for any impairment. Any impairment losses, which are determined by comparing the carrying value of the instrument to the fair value, are recognised in the income statement. If there is objective substantial evidence in subsequent periods that the impairment of an asset is no longer applicable, the previously recorded impairment loss is to be reversed. However, the reversal of the impairment loss may not create a carrying value that exceeds what the carrying value would have been if normal amortisation charges had been considered (not considering the impairment).

Other financial liabilities

Other financial liabilities comprise all financial liabilities with the exception of derivatives. Financial liabilities are recognised initially at fair value including transaction costs. They are subsequently measured at amortised cost using the effective interest method. In addition to actual interest payments, finance costs include annual compound interest and pro rata transaction costs.

Financial quarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss. This loss incurs when a specified debtor fails to make payments in accordance with the original or modified terms of a debt instrument. In some cases, the creditworthiness of customers is guaranteed by the Liebherr Group to the financing party, i.e. a financial guarantee contract is issued.

3 Non-current assets

3.1 Intangible assets

Intangible assets acquired separately are measured initially at acquisition costs. Internally generated intangible assets from which the Group expects to receive a future benefit and which can be measured reliably are capitalised at their corresponding production costs. The production costs include all costs directly attributable to the production process and a proportionate share of production related overheads. Borrowing costs are not capitalised, as by definition intangible assets are not qualifying assets.

Development costs for new products are not capitalised, as the future economic benefit can only be demonstrated after a regulatory approval and a successful launch of the products in the market.

All intangible assets are amortised over the lower of their expected economic useful life or the contractual length using the straight-line method. Intangible assets with indefinite useful lives are not amortised but are tested for impairment annually.

The estimated useful lives of the major classes of intangible assets are as follows:

Concessions	3 years
Industrial property rights and similar rights	3 years
Licences	3 years
Software	3-5 years

3.2 Tangible assets

Tangible assets are measured at costs less cumulative depreciation and cumulative impairment. As a depreciation method the straight-line method is used with a depreciation period corresponding to the useful life. Land is not depreciated on a systematic basis. Maintenance costs are capitalised when they extend the useful life or the production capacity of the asset. Other maintenance costs and repairs are recognised in the income statement as incurred.

The estimated useful lives of tangible assets are as follows:

Buildings	20 - 40 years
Machinery and equipment	5-21 years
Furniture	13 years
IT	3-5 years
Vehicles	5-11 years

Any gain or loss arising from the disposal of an asset is included in other operating income or expenses. The disposal of rental machines is recognised as revenue. The reversal of the related remaining book value from the disposal is treated as cost of materials. Tangible assets are derecognised upon disposal or when no future economic benefit is expected from their use.

Borrowing costs directly attributable to the purchase, construction or manufacturing of a qualified asset are capitalised during the period until the asset is brought into service and afterwards depreciated over the useful life of the asset. Other borrowing costs are treated as expenses.

Development of tangible assets as at Dec. 31, 2017:

in m €	Land and buildings	Technical equip. and machinery	Other equip., factory and office equip.	Adv. paym., assets under construction	Total
Acquisition and production cost as at 1/1	2,953	2,507	1,423	233	7,116
Additions	52	379	113	195	739
Disposals	- 12	-347	-49	-4	-412
Transfers	127	56	19	- 195	7
Foreign exchange differences	-67	- 55	-39	-8	- 169
Acquisition and production cost as at 31/12	3,053	2,540	1,467	221	7,281
Accum. depreciation and impairment as at 1/1	1,055	1,460	947	0	3,462
Depreciation of the year	115	222	134	0	471
Accum. depreciation on disposals	-9	- 154	- 45	0	- 208
Impairment	0	3	0	0	3
Transfers	11	-1	0	0	0
Foreign exchange differences	-20	-28	- 21	0	-69
Accumulated depreciation as at 31/12	1,142	1,502	1,015	0	3,659
Net book value 31/12	1,911	1,038	452	221	3,622

Development of tangible assets as at Dec. 31, 2016:

in m €	Land and buildings	Technical equip. and machinery	Other equip., factory and office equip.	Adv. paym., assets under construction	Total
Acquisition and production cost as at 1/1	2,771	2,350	1,296	277	6,694
Additions	58	404	117	158	737
Disposals	- 17	-313	- 59	-3	-392
Transfers	96	55	52	- 203	0
Foreign exchange differences	45	11	17	4	77
Acquisition and production cost as at 31/12	2,953	2,507	1,423	233	7,116
Accum. depreciation and impairment as at 1/1	949	1,368	865	0	3,182
Depreciation of the year	111	211	126	0	448
Accum. depreciation on disposals	- 16	- 130	-53	0	- 199
Impairment	0	5	0	0	5
Transfers	0	0	0	0	0
Foreign exchange differences	11	6	9	0	26
Accumulated depreciation as at 31/12	1,055	1,460	947	0	3,462
Net book value 31/12	1,898	1,047	476	233	3,654

Other equipment, factory and office equipment include mainly computer equipment, furniture, vehicles, transportation equipment, tools and fixtures.

The net book value of 3,622 million € (2016: 3,654 million €) corresponds to 49.7% (2016: 51.3%) of the historical cost. The recognised impairment loss relates to the rental equipment. The carrying amount of tangible assets held under finance leases amounts to 63 million € (2016: 65 million €) and can basically be allocated to land and buildings as well as to technical equipment and machinery.

The carrying amount of land and buildings contains the capitalised borrowing costs amounting to 7 million € (2016: 8 million €).

3.3 Leasing

The Group primarily is both a lessor of its self manufactured construction machinery and a lessee of other tangible assets. The classification of leases according to IAS 17 is based on the extent to which risks and rewards incidental to ownership of a leased asset lie with the lessor or the lessee. Therefore, depending on the situation, the leased asset is recognised as finance or operating lease in the financial statement of the lessor or the lessee.

Self constructed assets capitalised under tangible assets but leased out under an operating lease are recognised at production costs. All other leased out equipment is recognised at acquisition costs. All rental equipment is depreciated using the straight-line method according to the asset's useful life reflecting the lower of the market value or the calculated residual value of the asset. Lease income from operating leases is recognised in the income statement on a straight-line basis. With respect to financial leases, a receivable is recognised at an amount equal to the net investment in the lease. Lease payments are divided into interest and principal payments.

Payments for operating lease contracts where the Liebherr Group is the lessee are recognised as an expense in the income statement on a straight-line basis over the lease term. Assets acquired under a finance lease are capitalised under IAS 17 at the fair value or, if lower, at the present value of the minimum lease payments at the commencement of the lease. At the same time the liability resulting from future minimum lease payments is recognised as a financial liability. The leased asset is depreciated using the straight-line method over theestimated useful life of the asset or over the lease term, if there is no reasonable certainty that the lessee will obtain ownership by the end of the lease.

If sale and lease back transactions result in finance leases, any profit will be deferred and amortised over the lease term. In case of operating leases, which are established at fair value, any profit or loss is recognised immediately.

3.4 Impairment of non-current assets

Impairment losses on intangible and tangible assets will be recognised at each reporting date if there are indications that, following an event or due to changing circumstances, the book value is overvalued. If the carrying amount of an asset exceeds the recoverable amount (value in use or fair value less costs to sell) the asset will be written down to this lower amount. If necessary, intangible and tangible assets are combined to cash generating units.

3.5 Joint Ventures and associated companies

Shares in joint ventures and associated companies are accounted for using the equity method of accounting.

3.6 Non-current financial assets

Non-current financial assets comprise non-current leasing receivables, loans and non-current marketable securities. Non-current marketable securities are designated upon initial recognition at fair value through profit and loss. Management of these financial assets is in accordance with a documented investment strategy and their performance is assessed based on the change in fair value.

4 Current assets

4.1 Inventories

Inventories are recognised at acquisition or production costs. Production costs includes costs directly related to the units of production and a systematic allocation of fixed and variable production overheads. The allocation of fixed production overheads is mostly based on the normal capacity of the production facilities; otherwise it is based on the actual level of production. Selling costs, administrative overheads and borrowing costs are not capitalised. Raw materials and merchandise are generally measured at acquisition costs. For raw materials, the acquisition cost reflect the lower of the last purchase price and the weighted average price. Sufficient allowances are recorded for risks with regard to obsolescence and surplus stock as well as for losses of pending transactions by depreciation or writing down to the net realisable value.

inm€	2017	2016
Raw materials and supplies	1,360	1,271
Work in progress	880	844
Finished goods and merchandise	1,390	1,410
Payments made in advance for inventories	4	5
Total	3,634	3,530

4.2 Construction and service contracts

Construction and service contracts within the meaning of IAS 11 are recognised using the Percentage of Completion method. They are recognised based on the agreed contractual revenues by reference to the stage of completion. The disclosure is in accounts receivable, respectively accounts payable, net of prepayments received from customers. The stage of completion is determined based on the proportion of contractual costs incurred for work performed as of balance sheet date to the estimated total contract costs or based on agreed milestones. When the outcome of a construction contract cannot be estimated reliably, revenue is recognised only to the extent of incurred contractual costs. The profit on such a contract is only recognised when the stage of completion allows for a reliable estimate of contract revenues and contract costs to be incurred to complete the contract.

4.3 Accounts receivable

Accounts receivables, if not derivatives, are classified as loans and receivables. An allowance for doubtful accounts is recognised when there is objective evidence that such receivables are not recoverable (e.g. due to bankruptcy, payment default or other financial difficulties of the debtor). The amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows. The allowance is based on internal group guidelines, according to which individual allowances must be deducted first. Based on the age of receivables, an additional systematic allowance between 20% and 100% is made on the residual balances according to the age of each receivable. The payment terms and outstanding receivables are regularly monitored locally by all subsidiaries. Furthermore, safeguards in the form of prepayments and down payments are established.

4.4 Derivative financial instruments

Within the Liebherr Group, this position predominantly includes forward currency contracts, currency options, currency swaps, interest rate swaps and interest rate currency swaps to hedge its foreign exchange and interest rate risks. All derivatives, if they do not qualify for hedge accounting in accordance with IAS 39, are classified as financial instruments at fair value through profit or loss.

To hedge the interest and foreign currency risks resulting from its operational activities, financial transactions and investments, the Liebherr Group makes use of derivative financial instruments. The goal is to reduce volatility in the income statement. A hedging relationship must fulfill various criteria relating to the documentation, the probability of occurrence, the effectiveness of the hedging instrument and the reliability of the measurement in order to qualify for hedge accounting in accordance with IAS 39.

Under certain circumstances, a derivative financial instrument designated as a hedging instrument can be used to hedge the exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability or a highly probable future transaction or the foreign currency risk in an unrecognised firm commitment. Exclusively in the aerospace division, Liebherr Group uses hedging instruments in cash flow hedges. Thereby the exposure to variability of future cash flows in foreign currencies which could have an effect on profit and loss is hedged. The effective portion of the gain or loss of the hedging instrument is recognised in other comprehensive income when the criteria for hedge accounting are fulfilled. These other comprehensive income amounts reflecting the cumulated value changes of the hedging instruments are, simultaneously, transferred to the income statement when the hedged transaction affects profit or loss or upon initial recognition of an asset or a liability. If the forecasted transaction is no longer expected to occur, the hedge is no longer effective and the amounts previously recognised in other comprehensive income are transferred to the income statement. The ineffective portion of the gain or loss of the hedging instrument is recognised directly in the finance result.

4.5 Current financial assets

The financial assets in these categories are classified, based on an internal risk management and investment strategy, as financial assets at fair value through profit or loss. The management of these assets is based on a written investment strategy and performance is measured on fair value.

inm€	2017	2016
Shares	384	354
Mutual funds	107	108
Fixed income securities	704	788
Other securities	4	17
Total securities and other financial assets at fair value	1,199	1,267
Fixed deposits with a residual term more than 3 months	24	0
Total	1,223	1,267

4.6 Liquid funds

In addition to cash on hand and cash in banks, short term deposits with an original maturity of three months or less are considered as liquid funds.

5 Equity

The share capital of Liebherr-International AG is divided into registered shares. The revenue reserve contains the legal reserve of Liebherr-International AG as well as the retained earnings of the other subsidiaries. Additionally, the balance includes the free reserves of Liebherr International AG as well as reserves and profits from previous years of the consolidated companies.

Under this position, the effective portion of the gain or loss of the hedging instrument in a cash flow hedge is recognised in accordance to IAS 39 in other comprehensive income (OCI) without being recorded in the income statement.

In equity, exchange differences arising from the translation of assets and liabilities from the individual closings of foreign subsidiaries into the presentation currency are included.

6 Financial liabilities

The following table gives an overview of the financial liabilities:

in m €	Current	Non-current	Total 2017	Current	Non-current	Total 2016
Bank liabilities	1,152	1,146	2,298	638	1,715	2,353
Liabilities from leases	15	84	99	38	85	123
Accounts payable from non-genuine factoring	1	0	1	1	0	1
Bank liabilities from discounted bills	1	0	1	3	0	3
Total	1,169	1,230	2,399	680	1,800	2,480

7 Other liabilities

The following table gives an overview of the other liabilities:

in m €	Current	Non-current	Total 2017	Current	Non-current	Total 2016
Liabilities from repurchase obligations with end users	0	98	98	0	100	100
Accounts payable trade	740	0	740	647	0	647
Liabilities from personnel expenses and social security	305	0	305	272	0	272
Tax liabilities and customs	105	0	105	88	0	88
Derivative financial instruments	9	0	9	177	0	177
Deferred income	58	0	58	45	0	45
Further liabilities	130	35	165	96	42	138
Total	1,347	133	1,480	1,325	142	1,467

8 Taxes

Taxes include both current and deferred taxes, Current income taxes (income or corporation tax, business tax and corresponding foreign taxes) are the amounts resulting from taxable income or loss to be paid to or recovered from the relevant tax authority.

Current income taxes for the actual period and prior periods are recognised as a liability to the extent that they have not yet been paid. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess is recognised as an asset. The benefit relating to a tax loss that can be carried back to recover current tax of a previous period is recognised as an asset.

Current tax liabilities (tax assets) for the actual and prior periods are measured at the amount expected to be paid to (recovered from) the taxation authorities, using the tax rates (and tax laws) that have been enacted at the reporting date or that will be enacted in the near future. Current income taxes are recognised in the income statement, except current income taxes relating to items priorly recognised in other comprehensive income.

Deferred tax assets and liabilities are recognised in accordance with IAS 12 for temporary differences between the carrying amount of an asset or liability in the balance sheet and itstax base. The deferred tax assets also include future tax reductions from the expected use of losses brought forward. Deferred tax assets are only recognised if there is sufficient probability that future taxable profit will allow the deferred tax asset to be recovered. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled. The announcements of new tax rates (and new tax laws) by the government have been considered for the measurement of deferred tax assets and liabilities. The formal enactment is not relevant unless the temporary differences balance themselves under the old tax law.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be recovered. Conversely, a previously unrecognised deferred tax asset is recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred taxes are charged or credited directly to other comprehensive income if the taxes relate to items that are credited or charged directly to other comprehensive income in the same or a different period.

Deferred income tax assets and deferred income tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred income taxes relate to the same taxable entity and the same tax authority.

9 Employee benefits

Employee benefits consist of pension obligations, commitments related to anniversary bonuses and partial retirement agreements. There are various employee benefit plans in the Group, which are individually aligned with local conditions in their respective countries. They are financed either by means of contributions to legally independent pension/ insurance funds, or by recognition as employee benefit liabilities in the balance sheet of the respective subsidiaries.

The net periodic costs with regards to defined contribution plans to be recognised in the income statement are the agreed contributions of the employer. In case of defined benefit plans, the period costs are determined by means of actuarial valuations by external experts using the projected unit credit method which are prepared on a regular basis.

The calculation of net periodic costs and employee benefit liabilities implies that statistical methods and variables are employed. These variables include, for example, estimations and assumptions concerning the discount rate. Furthermore, actuaries use a wide range of statistical information for actuarial calculation of employee benefit liabilities which can deviate significantly from actual results due to changes in market conditions, the economic situation as well as fluctuating rates of withdrawal and shorter or longer life expectancy of benefit plan participants.

10 Provisions

Provisions are only recognised in the balance sheet if the Liebherr Group has an obligation to a third party that resulted from a past event, and if a reliable estimate of the obligation can be made. Possible losses from future events are not recognised in the balance sheet. Restructuring provisions will only be recognised if the respective costs can be determined reliably by reference to a plan and if there is a corresponding obligation resulting from a contract or notification.

Provisions 2017 in m €	Warranty obligation	Compensation and product liability	Expected loss from pending transactions	Other provisions	Total
Current provisions	388	8	69	59	524
Non-current provisions	0	1	10	21	32
Total provisions	388	9	79	80	556
Reconciliation					
Dec. 31, 2016	388	21	65	97	571
Increase	133	2	40	41	216
Usage	-89	-4	-30	-20	-143
Transfers	11	0	6	-17	0
Reversal	-49	-10	-2	-18	-79
Discounting	0	0	0	0	0
Foreign exchange differences	-6	0	0	-3	-9
Dec. 31, 2017	388	9	79	80	556

Provisions 2016 in m €	Warranty obligation	Compensation and product liability	Expected loss from pending transactions	Other provisions	Total
Current provisions	388	17	54	74	533
Non-current provisions	0	4	11	23	38
Total provisions	388	21	65	97	571
Reconciliation					
Dec. 31, 2015	393	26	74	111	604
Increase	119	5	24	42	190
Usage	- 95	-5	- 29	-32	- 161
Transfers	1	0	0	-1	0
Reversal	-30	-5	-6	-23	-64
Discounting	0	0	0	0	0
Foreign exchange differences	0	0	2	0	2
Dec. 31, 2016	388	21	65	97	571

11 Revenue recognition and profit realisation

Revenues from sales of goods and services are recognised when the related significant risks and rewards of ownership have been transferred to the buyer. Anticipated losses related to onerous contracts are provisioned. Revenue related to construction and service contracts is recognised and measured using the Percentage of Completion method.

Under financial leasing contracts where the Liebherr Group is the lessor, revenue is recognised at the lower of the regular selling price or the present value of the future minimum lease payments. Also, sales gains or losses are determined applying the same method as for direct sales transactions. The lease payments by the lessee are split into an interest and a principal portion. The interest portion is recognised based on a pattern reflecting a constant periodic return on the outstanding net investment of the lessor.

Revenue from operating leases is recognised on a straight line basis over the lease term, unless another systematic basis is more representative of the time pattern in which the user benefit derived from the leased asset is diminished. As such, income from lease payments is recognised proportionally. The difference between payments received and income recognised is deferred.

Sales proceeds from rental equipment disclosed under non-current assets are not recognised until actual transfer of risks and rewards related to the assets occurs.

Report of the statutory auditor

To the Board of Directors of Liebherr-International AG. Bulle Berne, April 11, 2018

Report of the independent auditor on the summary consolidated financial statements

The summary consolidated financial statements of Liebherr-International AG, Bulle, which comprise the balance sheet as at December 31, 2017, the income statement, statement of comprehensive income, cash flow statement and statement of changes in equity for the year then ended, and related summary notes, are derived from the consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS) and audited in accordance with International Standards on Auditing (ISA). We expressed an unmodified audit opinion on those consolidated financial statements in our report dated April 11, 2018.

The summary consolidated financial statements do not contain all the disclosures required by IFRS. Reading the summary consolidated financial statements, therefore, is not a substitute for reading the audited consolidated financial statements of Liebherr-International AG.

Board of Directors' responsibility

The Board of Directors is responsible for the preparation of a summary of the audited consolidated financial statements on the basis described in the notes to the summary consolidated financial statements.

Auditor's responsibility

Our responsibility is to express an opinion on the summary consolidated financial statements based on our procedures, which were conducted in accordance with International Standard on Auditing (ISA) 810, "Engagements to Report on Summary Financial Statements".

Opinion

In our opinion, the summary consolidated financial statements derived from the audited consolidated financial statements of Liebherr-International AG for the year ended December 31, 2017 are consistent, in all material respects, with those consolidated financial statements, on the basis described in the notes.

Ernst & Young AG

Christoph Michel Licensed audit expert (Auditor in charge)

Florian Baumgartner Licensed audit expert

Five-Year Summary

in m €	2013	2014	2015	2016	2017
Sales revenue	8,964	8,823	9,237	9,009	9,845
Investments	830	816	751	751	749
Depreciation	405	427	448	466	485
Non-current assets	3,521	3,737	3,913	4,089	4,068
Current assets	7,998	8,111	8,349	8,572	8,949
Equity	6,442	6,525	6,761	7,051	7,396
Liabilities	5,077	5,323	5,501	5,610	5,621
Result after tax	364	316	294	298	331
Personnel expenses	2,100	2,181	2,331	2,413	2,538
	2013	2014	2015	2016	2017
Employees	39,424	40,839	41,545	42,308	43,869











