

always.

Corporate Responsibility Report and Management Report  
of the Messer Group GmbH 2014

This report complies with the G4 Guidelines of the Global Reporting Initiative (GRI). The G4 standard labels in the margin reference the corresponding text to the relevant position in the GRI Content Index (pages 98 to 101).

## Overview of the activities of the Messer Group

Messer Group GmbH (“the Company”), an industrial gases manufacturer, has its registered office in Sulzbach/Taunus near Frankfurt am Main and its postal address in Bad Soden am Taunus. It acts as management holding company and, together with its subsidiaries and affiliated companies, forms the Messer Group (“the Group”).<sup>1</sup>

G4-3

From acetylene to xenon, the Messer Group offers a product portfolio that must surely count as one of the most diverse in the market – the Company produces industrial gases such as oxygen, nitrogen, argon, carbon dioxide, hydrogen, helium, shielding gases for welding, specialty gases, medical gases and a wide variety of mixed gases.

G4-4

In state-of-the-art competence centres, the Messer Group develops application technologies for the use of gases in almost all branches of industry, in foodstuffs technology, medicine and research and science.

The Group has its own operating facilities in 32 countries. Messer is therefore represented in each of the main European markets (with the exception of the United Kingdom and Scandinavia) as well as in China, Vietnam, Algeria and Peru.

G4-6

In Germany, the Messer Group employs teams of experts that specialise in gas technologies, gas production and distribution. One highly specialised technical centre handles applications in areas such as cold grinding, recycling and cryogenics and another is responsible for developments in the area of welding and cutting. The Group’s technical centre for application processes used in the manufacturing, metallurgy, heat treatment and burner engineering sectors is located in Austria. The technical centre in France specialises in the development of processes used in the food-processing, pharmaceutical and biotechnology sectors. In China, Messer runs a technical centre for shielding gas applications and another one for metallurgical processes and burner technology.

<sup>1</sup>A full list of the subsidiaries included in the group reporting entity is provided in the list of shareholdings of the Notes to the Consolidated Financial Statements.

# We make gases out of air

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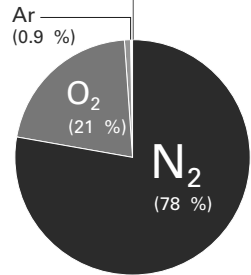
## What are industrial gases?

Industrial operations require oxygen, nitrogen, argon, xenon, neon and krypton, along with carbon dioxide, acetylene, hydrogen and helium, and a wide variety of gas mixtures. At Messer we call these gases **Gases for Life**. They are produced in large-scale industrial plants and are just as important as water and electric power for many manufacturing processes which make everyday products.

## What is air?

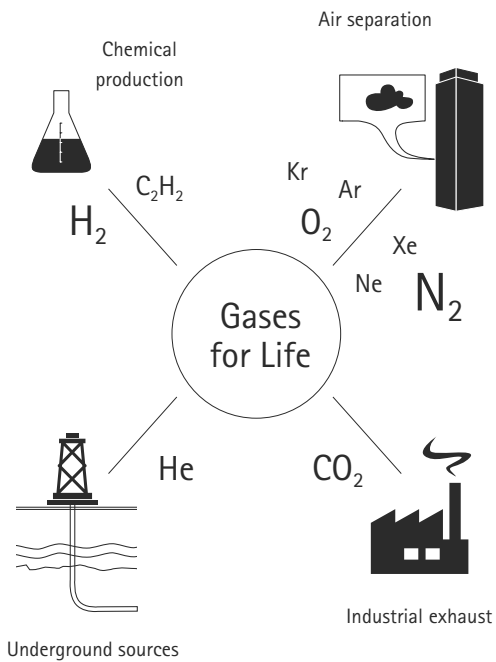
What we generally refer to as air is a mixture of different gases which make up the atmosphere around our planet. For the most part, air consists of nitrogen and oxygen, plus a small quantity of argon and traces of other gases.

CO<sub>2</sub>, Ne, He, CH<sub>4</sub>, Kr, H<sub>2</sub>, N<sub>2</sub>O, CO, Xe (all together 0.1 %)



## Where do they come from?

Oxygen, nitrogen, argon, xenon, neon and krypton are produced from the air. Carbon dioxide is primarily collected from the exhaust of industrial operations and cleaned. In some cases it is also produced from natural underground sources. Hydrogen and acetylene are produced chemically. Helium is produced from underground sources.



## How are gases produced from air?

In order to produce these gases, we use air separation units which can reach 60 metres high or more. Inside them, a physical process takes place which separates the air into its components. That process, which is also known as low-temperature rectification, basically works like this:

Air is

- filtered (dust is removed) and compressed to about six bars
- pre-chilled with cooling water
- dried and stripped of all CO<sub>2</sub> in a molecular sieve
- cooled below -175 degrees Celsius and liquefied in the main heat exchanger
- separated into liquid or gaseous oxygen and nitrogen in a separation column
- also separated into liquid argon

The gases are stored in tanks in liquid form.



### How do Gases for Life reach the customer?

In smaller quantities, gases are stored in gas cylinders. When industrial gases are needed in large quantities, we install tanks at our customer's plant. Those tanks are used to store gases such as oxygen, nitrogen, argon or CO<sub>2</sub> in liquid form. Road or rail tankers are used to transport the gas from the production plants to the customer.

Major industrial concerns such as steel works or chemical companies need so much gas that they often have an air separation unit operating on their grounds. Sometimes pipelines also supply gases to one or more major facilities, such as in industrial parks.

The greater the quantity of gases a consumer needs, the shorter the distance should be between the customer's site and the location where the gases are being produced. Generally speaking, gases are produced where they are needed: close to densely developed industrial areas.

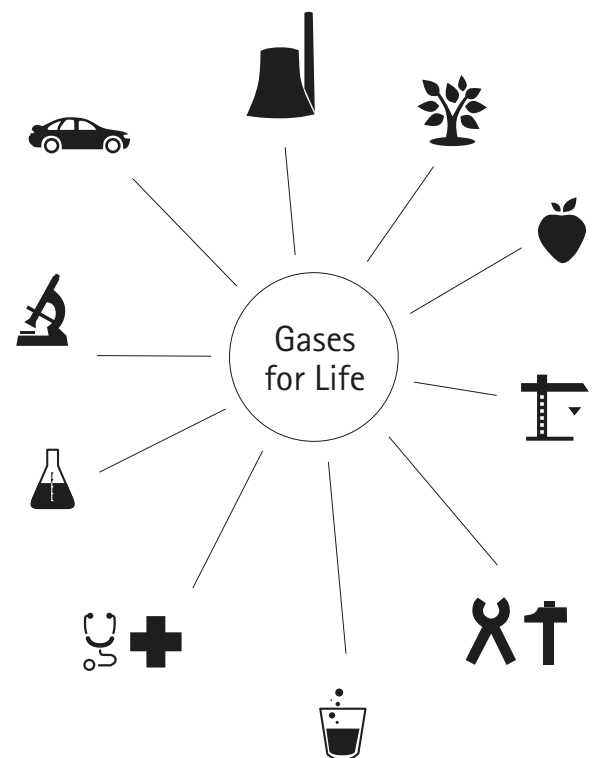


### Who needs Gases for Life?

Industrial gases are used in a variety of purity grades and for a wide range of purposes. Including as food gases and medical gases.

Industrial gases can make production processes safer and more cost-effective and improve product quality. They often contribute to environmental protection. Some processes and applications would even be inconceivable without the chemical processes of gases.

Typical user sectors include the automotive industry, the steel industry, environmental engineering, food and beverages, construction, metallurgy, glass and ceramics, medicine and pharmaceuticals, the chemical industry, and research and development.



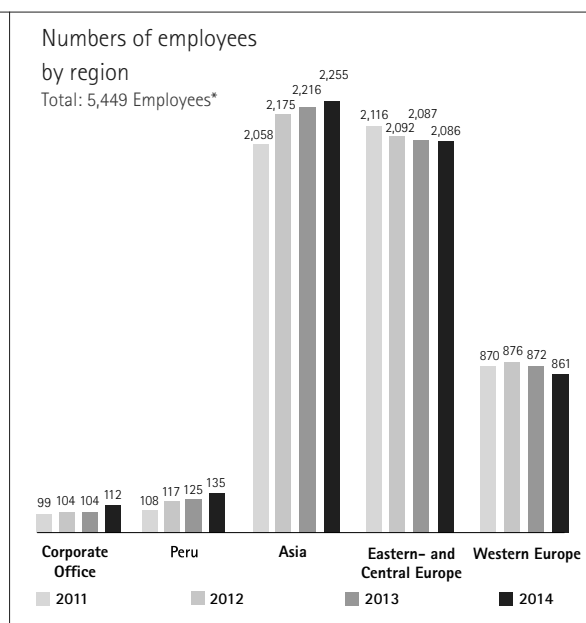
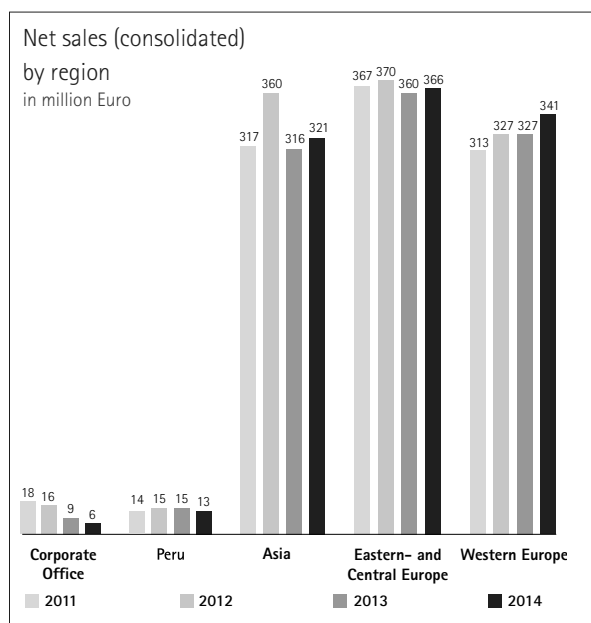
# Key figures of the Messer Group at a glance

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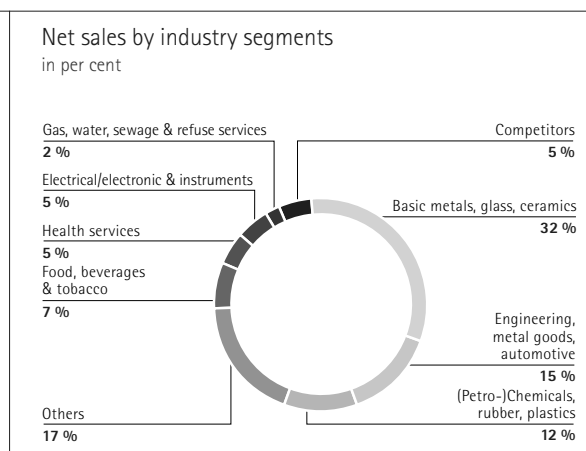
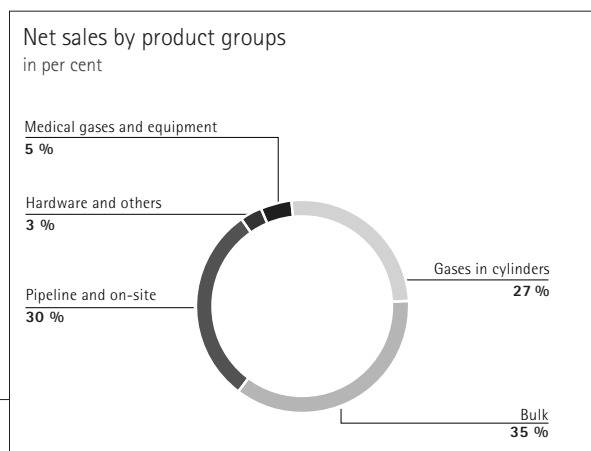
As of 31.12.2014

		2011	2012	2013	2014
Net sales	in million Euro	1,029	1,088	1,027	1,047
EBITDA	in million Euro	241	237	231	241
EBITDA margin	in per cent	23	22	23	23
Investments	in million Euro**	191	184	197	205
Employees*		5,251	5,364	5,404	5,449

\* contractual employments \*\* incl. IFRIC4



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For Messer as a family enterprise, continuity, responsibility and sustainability constitute the basis of our actions rather than the latest trends to be followed, as is the case for many owner-run companies.

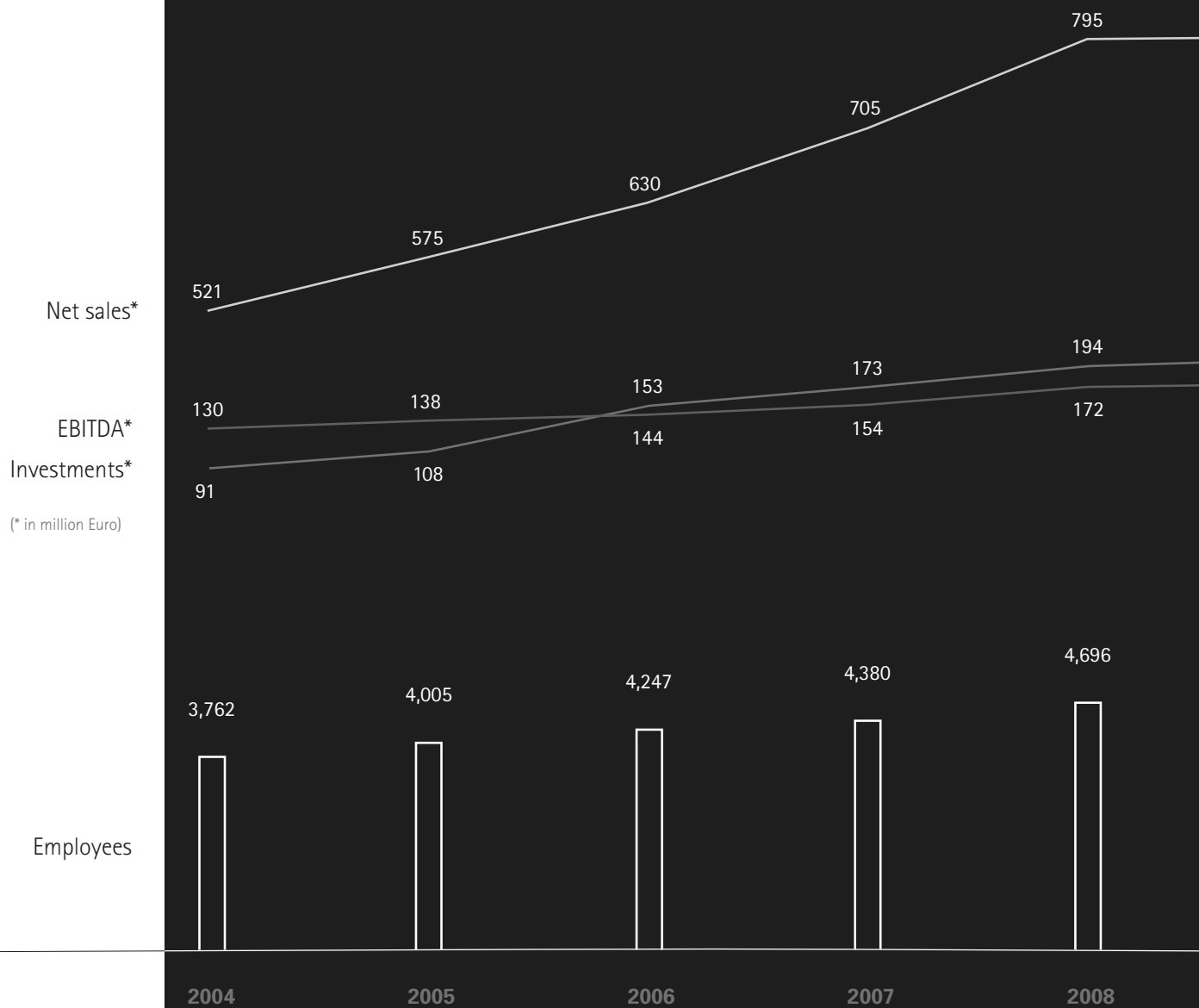
Because a conscious and responsible approach to dealing with people, the environment and resources is an absolute necessity rather than a luxury for the future of our society.

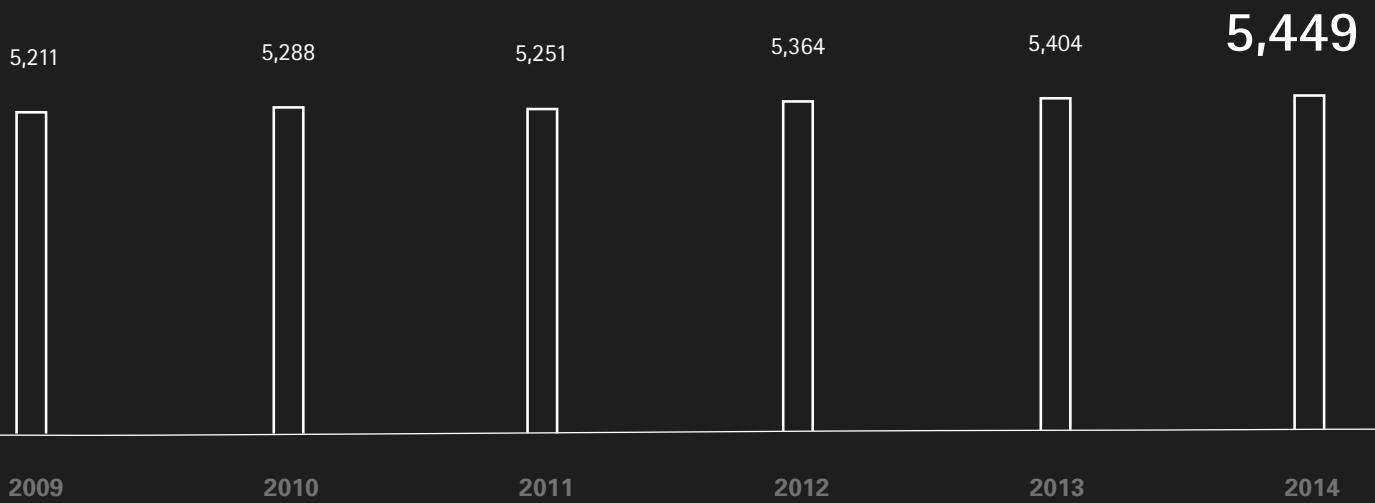
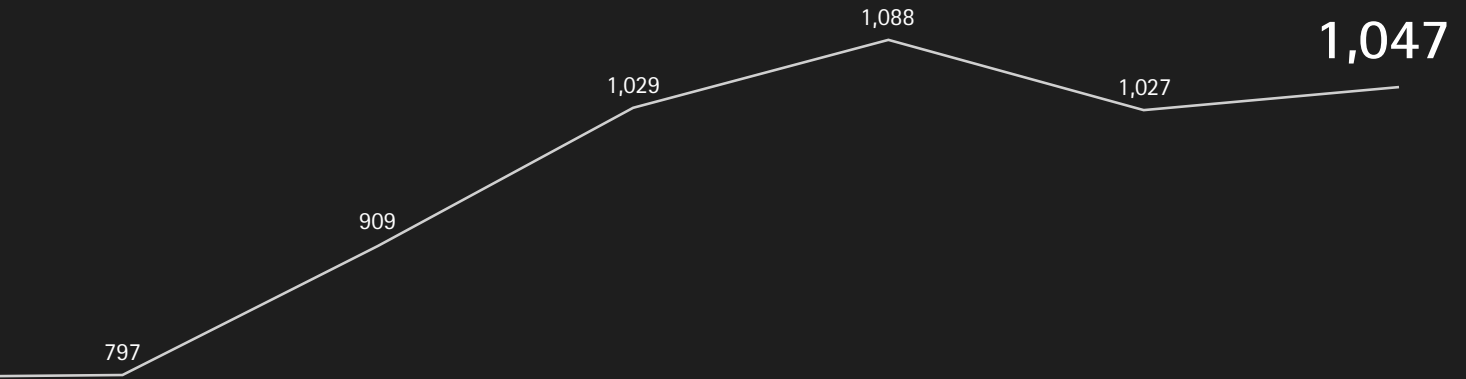
Besides our economic performance in the 2014 financial year, this report provides current and "historical" examples of sustainability being put into action, a constant component of our success as a company.

And always has been.

## Growth with vision

A look at Messer's business development shows a direct correspondence with the development of the size of the workforce. Messer does not make profit at the expense of its employees, but generates this profit based on its staff's personal commitment. As a family enterprise, that is what we consider to be a win-win situation.







**As owner and CEO of the largest owner-managed industrial gases specialist, Stefan Messer has for the past ten years been the driving force behind the strategies adopted for the future.**

## Dear Readers,

If we could stop time, we would get to enjoy many pleasant impressions and experiences more intensely – and it could be that we would also live in a more peaceful world. Conflicts always arise when people fail to take the time to understand other cultures, religious orientations and ways of life. No one of us is perfect, and we have to accept that our global world is increasingly becoming a multicultural village where we need to treat each other with decency and respect in order to avoid conflicts.

The pace of globalisation continues to quicken and, economically, there is a clear eastward trend. This means that there will be a shift in prosperity in the medium and long term, and we need to take care that we don't rest on the laurels of our past successes. Not all politicians have understood this trend and are hindering the competitiveness of our economy with new social legislation such as pensions at 60 or the introduction of a nationwide minimum wage. Europe remains a prosperous region with a rich history and culture as well as an innovative and strong economy. This should be protected by our moving even closer together and by bundling and actively using our strengths in a united Europe.

In our small Messer universe, we are already a global team with a diverse membership that is characterised by mutual respect and appreciation. Whether it's in Peru, Serbia, France, Bosnia-Herzegovina or Japan, our staff feel a bond with Messer and breathe life into the values that we as a family company have embraced. Only with respect and trust is it possible to get the best out of people and to steer the company through bad times as well as good. Despite adverse circumstances, this is what we have succeeded in doing once again this year.

Official confirmation of our customers' satisfaction came in the form of the Quality Performance & Compliance Award 2013 from the Coca-Cola Hellenic Bottling Company, who operate bottling plants for many countries in Europe. Being classified as a reliable supplier by such a large company is the kind of news that we naturally love to receive.

We have successfully continued our diversification strategy in China. In Haikou (Yunnan province), our new plant with a 300 tonne per day (t/d) liquid facility and a cylinder-filling unit has gone into operation. There were further start-ups: of a 520 t/d plant with pipeline in Chengdu (Sichuan province); a 520 t/d liquid plant with GAN pipeline and hydrogen production for steel producer POSCO in Shunde (Guangdong province); and a 10,000 normal cubic metre (Nm<sup>3</sup>) gas plant with a 300 t/d liquefier in Chongqing. At Pangang Iron & Steel (Sichuan province), all the preparations were completed for the second 40,000 Nm<sup>3</sup> gas plant to go into operation at the beginning of 2015. Our new specialty gases plant in Suzhou (Jiangsu province) and on-site krypton/xenon production at PMG and XMG are under construction. The same applies to our new CO<sub>2</sub> facilities in Mianyang (Sichuan province) and Kunming (Yunnan province). Further CO<sub>2</sub> projects in Nanjing (Jiangsu province) and Shanghai are at the preparatory stage.

In Vietnam, our second air separation unit has gone into operation for on-site customer Hoa Phat Group, and at the end of the year we signed the contract for the third unit as part of the next expansion phase. Our capacity for liquid gases in the north of Vietnam now stands at 280 tonnes a year.

Our "C7" efficiency programme for Europe, launched in 2013, has been successfully continued. Utilisation of our total production capacities, which have been greatly increased in recent years, has reached a satisfactory level. We managed to continuously reduce the specific energy consumption of our plants and installations and optimise logistics costs.

Our Italy-France country swap with the American Praxair Group was important for the development of our business in Europe. Which is why – albeit with a heavy heart – we handed over Messer Italia to Rivoira (Praxair Italy) and received Praxair France in return. The integration of Praxair's two air separation units in Creil and Ugine and our stake in a plant in L'Isle d'Abeau, as well as the filling plants in Gondecourt and St. Orens de Gameville, now give us comprehensive coverage in France.

Despite the weaker economic situation in Europe, we have once again invested in several growth projects this year. In Estonia, for example, we received an order for a VPSA on-site oxygen supply system from American glass manufacturer Owens Illinois. In Poland, we laid the foundation stone for a new liquid plant in Turek (with a capacity of 400 t/d), to supply the gases market in the northeast of the country. The construction work for our on-site facility at the copper works in Bor, Serbia, has made further progress, which means that the facility will probably go into operation in the middle of 2015.

We agreed to work closely together with the associated German company BUSE in the area of plant engineering. As a result, BUSE Gastek's CO<sub>2</sub> plant engineering and dry ice technology division was integrated into the ASCO Group whilst, in exchange, BUSE received a 30 % share in ASCO Carbon Dioxide Ltd. The ASCO CO<sub>2</sub> systems plant in Christchurch, New Zealand, was closed down and moved to the BUSE site in Bad Hönningen, Germany.

In the area of indirect cryocooling of blood and biological material with the aid of nitrogen, we have commenced cooperation with NSC Medical Cooling Systems GmbH. We expect to be able to install new equipment at several blood banks using the new technology from NSC.

Energy service provider RWE has put the first major superconducting power cable into operation as part of the "AmpaCity" project in Essen. The cable, which is cooled with liquid nitrogen, is one kilometre long, making it the longest of its kind in the world. It was successfully integrated into RWE's distribution system. We developed the cooling technology for the superconducting technology and are naturally supplying the nitrogen.

There was also movement afoot at the MEC Group, where we continued our expansion in the Castolin Eutectic division. In 2014, we implemented more projects than at virtually any time in the past. We drove

forward the development of all three of our pillars – our cash cows, our consumables and equipment, as well as our investment in future-prospect services.

The highlight was certainly the acquisition of US company Whertec Inc, which was completed in June 2014. Whertec is a boiler coating specialist and sells maintenance services to power stations, waste incineration plants, steelworks and other branches of industry. These activities will be rolled out worldwide in the coming year. We have already successfully completed the step of global duplication of technology this year with the development of new production sites in Dubai and Mexico, using the technology acquired with the Monitor Coatings Group back in 2013. We have also commenced production at the new sites in Singapore and Dalian, China. Further new plants have been opened in Poland and Moscow and existing ones have been significantly expanded and extended, such as the sites in Austria, Korea and Norway, where laser cladding systems were put into operation in 2014. In Japan, we moved into a new and larger building in Yokohama.

In the area of consumables, we have installed the new gas atomiser in Canada, while in the equipment segment, we have officially opened our new welding equipment line. These products will now form the basis for our profitable sales growth. We are also expanding our presence geographically. We have established new sales and distribution centres in Thailand and will shortly open sales offices in Nigeria and Indonesia.

2014 was a difficult year for Messer Cutting Systems due to the downturn in the economy. In particular, our Russia business was hit hard by the tightening of export controls in connection with the political embargo. Nevertheless, we have also laid the foundations for further growth in this area. The construction of what is now our third expansion in the production of laser cutting systems in China is at a very advanced stage, with the opening planned for early 2015. The new location in India, which we opened at the end of last year, has also developed very successfully.

The BIT Group has completed its consolidation in the USA and successfully continued its development as a global supplier to the in-vitro diagnostics market. The new R&D centre in Irvine, California, was opened in the summer. We have major plans for further global expansion of our activities in the smallest division of MEC and are optimistic about the future.

In May, we celebrated the 10th anniversary of the Messer Group in our old railway station in Bad Soden. Since the 100 % return of Messer into our family's ownership in 2004, we have truly achieved a great deal. We have been able to double our annual sales from a good 500 million euros to over a billion euros. That being said, to achieve this, we also had to invest 1.8 billion euros. A good third of this went into expanding our business in China and Vietnam, with the remainder primarily going into our "Independence" project, aimed at securing our independence in Europe, as well as into appropriate distribution channels. In all of this, our sights are always set on ensuring that there is a balance between our earning power and our debt burden. This means that we are now well placed for the future.

In recognition of our company's performance in recent years, and together with my family, I had the privilege on the 7th of November of receiving the "Family Business Entrepreneur of the Year" award in Berlin from the international auditing firm Ernst & Young. This award is very special, and I was delighted to receive it because it proves once more that our team has done a great deal for the successful development of Messer. I would therefore like to take this opportunity to express my heartfelt thanks for the remarkable work done by all our staff.

Our vision and dream is to live in peace and that is only possible if you are prepared to share and help those in a weaker situation. In this regard, Messer and our charitable foundations have once again managed to achieve quite a lot in the past year. I am sure that you, too, will have been able to make a contribution to world peace, because all our prosperity is worth nothing if people are fighting each other and destroying what took so much effort to build, out for reasons of envy or hatred.

Let us think about how each of us can make an individual contribution to improving our global coexistence.

I thank you for your partnership, friendship and trust.

Your

A handwritten signature in black ink, appearing to read 'Stefan Messer', written in a cursive style.

Stefan Messer

# Mission Statement

## Our vision

Messer is an important industrial gases group in its core markets of Europe and China. Messer is and will remain an independent family-run business. We think and act decisively for a long term and measure ourselves by our sustained success. Together with our partners and associated companies in the field of wear, fusion, and cutting technologies as well as precision instrumentation we develop synergies and meet our customers' needs expertly, reliably and with a flair for innovation. This is what makes us the first choice for our customers and employees.

## Our mission

As an owner-managed family business with a rich tradition we are focused on the future whilst taking into account the different conditions in our existing markets. We also use our experience and expertise to building up our position in new markets. Ranging from acetylene to xenon we offer our customers a wide range of technical and medical gases and food and specialty gases.

Our product range is completed by our excellent services and state-of-the-art technical plants and equipment. In our highly modern technology centers we work together with our customers to develop application technologies for the use of gases in almost every industry, in food technology, medicine, science and research. Our efficient and dedicated employees, our flexibility and the closeness we feel to our customers in local markets makes us their preferred partner. Through entrepreneurial flair, farsighted thinking and the continuous improvement of our processes, we create added value for our customers and so secure our mutual success in the long term. Solid finances and fair profits guarantee our independence and support sustainable growth.

## Our values

### **Customer orientation**

We are focused on the individual requirements of our customers and help them to improve their competitiveness and their performance.

### **Employee orientation**

We train, develop and promote motivated and efficient employees with integrity. We expect our employees to be resourceful and responsible team players.

### **Responsible behavior**

We take our social responsibilities towards our employees and to society very seriously:

- Safety: we are committed to the safety of our staff and the safe production, handling and use of our products.
- Health: we set working standards that ensure sound health and well-being for every individual.
- Environment: as a member of the wider society, we are committed to protecting the environment.

### **Corporate responsibility**

By responsibly managing our resources and applying the talents of our employees we are increasing the worth of our company in the long term.

### **Excellence**

Our actions are based on technical expertise, innovation, flexibility and the ability to make quick decisions.

### **Mutual trust and respect**

We believe that cooperation is based on trust, sincerity, transparency and frank communication.

We respect and abide by the culture and social customs of the countries in which we work.

## Management Board and Supervisory Board of the Messer Group

Reliability in all business activities is a quality to which both the Management Board and the Supervisory Board are committed. Over the past ten years, the Supervisory Board has supported the strategy of the Messer Group to the best of its ability and, in so doing, has always called for business sustainability alongside commercial success.

### Supervisory Board of the Messer Group:

Dr. Jürgen Heraeus, Chairman

Dr. Werner Breuers

Dr. Bodo Lüttge

Dr. Karl-Gerhard Seifert

Dr. Nathalie von Siemens

Peter Wilhelm Storm van's Gravesande

### Management Board of the Messer Group:

Stefan Messer, Chief Executive Officer

Dr. Hans-Gerd Wienands, Chief Financial Officer

Dr. Uwe Bechtolf, Strategy, Executive Vice President Accounting & Controlling

Johann Ringhofer, Executive Vice President Engineering & Production

Adolf Walth, Executive Vice President Sales & Marketing



**Dr. Werner Breuers**

**Dr. Nathalie von Siemens**

**Stefan Messer**

**Dr. Jürgen Heraeus**

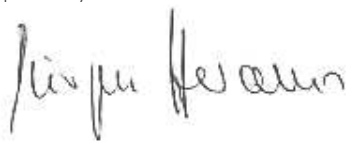
## Supervisory Board Report

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During the reporting period, the Supervisory Board performed the tasks incumbent upon it in accordance with the statutory provisions and the articles of association and provided support and advice to the Management. The Management reported to the Supervisory Board, both verbally and in writing, concerning the performance and situation of the company within the framework of regular meetings on April 10, 2014 and November 4, 2014. Furthermore, the Supervisory Board was informed about important business transactions and decisions. Legal transactions requiring the Board's approval were submitted to the Board for its decision. The Supervisory Board satisfied itself in the plenum that the bookkeeping, the annual financial statement of Messer Group GmbH and the Group accounts for the year ending December 31, 2014, as well as the management report from Messer Group GmbH and the Messer Group, had been audited and certified by the auditing company KPMG AG Wirtschaftsprüfungsgesellschaft, Essen. The audit reports were discussed at the Supervisory Board meeting on April 23, 2015 with the assistance of the auditors. The Supervisory Board had no objections and expressed its agreement with the auditor's results.

The Supervisory Board would like to thank the Management as well as all employees of the Messer Group for their efforts and successful work in the 2014 financial year.

Bad Soden, April 23, 2015  
Supervisory Board



Dr. Jürgen Heraeus, Chairman



**Peter Wilhelm Storm  
van's Gravesande**

**Dr. Hans-Gerd Wienands**

**Dr. Karl-Gerhard Seifert**

**Dr. Bodo Lüttge**

# Corporate Responsibility Report

of the Messer Group GmbH 2014



**Dr. Hans-Gerd Wienands**

**Stefan Messer**

## Commitment to sustainability

G4-1

The Management of Messer Group GmbH is committed to acting in a responsible and sustainable manner as part of its economic and social integration into society.

### **Stefan Messer, owner and Chief Executive Officer:**

"We recognize and accept our social responsibility towards our employees and society in different areas: the safety of our employees, customers and partners when using our products is our number one priority. We are also committed to protecting our environment and climate by constantly improving our processes and focusing our development on technologies that make our customers' production processes more efficient and resourcefriendly. Messer has a presence in thirty countries. We respect the cultural differences as well as rights in the regions in which we operate. We contribute to community life and education in these regions through the provision of wide-ranging support."

### **Dr. Hans-Gerd Wienands, Chief Financial Officer:**

"We conduct our business on a sustainable basis and guarantee our autonomy and independence through forward-looking investments. This enhances our customers' and financial partners' confidence in us and gives our employees long-term security. We operate with maximum transparency vis-à-vis our stakeholders. Responsible behaviour is an important factor when choosing a business partner. We take this into account by viewing corporate responsibility as a strategic matter and integrating it into our processes."

## G4-18 Strategic integration of corporate responsibility

The key themes concerning our responsibility in the economic and social spheres are derived from our own objectives, traditions and innovations as well as from general standards. The core areas are our values as a company, our customers and the markets in which we operate, climate and environmental protection, safety, our employees and society.

Since Messer Group GmbH was founded, we have been pursuing long-term objectives to take the company forward on an independent and profitable footing. We have always observed the principles of the "honourable businessman", acting responsibly with regard to our place in society. Our corporate responsibility has been strategically embedded in our processes since 2014 through the cross-divisional Corporate Responsibility function. We have set ourselves measurable goals in the different business units to document our improvements and development. We are publishing these goals in this Corporate Responsibility Report for the 2014 financial year, which features extensive comparisons with the results achieved in 2013. In future, we will carry out transparent comparisons of these key performance indicators and let our stakeholders judge us on them.

G4-15 In this context, we support our customers' aim of checking and ensuring the sustainability of their own activities and supply chains. We therefore also report to contracted third parties, e.g. Ecovadis or the 'Carbon Disclosure Project', at our customers' request.

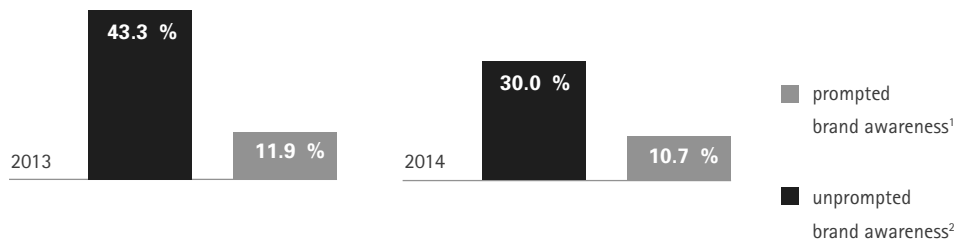
## Our brand: "Messer – Gases for Life"

In contrast to many other companies and our competitors, the Messer company name is not a made-up name. It is the Messer family name, which gives the company and its products a special identity and importance as a family enterprise.

The "Gases for Life" company slogan was introduced in 2011 and has been an integral part of the Messer brand ever since. "Gases for Life" is intended to demonstrate the diversity of the products and the responsible behaviour of Messer as a family enterprise. Through an international advertising campaign, we want to show and explain to customers and the general public where gases are hiding as invisible helpers. The campaign, which also includes a website and the "Gases for Life" customer magazine, is aimed at achieving long-term competitive advantages through emotional branding.

## Reputation of the company and brand awareness

We regularly analyse the Messer brand's reputation scores and the media feedback. The latest reputation survey amongst approximately 1,000 people in Germany, which was carried out by an independent institute, showed that brand awareness was 10.7 per cent. In the previous year, brand awareness in Germany was 11.9 per cent. In future, we will also measure brand awareness in selected core markets. The media response analysis shows that 100 per cent of the reports published about Messer were positive and provided an accurate picture of our business activities. Through publications in independent online and print media, we achieved gross reach of 43,498,814 people. Media reach is determined according to standard criteria to ensure comparability. Gross reach indicates the number of contacts.



## Communication with our stakeholders

The Messer Group promotes and takes advantage of regular contact and exchange with its stakeholders. These comprise our employees, customers, potential customers in industrial, medical and pharmaceutical sectors as well as in research, science and teaching, the shareholders of the Messer Group, our neighbours, the broad public and the Internet community. We have occasional contact with non-profit organisations as well as governmental and non-governmental organisations. As an owner-managed company, our cooperation is based on trust, honesty, transparency and open communication. We are committed to these values so that our customers, business partners and the public justifiably perceive us as a reliable and trustworthy organisation.

G4-24, G4-25, G4-26, G4-DMA  
Open communication and  
cooperation with our stakeholders

<sup>1</sup>Survey without mention of different industrial gas manufacturers

<sup>2</sup>Survey with mention of different industrial gas manufacturers

G4-18, G4-27, G4-20,  
G4-21, G4-26

## Generation of our materiality matrix

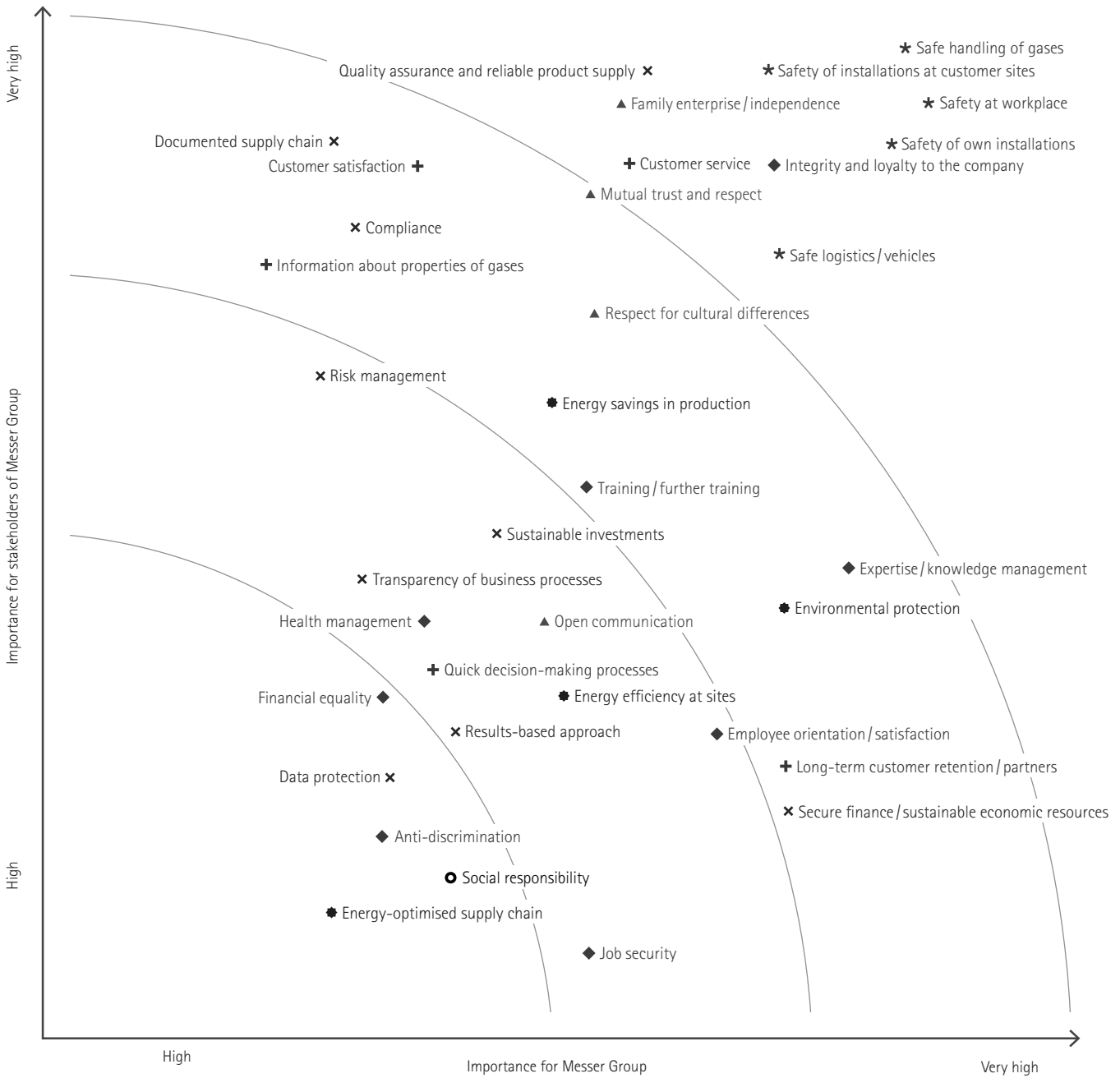
The material topics of our strategic sustainability process are generated from our daily and long-term actions and activities. We consider it important to include representatives of all stakeholders in the evaluation of these topics. We therefore compiled an extensive list of individual topics covering the categories of environment/climate protection, economy/business, values, products/services/markets, safety, information/data protection, customers, employees, society and suppliers. To achieve a differentiated prioritisation of our internal stakeholder groups, such as owners, management and employees, around ten per cent (approx. 500 employees) voluntarily completed an anonymous online survey where they rated the topics on a scale of one to ten, with one being important and ten extremely important. We also evaluated 17,000 customer opinions from the latest customer survey and used the information in our analysis. The anonymous online survey was also completed by selected journalists.

When compared with the materiality matrix that we generated for the 2013 Corporate Responsibility Report, it can be seen that the topics related to every aspect of the safe handling of gases and the safety of our installations, as well as safety in all workplaces, continue to be of the utmost importance for our company. As a result of the expanded survey of employees, the current materiality matrix places greater emphasis on implementing and complying with our values as a company as well as on integrity.

All key topics can both be influenced by our decisions and have a potential impact on stakeholder groups outside of the organisation. All key topics are therefore relevant both within and outside of the organisation.

# Materiality matrix

G4-19



- ▲ Values
- ✕ Economy and business
- ★ Safety
- ⚙️ Environmental and climate protection
- ◆ Employees
- Society
- ◆ Employees
- +

## Corporate Responsibility

Customer and employee orientation, responsible behaviour, corporate responsibility as well as open communication, trust and respect: all of these are embedded in the Messer Group's mission statement. Shortly after bringing all of the company's shares back into family ownership in 2004, Stefan Messer personally drove forward a discussion of values, which led to a company-wide vision and mission as well as the formulation of the company's values. Ever since the foundation of the Messer Group, we have acted sustainably to meet the needs of our customers in accordance with our collective responsibility for people, progress and the environment. In order to make these values and the corresponding developments measurable and comparable, for the first time this year, Messer has introduced Key Performance Indicators (KPI). The following twelve key topics are relevant for every Group company:

	Unit	2013	2014
<b>1. Safety of our employees</b>			
Number of Lost Time Injuries (Messer employees)	persons	36	18
Lost Time Injury Frequency Rate - LTI FR (Messer employees lost time injuries)	per million working hours	3.6	1.7
Lost Time Injury Severity Rate -LTI SR (Messer employees lost days)	per million working hours	65.0	47.6
Number of Recordable Working Injuries - RWIs (Messer Employees)	number	63	36
Recordable Working Injury Frequency Rate - RWI FR	per million working hours	6.3	3.5
Fatalities (Messer employees)	persons	0	0
<b>2. Safety of our logistics</b>			
Cylinder fleet: Number of preventable incidents	number	9	11
Cylinder fleet: Frequency Rate (Number of preventable incidents)	per million driven kilometres	0.35	0.49
Bulk Fleet: Number of preventable incidents	number	21	14
Bulk Fleet: Frequency Rate (Number of preventable incidents)	per million driven kilometres	0.40	0.30
<b>3. Safety of our customers</b>			
Total number of customer installations (Messer owned)	number	./.	6,644
Number of technical reviews of customer installations	number	./.	7,553
Ratio: Number of technical reviews / Number of Messer owned customer installations	number	./.	1.14
Number of safety audits at customer sites with Messer's installations	number	./.	1,199
Ratio: Number of safety audits at customer sites / number of Messer owned customer installations	number	./.	0.18
Number of safety trainings provided to customers at any customer site	number	./.	1,697
Total number of customer training participants	persons	./.	3,841

G4-PR1

	Unit	2013	2014
<b>4. Mutual trust and respect</b>			
Number of cases reported in respect to discrimination	number	0	0
Number of employees trained in this respect	number	./.	171
<b>5. Energy efficiency in production</b>			
Specific power (energy consumption in relation to sold product)	kWh	1.3560	1.3557
<b>6. Open communication and cooperation with stakeholders</b>			
Media resonance analysis: Gross coverage	persons	./.	43,498,814
Brand awareness (Germany)	per cent	11.9	10.7
<b>7. Protection of the environment</b>			
CO <sub>2</sub> Footprint of plants and logistic	million tonnes of CO <sub>2</sub> e	2.62	2.67
Number of production / filling companies in EU certified to ISO 14001	number	14	16
Number of new customer installations (bulk) for applications which protect the environment	number	188	169
<b>8. Independent, family-run company values</b>			
Net Debt/EBITDA-Ratio	per cent	1.91	1.84
EBITDA/Sales-Ratio	per cent	22.5	23.0
<b>9. Customer satisfaction</b>			
Number of participants in customer satisfaction surveys across the Group	persons	624	2,041
Percentage of credit notes in relation to number of invoices issued	per cent	3.9	3.2
<b>10. Employee satisfaction</b>			
Average length of service	years	9.3	9.7
Staff turnover rate	per cent	7.4	9.0
Sick days per employee	persons	3.33	2,96
<b>11. Employee development</b>			
Expenditures on training programs per employee	Euro	233	207
Training days per employee	days	4.01	3.61
Apprentices and trainees in total workforce	persons	82	85
<b>12. Compliance</b>			
Inquiries submitted to the "Ask us help desk"	Compliance cases reported	29	2
Number of compliance trainings	number	29	74

# Our values

## Tenth anniversary of Messer Group

Messer Group celebrated its tenth anniversary in May. Ten years ago, Stefan Messer sent an internal memorandum to everyone in the Messer World, proudly announcing that the company had been successfully taken back into family ownership. More than 3,700 colleagues in more than 30 national subsidiaries found a new home as employees in the newly founded Messer Group and – in Stefan Messer – an owner and CEO who would do everything in his power for them and for the survival of the company. There was a spirit of optimism and a real team spirit among the 85 head office staff who, together with Stefan Messer, ventured the move from Messer Griesheim GmbH to the new Messer family company. Many of the original staff still remember the initial challenges: the fresh start required the implementation of a completely new company organisation, while business in the affiliate companies had to continue in parallel. In addition, there was the widespread belief in the markets that Messer no longer existed as a company – brought about by false reports connected with our contractually agreed non-competition clause and an agreement not to use the Messer brand in Germany up to 7 May 2008. Messer responded to this by founding Gase.de Vertriebs GmbH, which commenced operations in Germany in May 2007 with Stefan Messer at the helm. Since May 2008, it has been trading under the name of Messer Industriegase.

In spite of the worldwide financial crisis, our sales topped the billion euro mark for the first time in the new company's history in 2011. A new home was created for the company with the construction of the headquarters in Bad Soden. Today, 120 employees work for Messer Group in Bad Soden and Krefeld or as foreign delegates. We at Messer remember the motivation we experienced when the Messer Group was founded. It is important that we now tackle the company's new goals with the same ambition and enjoyment in order to continue Messer's success story as a family enterprise.

G4-56, G4-DMA  
Independence

## The company's mission statement

Customer and employee orientation, responsible behaviour, corporate responsibility as well as open communication, trust and respect are firmly embedded in the Messer Group's mission statement. Immediately after bringing all the company's shares back into family ownership in 2004, Stefan Messer personally stimulated a discussion of values, which led to a company-wide vision and mission as well as the formulation of the company's values. A working group of ten executives from different countries developed the mission statement ten years ago, taking the expectations of the staff fully into account. This then led to the signing of the "Dubrovnik Agreement" at a management conference in Dubrovnik, Croatia, in 2005. Thanks to numerous measures and a fruitful dialogue within the company, the Messer

Group's mission statement has since penetrated deep into the organisation and serves in a targeted manner as a message for customers and the public. Who we are, how we see ourselves, what we want to achieve and what our accompanying values are – our mission statement answers these questions.

This can be summarised as follows:

Messer is an independent, owner-managed family company producing industrial gases with a focus on Europe and China.

We act sustainably to meet the needs of our customers in accordance with our collective responsibility for people, for the environment and for progress.

## Engagement in the economic sphere

At Messer, both executives and employees are engaged in the economic and social spheres in a variety of ways. The subsidiaries are engaged in various industrial associations at a local level.

### **The owner's personal involvement**

As Vice President and member of the General Assembly of the Frankfurt am Main Chamber of Commerce and Industry (IHK), Stefan Messer holds the office of Chairman of the Foreign Trade Committee and is a member of the Foreign Trade Committee of the German Association of Chambers of Commerce and Industry (DIHK) in Berlin. Stefan Messer is the President of the International Oxygen Manufacturers Association (IOMA), Washington. At the EIGA, the European Industrial Gases Association in Brussels, Stefan Messer is on the board of directors. He is also Honorary Senator of the Technical University Darmstadt and Honorary Senator of the Goethe University Frankfurt, as well as a member of the board of trustees of the economics faculty and the board of trustees of the China Institute at the Goethe University Frankfurt. Furthermore, he is a member of the board of the German-Swiss Chamber of Commerce, a member of the advisory committee of the FrankfurtRheinMain Economic Initiative, a member of Commerzbank AG's advisory committee for the State of Hesse and a member of the state advisory committee of the Gerling group. He is also a member of the Friends of the German-Vietnamese University and sits on the board of Dachser GmbH & Co. KG. Since January 2009, Stefan Messer has been Honorary Consul of the Republic of Slovenia for the Consular District of Hesse, Rhineland-Palatinate and Saarland. Stefan Messer is also involved in the ASU Association of Family Entrepreneurs, which supports the fundamental values of the social market economy, particularly free enterprise. Furthermore, Stefan Messer supports the OAV East Asian Association on its committee and board and is Chairman of the "Thailand" Committee. In addition, he is a member of the Economic Advisory Committee of the German Red Cross as well as a member of the board of the German International Chamber of Commerce (ICC).

G4-15, G4-16

### **Economic engagement in associations**

Messer Group is a member of the European Industrial Gases Association (EIGA). The association, which is based in Brussels, represents almost all European companies which produce and sell industrial, medical and food gases. The association members work together to achieve the highest possible safety and environmental standards in the production, transport and use of gases. At the beginning of each working meeting organised by the EIGA, compliance with the "EIGA anti-trust meeting rules" is stressed.

Messer Group is a member of the German Welding Society (DVS-Verband e.V.). DVS is a non-profit-making, technical-scientific association based in Dusseldorf. The organisation's aim is to promote welding and allied processes beyond the circle of its members. Messer employees are involved in expert committees, support research projects and establish and maintain contact with other highly qualified industry professionals.

Our subsidiaries are involved in various industrial associations at a local level.

## Open communication builds trust

Regular contact with customers, suppliers, employees, industrial firms or organisations; with the media, our neighbours; with the general public and the Internet community – and not forgetting our valued retirees – is important to us. The wide range of requirements is reflected in the diversity of communication channels. Information about the Messer brand, about product properties or special technologies has to be produced and made available in the appropriate format. And it should be easily accessible. For this, Messer uses a variety of channels.

### **Our online presence at [www.messergroup.com](http://www.messergroup.com)**

With an average of 10,000 visitors a week accessing our European web pages, our online presence is an ideal platform for finding out more about the activities of Messer and about products and applications, as well as about the history and characteristics of a family company. The country selection featured on the home page provides access to the websites of our more than 30 national subsidiaries around the world.

### **The annual report**

G4-30

Annual reports, which are published once a year following conclusion of the financial year, are now no longer just a disclosure of key financial data and core projects. Together with the corporate responsibility report, they are an ideal compendium for allowing the economic and technological development of a company to be assessed. This is particularly important for transparency vis-à-vis financial partners and key accounts and thereby for establishing trust. Since annual reports are very extensive documents, they are made available both on the Internet and in printed form. Messer's latest annual and corporate responsibility report is always available for download at [annualreport.messergroup.com](http://annualreport.messergroup.com).

A propos: all the annual reports from 1964 to the present are available for download on the company website [messergroup.com](http://messergroup.com). The archived annual reports and the outlines of the economic environment in which the company was then operating (written by historian Dr. Jörg Lesczenski) chart the economic cycles, the growing integration of national economies and the rise of new boom regions which presented Messer Griesheim GmbH (set up in 1965) with increasing challenges in the last third of the 20th century. These continue to have a significant bearing on the development of the Messer Group.

### **Gases for Life, the industrial gases magazine**

Our industrial gases magazine was conceived for readers who are already acquainted with Messer and want to find out more about the diversity of our business. It is written in clear, comprehensible language and richly illustrated. But we consider it just as important to get different people interested in the world of gases – from technical experts to students with a thirst for knowledge. Because gases are as important as water and electricity in everyday life. And communication today is as multifarious as the numerous platforms that exist: but everything can also be found on the World Wide Web.

### **Gases in everyday life at [www.gasesforlife.de](http://www.gasesforlife.de)**

[www.gasesforlife.de](http://www.gasesforlife.de) describes applications and processes where gases are used in all spheres of life such as nutrition, leisure, healthcare, communication, mobility, environmental protection, science or living. Our texts are aimed at a general readership rather than technical experts or those whose work involves the use of gases. The target groups for this website include journalists, teachers, students, school children and consumers. All images and texts can be downloaded for free.

### **Free infographics**

Under the heading "Info & downloads" on our homepage, we provide free access to easy-to-understand graphics relating to processes and gas technologies, such as the production of gases through air separation, shrink fitting of metal components or soil freezing with nitrogen. This material is used primarily by journalists and students.

### **GaseWiki at [www.gase.de](http://www.gase.de)**

GaseWiki is a free encyclopaedia about the world of gases. It is written by voluntary contributors, rather than by a permanent editorial team. This initiative by Messer is intended to provide a structured, comprehensive presentation of knowledge on specific topics as well as information about every aspect of the world of gases. Knowledge is central to GaseWiki: in no way is it attempting to compete with the much bigger Wikipedia, upon which it is modelled. GaseWiki is a collection of pages, the vitality of which is based on the principle of transmitting knowledge about gas-related topics. As well as reading the pages, every visitor can also alter them and add new ones.

### **Messer in the social media**

Studies show that social media are increasingly becoming the first port of call for people who are looking for information about products or a company. Even in a crisis situation, the public gets their information here first. However, not all of these networks are available in every country, which is why use can vary significantly from region to region. In order to be able to respond to the changes in communication, Messer Group has created several official channels in the most widely-used social networks in Europe: our "Gases for Life" campaign is aimed at further raising awareness of the Messer brand. The use of gases in the production of everyday objects offers a wealth of stories which we can disseminate through social media in order to reach a large number of people.

**Facebook** is the largest and most active social network. It is being increasingly used by the public and journalists as a source of information, which is why Messer has also created an official Facebook page. We use it to feature content from articles in our magazine, share short stories about our day-to-day work and provide links to videos on our YouTube channel. Anyone can contact Messer via Facebook and get answers to their questions immediately after submitting them.

**Google+** is a Facebook-like platform run by the search engine operator. We maintain similar content here to that on Facebook. As this network is going to be increasingly integrated into Google search in future, the content of company profiles will also be included in the search results.

**Twitter** is used by Messer primarily to disseminate press releases. Users can receive these messages by subscribing to them.

**Xing** is used for professional networking with customers, partners and colleagues. Messer has a company profile on Xing which conveys some information about the size of the company as well as the annual financial statement. Furthermore, every employee whose profile specifies Messer Group as their employer is linked to this page and can be easily contacted.

**YouTube** is a public video platform on which Messer also has its own channel. All the videos produced by Messer are released here, featuring such events as official openings and the laying of foundation stones. The video messages relating to our employer branding campaign are also published here, as are videos which draw attention to "Gases for Life"; that is, the use of our products in the manufacture of end products.

## Awards and commendations

### **Stefan Messer: Honorary Family Business Award**

At the German Historical Museum in Berlin on the 7th of November, Stefan Messer received the "Family Business Award" from the international consultancy and accountancy firm Ernst & Young (EY).

The award was presented at the "Entrepreneur of the Year" competition, which each year acknowledges entrepreneurial excellence in different categories. "The entrepreneur saved the company his family founded in 1898 from imminent insolvency and repositioned the supplier of industrial gases for international business. The judges were particularly impressed with the future potential. Added to that is the implementation of social entrepreneurship as a model for responsible, sustainable behaviour," said Peter Englisch of Ernst & Young, explaining the decision of the independent panel of judges as he presented the award. The "Entrepreneur of the Year" award is presented in over 60 countries worldwide, and was presented in Germany for the 18th time in 2014. The competition organised by EY is supported by well-known companies and media organisations.

### **Coca-Cola HBC AG's best supplier**

The largest Coca-Cola bottler in Europe, Coca-Cola Hellenic Bottling Company AG (CCHBC AG), awarded Messer the Best Supplier of 2013 award in the "Quality Performance & Compliance" category. To assess the performance of suppliers, all the European plants that bottle Coca-Cola and other Coca-Cola products award points over the course of a year in a structured reporting system, thereby ensuring an

objective assessment. Messer presently supplies carbon dioxide and nitrogen to CCHBC AG bottling plants in Austria, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Poland and Serbia. The award will support Messer in continuing to develop its partnership with Coca-Cola.

### **“Oscar of Austrian business”**

The Austrian business magazine “WirtschaftsBlatt” and its partners PwC Austria and KSV1870 – Austria’s largest association for the protection of creditors – named Messer Austria as one of “Austria’s 100 Leading Companies”. In the “Goldener Mittelbau” category for medium-sized companies with an annual turnover of ten to 50 million euros, Messer Austria came in the top third. The panel of judges based their decision on the assessment of issues such as “quality and safety”, “sustainability” and good performance indicators when it comes to business data and business development over the past three years. The selection of “Austria’s 100 Leading Companies” took place for the 16th time in 2014. The competition is regarded as being the “Oscar of Austrian business”.

### **Messer Austria receives environment award**

Messer Austria was one of five Austrian companies to receive the “EMAS Award 2014” at the “EMAS” (Eco Management and Audit Scheme) annual conference in Krems on 27 May 2014. The company was given the award for its comprehensive environmental and sustainability management, whereby the construction of its new state-of-the-art air separation unit in Gumpoldskirchen delivered increased production capacities as well as improved energy efficiency and thus sustainable energy savings. The waste heat generated during production is used to heat the entire Messer site. Moreover, Messer Austria is continuously improving its business processes by taking purposeful and systematic action in all quality- and environment-related areas with a view to precluding or minimising potential negative environmental impacts, such as with the conversion to paperless billing.

EMAS was set up by the European Commission in 1993 as a voluntary instrument for systematic environmental protection. The Management and Audit Scheme helps companies to be more innovative, to reduce their environmental impact and costs and to improve their management to ensure environmental benefits.

### **Messer Group receives safety awards**

At this year’s June summer conference of the European Industrial Gases Association (EIGA) in Krakow, Poland, Messer Group received six safety awards for exemplary safety at work.

Messer Croatia Plin, Croatia, received a gold “EIGA Safety Award” for zero accidents in the last 20 years at its Kutina site. Another gold “EIGA Safety Award” went to Messer Vardar Tehnogas for 15 years of zero-accident operation at its site in Skopje, Macedonia. The silver “Safety Award” for ten years of zero-accident operation was received by Messer Tehnogas for its Niš site in Serbia and by Messer Croatia Plin for its Zaprešić site. The El Morell site of Messer Ibérica de Gases in Spain and the Kraljevo site of Messer Tehnogas in Serbia were each rewarded with a bronze “Safety Award” for zero accidents in the last five years.

### Responsible Care

At an awards ceremony in Gumpoldskirchen on 17 September 2014, Messer in Austria was presented with the "Responsible Care" certificate. Responsible Care is a global, voluntary initiative developed by the chemical industry with the aim of improving health, safety and environmental performance through self-regulation. The certificate, which is valid for a period of three years, is awarded to companies that meet the initiative's strict conditions.

As a gases manufacturer, Messer is a member of the Austrian chemical industry association FCIO and has committed itself to the Responsible Care standards.

### And always has been ...

### Values

2004	Start of discussion on values
2005	Development of corporate mission statement
2006	Implementation of vision, mission, values
2007	Preparation of company history
2008	Implementation of "GaseWiki"
2009	Messer is one of the "Brands of the Century"
2010	Stefan Messer is "Family Business Owner of the Year"
2011	Opening of Industrial Gases Museum
2012	New "Messer Gases for Life" brand
2013	Strategic CSR process
2014	Stefan Messer receives "Family Business Honorary Award"

# Our employees

## Integrity and loyalty to the company

This year, Messer Group celebrated a decade of success as a wholly family-owned company. In the years ahead, Messer's success will continue to depend on motivated, committed and creative employees. We train and promote employees of integrity – we expect them to be resourceful and responsible team players.

In the joint process of defining our employer brand, we established what characterises our working culture:

Messer suits those who ...

- ... are not easily satisfied.
- ... never want to stop learning.
- ... thrive when given the freedom to achieve.
- ... focus on the essentials.
- ... don't need to prove themselves.
- ... can keep things in perspective.
- ... appreciate frankness.
- ... enjoy an open dialogue with colleagues.
- ... are easy to work with.

G4-LA1

### **Length of employment and staff structure**

Across the Group, the average length of employment for our staff since joining is 9.7 years compared with 9.3 years in 2013. We are proud of the fact that our employees are loyal to the company over such a long period of time. As of 31 December 2014, the Messer Group employed an average of 5,550 people worldwide. Of these, approximately 74 per cent are male and 26 per cent female. The proportion of our employees with severe disabilities is 0.78 per cent.

Total staff turnover increased slightly from 7.4 per cent in 2013 to 9 per cent in 2014. Happily, the number of sick days per employee went down from 3.33 in 2013 to 2.96 in 2014. This does not include employees who have been off sick for more than six months (employees on long-term sick leave).

The Messer Group trained a total of 85 apprentices and trainees in 2014. That's three more than in 2013.

**Messer is one of the most popular employers in Bosnia**

In a poll organised by the online jobs portal Posao.ba to determine the most popular employer in 2014, Messer BH Gas received an award in the Oil and Gas category on 25 April 2014. At the awards ceremony, companies in Bosnia and Herzegovina were recognised for their personnel management. The aim is to improve the relationship between employer and employee and create an atmosphere in which staff can develop and advance. For example, Messer BH Gas invests in vocational training for young members of staff. Thanks to this personnel strategy, along with our employees' know-how and our high-quality products, we have been very successful in Bosnia and Herzegovina for 15 years, enjoying a good reputation with customers, partners and job-seekers.

**Girls' Day in Krefeld too**

On the occasion of this year's Girls' Day on 27 March 2014, Messer Group in Krefeld, along with many other companies, factories, colleges and universities throughout Germany, opened its doors to school-girls in the 10 to 15 age range. 14-year-old Alessa Adelsbach got a taste of the exciting work done in the offices of the Engineering & Production department. For example, she was given an insight into the day-to-day work involved in the construction and operation of air separation units. Girls' Day is the largest career guidance project for schoolgirls worldwide. More than 1.3 million girls have taken part since the launch of the campaign in 2001. In 2013, some 109,000 girls explored opportunities in engineering and the natural sciences. Girls' Day introduces girls to apprenticeships and courses in IT, the trades, natural sciences and engineering, where women account for a maximum of 40 per cent of trainees or employees.

**Campaigns for a sense of togetherness**

The sharing and exchanging of knowledge and a sense of togetherness among colleagues are typical of working at Messer. This is demonstrated by the latest examples from Slovenia:

At the end of 2014, the fifth staff meeting between Messer Slovenija and Messer Croatia Plin took place in Slovenia.

At the end of September 2014, Messer Slovenija invited its staff to a traditional weekend event, which this time took place in the Goriška Brda wine-growing region. While enjoying local specialities and wines, the staff took advantage of the opportunity for a personal exchange of ideas and information so as to better master the everyday challenges of the workplace.

Even former Messer employees feel a close affinity to their company, as demonstrated by Messer Slovenija's annual retiree meeting, with 40 retirees taking up their former employer's invitation. The meeting is also very popular with current staff due to the active exchange of experiences.

## Training and professional development

Personnel development includes education and training as well as employee networking for the purpose of team-building. Even if there is an established training programme, Messer welcomes and encourages individual suggestions for personal advancement. This not only applies to employees of many years' standing but is also aimed at retaining young staff at the company. We train young staff centrally at Messer Group as part of a trainee programme lasting one and a half to two years and offering sound commercial or technical training for graduates.

G4-LA9 Messer's staff development programme operates at a local and central level, meaning that both management and staff can express the need or desire for training. The most important source for obtaining such information is the staff appraisal meeting. A new questionnaire is designed to ascertain the requirements even more specifically. Staff can use a feedback form to make a written record as to whether training delivers what it promises. The Messer Group has specific centrally recorded training and development plans for a selected group of approximately 6.9 per cent of staff. A corresponding database is maintained for some 380 persons.

Local staff development is based on the independence of the national subsidiaries with their own HR managers with appropriate powers, for example to manage staff development themselves on the basis of the staff appraisals.

In 2014, the average spend on training was 207 euros per employee. In 2013, it was 233 euros. Compared with 2013, the number of training days per employee decreased from 4.01 to 3.61.

In 2013, a major Group-wide campaign was initiated with the aim of improving the English language skills of staff across the different entities, which will be continued over the next three years.

G4-LA10 **Development and learning programmes**

We use "Academy Messer Group" as an umbrella brand for our development programme. This includes the Junior Circle, a two-year programme which introduces 18 selected employees from Europe and Asia to our entire value chain in five one-week modules and prepares them for project work and as successors for senior positions within the company. The second Circle will start in June 2015. In parallel, our managing directors and second-tier managers are given annual training in specific areas such as intercultural cooperation. However, the Academy Messer Group will also cover central training topics. At the moment, standardised training in the local language is being set up for gases sales staff under the heading "Focus on Cylinder".

Furthermore, increased use of e-learning is being made in areas that involve standardised knowledge transfer. Online instructions on safety as well as on ergonomics in the workplace and the office are a new addition. Each entity also offers new staff an on-the-job training phase. Among other things, this serves to convey and test knowledge on the job. From accounting through to filling, this method of personnel development cuts across all the functions. In particular, technical staff are given customised

training with regard to changes and improvements in their area of work, such as regular training sessions on the safe handling of hazardous materials, SAP training, forklift operator training etc. Messer offers a staff exchange programme, greater use of which is to be made in its new form in the future. We also want to offer young students, especially those undertaking technical courses, the opportunity to work with us on projects, combined with assignments abroad, as part of a mentoring scheme designed to make ourselves attractive as an employer at an early stage.

## Employee orientation and satisfaction

G4-DMA Equal treatment

### **Behaviour towards other employees**

We regard the diversity of people working for Messer as one of our company's strengths. The differences in terms of our employees' background, culture, language and way of thinking give us a competitive advantage by virtue of the fact that they contribute to ideas and innovations through their openness and willingness to embrace change. Each employee needs to be aware of the fact that their behaviour is always associated with the company, and that the latter's external and internal reputation therefore depends on the behaviour of the individual. Consequently, the company expects each employee to treat colleagues or third parties in a respectful, fair, friendly and professional way. Discrimination, particularly on the basis of gender, race, skin colour, age, religion, background or physical appearance will not be tolerated at Messer. Resolute action will be taken against any form of discrimination, preferential treatment, harassment or exclusion. Messer does not tolerate psychological and physical harassment nor any other attacks which violate employees' dignity and respect in their place of work. We respect and value the cultural differences and the various practices and customs of the people we meet.

### **Equal treatment and anti-discrimination**

G4-HR3

In 2014, 171 Messer Group employees were given training on the subjects of equal treatment and anti-discrimination. If employees feel discriminated against or not treated equally, they can, at any time, turn to their local human resources manager or the Group Compliance Manager, who are obliged to clear up the matter and ensure that equality is maintained. Such incidents must be included in the annual Compliance Report. The employee may also choose to put it on record during the annual appraisal. Every executive has a duty to organise their area of responsibility in such a way that any violation of the law can be reported at any time. Misconduct must be actively communicated. All employees are called upon to report any violation to their superior.

Whenever a new company is formed or there is a majority acquisition of a company, we ensure that these codes of conduct are communicated and implemented immediately. To date, no violations of human rights or equal treatment have been reported. If such a case arose, provided it is a minor infringement, there would be a discussion, in consultation with the parties involved, as to whether the problem could be resolved through mediation or equivalent coaching. A serious violation could, however, result in termination of employment for the employee who committed the offence.

### **Financial equality**

Our salaries are based on performance, the market, the position and length of service. We do not make distinctions on the basis of gender. More information on our remuneration policy can be found in the Management Report 2014 of Messer Group GmbH.

G4-11 **Internal social partnerships**

Messer is generally supportive of the formation of employee organisations such as works councils. About 58 per cent of our employees are represented by works councils. In 2013, the figure was 57 per cent. The increase is due to the transfer of employees in France. We are proud when our employees see no need for such an organisation, as is the case in Germany. At most of our Eastern European national subsidiaries, the local management negotiates joint pay agreements with trade unions. The relationship between our workforce and the management is characterised by trust, so there has never been a strike or any similar action within the Messer Group up to and including 2014.

## Health management

We take our social responsibilities towards our employees and to society very seriously. That is why we set working standards, among other things, to protect health and well-being. Many national subsidiaries are therefore implementing measures aimed at preventing ill health. We also promote an open corporate culture and encourage our employees to engage in sport together in order to reduce stress and improve cooperation.

### **Sporting activities connect people**

Not only are sporting activities good for one's fitness and health, they also strengthen team spirit. That is why it is all the more gratifying that our employees take part in a wide variety of sports together.

Every Wednesday, a small group of colleagues in Hungary meets for morning keep-fit sessions. Messer Hungarogáz is supporting the voluntary scheme by providing the premises and the sports equipment.

April and May saw two competitions take place at Messer Industriegase in Germany: on 1 April 2014, the Region South field staff challenged their Region North colleagues to a football tournament. The return match took place on 6 May, but this time the sport was bowling: 20 staff from Bad Soden and their sales colleagues pitted their bowling skills against one another on four lanes of a bowling alley.

At ASCO in Switzerland, it has now almost become a tradition to go bowling after a company meeting. And these get-togethers are usually very competitive in nature.

On 11 June 2014, some 40 colleagues from Messer Group and Messer Eutectic Castolin took part in the world's largest corporate run in Frankfurt am Main. The 71,735 runners from 2,781 companies raised a total of 258,500 euros in donations by taking part in the "J.P. Morgan Corporate Challenge". The money is being used to promote sports for young people with disabilities.

Messer Tehnogas, Serbia, organised an outdoor afternoon for its staff on 23 May 2014. Activities such as Segway riding, archery and human table football were not only aimed at team building but also at promoting physical and mental fitness.

Zhang Gengqiu, General Manager of Sichuan Messer, and his son ran the City Marathon in Chengdu on 25 October 2014. They came 32nd in the 4-person relay with a time of 3' 54".

Wolfgang Pöschl, Martin Pammer, Michael Holzinger, Thomas Gober-Dautz and Roland Papst of Messer Austria came 27th in the Wachau Quarter Marathon in Dürnstein, Austria.

The Messer team was very successful at the "Corporate Golf Challenge 2014" in Bad Vilbel, Germany. They managed to win this long-established tournament for the company at the third attempt.

Martin Küng, Senior Project Manager at ASCO Carbon Dioxide, regularly participates in marathons or energy-sapping obstacle courses.

A team from Messer Austria demonstrated its motivation and team spirit when it took part in a dragon boat race on 5 September 2014 under the alias "The Gas Rocket".

Peter Hölzl, Christoph Kurz, Roland Papst, Gottfried Hatz, Martin Pammer, Wolfgang Pöschl, Hans-Peter Zauner and Margit Haudek of Messer Austria took up the challenge of the "Vienna Marathon Champions 2014" in April.

Oliver Strim, Technical Director at ASCO Carbon Dioxide, competes in triathlons such as the Ironman.

In 2014, the staff of Messer Haiphong, Vietnam, once again went on their traditional "Company Tour". Our event on Cat Ba Island focused on team-building measures.

## Networks and knowledge management

"Knowledge Management" is an area that is being looked after by a working group led by the Senior Vice President Human Resources at Messer Group. The regular international network meetings of experts have been given two additional tasks. They have been asked to regularly ascertain the need for better documentation as well as the training requirements. Network meetings now take place over two

days and feature a talk by a guest speaker. There are 21 specialist networks at Messer consisting of experts and contacts from many countries.

The annual meeting of communications managers – the ComMeeting – was one of the first to which the new regulations applied. In mid-March, 31 ComManagers from 23 countries met in Belgrade to discuss ways of supporting the implementation of current strategic projects through appropriate communication measures. They also looked at the new e-tools in detail, which need to be marketed both to existing and prospective customers. The main need for training is in connection with the use of the new technologies as well as the content management systems.

### **Focus on helium**

Staff at the national subsidiaries who have responsibility for the sale of specialty gases work together in Messer Group's "Specialty Gases" network. In June 2014, 25 colleagues from 19 European countries and China as well as from Spectron Gas Control Systems met for the annual "Global Workshop Specialty Gases" at our headquarters. Besides information about current sales, our product sources and ongoing projects in production, this year's workshop also focused on the development of the global helium market. The guest speaker, Dr. Jürgen Becker, Chief Procurement Officer at Siemens Healthcare, gave a talk on the particular importance of a reliable helium supply for the MRI scanner business.

### **Messer experts share know-how**

Alexander Kriese, Vice President Filling Plants and Cylinder Technology, used the "Safety for Life." campaign and the growth target for cylinder gases as an opportunity to invite the works managers of all of Messer's filling plants in Europe as well as technical managers to the company headquarters for the first time. CFO Dr. Hans-Gerd Wienands called for further safety improvements at the filling plants – in accordance with the motto "Every accident is avoidable!". Against this background, there were also talks on plant structures, cylinder filling processes, the latest technical developments such as MegaPack and Duplex, and special aspects in relation to specialty and medical gases. A follow-up meeting, to be held at a filling plant, is planned for 2015.

### **Teaching assignment for enhanced safety**

At the end of October 2014, Messer Romania Gaz organised safety seminars at the Petroleum-Gas University of Ploiești and the Polytechnic University of Bucharest. The seminars were attended by 80 staff and students from the two universities. Using practical examples, Dr. Michael Hanisch, Senior Specialist Specialty Gases at Messer Group, presented important rules for transporting, storing and emptying cylinder gases and explained the operation and use of pressure regulators to the mostly young audience.

### International information exchange

The meeting of fleet and logistics managers from 14 subsidiaries at Messer Austria in the autumn of 2014 as well as the meeting of human resources managers from 17 subsidiaries at Messer Ibérica de Gases were intended to help the company make progress in important areas. Christoph Schütz of Corporate Logistics prepared presentations on safety, driver training, vehicle technology, accident management, maintenance and repair for the fleet managers' conference. The annual human resources conference centred on current personnel-related projects. This includes the Junior Circle, the planned training of sales staff as part of the C7 project "Focus on Cylinder", the new application portal and the mentoring programme for talented technology and engineering students. There was also an interesting workshop on body language.

### And always has been ...

### Employees

2004	Award of international Messer Innovation Prize worth 45,000 euros
2005	Growing together: international photo competition for employees
2006	Introduction of communication tools for guiding principles: Vision, Mission, Values
2007	Launch of European graduate trainee programme
2008	Intercultural cooperation in plant engineering – Strong together-exchange of expert groups
2009	Expansion of ideas management
2010	Employee satisfaction survey
2011	Employee motivation projects carried out worldwide
2012	Launch of Employer Branding campaign
2013	Establishment of Messer Group Academy
2014	Beginning of know-how transfer project, network meetings and knowledge management

# Business activities

## Reliable product supply – selected projects

We would like to guarantee our long-term independence and sustainable growth on the basis of solid finances and fair profits. We use the profits we make for new investments in local markets. These investments are based on commercial principles and are primarily targeted at projects which ensure a secure product supply and/or offer prospects for profitable growth.

In Europe, our focus since 2007 has been on the development and expansion of our production facilities with the aim of, among other things, reducing product supply shortages and the associated additional purchases. In China, Messer is seeking to act as a partner supporting the expansion plans of our on-site customers. Details of the value of our investments in 2014 can be found in our Group Management Report.

### **New Messer location in Poland**

On 26 June 2014, MP Production, a wholly owned subsidiary of Messer Polska, laid the foundation stone for the construction of another new air separation unit (ASU). The investment of 30 million euros in the ASU and 2.5 million euros in a new industrial gases filling plant will create a completely new production centre in Turek, helping Messer to further strengthen its position in Poland. The start-up of the ASU in the third quarter of 2015 will improve delivery times for our customers in central and northern Poland. Compared with other countries in Europe, the industrial gases market in Poland has for years seen the fastest and highest growth rate. The filling plant is due to go into operation a year later, in the third quarter of 2016.

It is planned that 400 tonnes of liquid oxygen and nitrogen will be produced each day at the new air separation unit, which equates to a capacity of 20 tankers. The new production site will facilitate the production of gases of the highest purity for use in medicine, pharmacy or research, for example, and will also meet the strict legal requirements governing the production of food gases. At the same time, Messer is creating some 25 new jobs with this investment – 15 for operation of the air separation unit and ten at the filling plant.

This investment is the result of a consistent development strategy and represents the second facility of its type in Poland after the air separation unit in Rybnik.

### **Modernisation for sustainable growth**

By increasing its production capacity, Messer Polska is strengthening its market position as a successful dry ice supplier: the company is modernising its plant in Chorzów and also investing in a state-of-the-art automatic dry ice block and pellet machine as well as a packaging unit from ASCO Carbon Dioxide. This will

allow ten different slice thicknesses and two pellet sizes to be produced at the touch of a button, the uses of which include transport refrigeration in the food industry.

### **Messer China consolidates market position**

On 29 March 2014, Messer China officially opened a new air separation unit on the Haikou industrial estate in Kunming, the capital of Yunnan province in southwest China. By investing in the new unit, Messer has consolidated its leading position in the region. In the meantime, a hydrogen production facility and a filling plant have also gone into operation. The plant can fill up to 10,000 gas cylinders a month.

### **Messer China builds second CO<sub>2</sub> plant**

Yunnan Tianan Messer Gas Products is Messer China's second new company that will produce CO<sub>2</sub>. Messer's first CO<sub>2</sub> joint venture started operating in the Chinese province of Sichuan at the end of 2012. Messer China and Yunnan Tianan Chemical entered into a joint venture by setting up Yunnan Tianan Messer Gas Products in southwest China's Yunnan province at the end of 2013. Our contractual partner is part of the Yuntianhua Group, a leading chemical company in China. In the first phase, an investment of around 5.9 million euros is planned for the construction of a CO<sub>2</sub> liquefaction plant, which is scheduled to produce 50,000 tonnes of food-grade CO<sub>2</sub> annually. The new company will use Messer's state-of-the-art production techniques to clean and liquefy surplus carbon dioxide from coal-based ammonia production. The intermediate product is then treated and turned into high-quality CO<sub>2</sub> for the food and beverage industry, the pharmaceutical sector, and for industry as well as agriculture.

### **Largest gas liquefier in Spain**

At the end of January 2014, Messer Ibérica's second liquefier went into operation on schedule at the site of the air separation unit (ASU) in El Morell. The new liquefaction plant is currently the largest in the Iberian Peninsula. With a capacity two and a half times that of the liquefier put into operation in 2008, its production is considerably more energy-efficient. This was given top priority during the process design stage. A new nitrogen storage tank with a volume of 2.5 million litres was also installed, as was a nitrogen backup system for our pipeline customers. "These measures have increased our security of supply in the Tarragona area's chemical sector. The expansion will facilitate better capacity utilisation of the ASU. Those volumes that we do not supply to our customers via pipeline can be used to supply existing and new bulk customers," says Enric Acosta, Sales Manager Key Accounts at Messer Ibérica.

### **New nitrogen generators**

Constructive teamwork: staff from several Messer companies worked hand in hand to ensure reliable on-site supply for our customers. The generators went into operation at customer sites in Slovakia and Serbia on schedule at the beginning of April and in mid-May 2014. Messer Group was responsible for the engineering and start-up of both plants; responsibility for the manufacture of the machine containers lay

with Messer Hungarogáz in Hungary. On-site installation was carried out by the Messer employees in Slovakia and Serbia. Thanks to the two new generators, these customer sites in logistically unfavourable locations can now be supplied much more economically.

### **Quality assurance for our products**

#### **EN 1090: Messer complies with European standard**

Since 1 July 2014, steel and aluminium structures have to be executed in accordance with the rules of the European EN 1090 standard, which is almost 400 pages in length. One of the standard's stipulations is that all filler metals must comply with the requirements of EN 13479 and the standard assigned in Table 5. EN 13479 defines general delivery terms for filler metals and powders for fusion welding of metal materials. However, this document does not apply to auxiliary materials such as shielding gases. To comply with EN 1090-2 – the suffix "2" stands for steel – shielding gases for welding must meet the requirements of the international ISO 14175 standard assigned in Table 5. Many users are unaware that this standard has been compulsory in the industrial gases sector for a number of years. At Messer Group, all shielding gases for welding are produced in accordance with ISO 14175 and meet the relevant requirements.

#### **Medical gases manufacturing approval renewed**

Messer Technogas in the Czech Republic had its approvals for medical oxygen and medical nitrous oxide renewed in May 2014. The approvals were first issued in 2008. Normally, a medical product approval is initially valid for a limited period, making it necessary to apply for a renewal. In conjunction with the manufacturing licence for medical oxygen and medical nitrous oxide, Messer Technogas wants to further strengthen its position as an authorised, independent medical gases supplier to Czech health services.

#### **High quality in Vietnam**

With three cylinder gases filling plants, two air separation units and the country's first food-grade CO<sub>2</sub> production facility, since 1997, Messer has developed into one of Vietnam's largest industrial gases suppliers. Messer offers the entire gases portfolio, be it high-purity gases, gas mixtures, specialty gases or gases in bulk quantities.

## Successful through partnerships

### **Cryogenic cooperation**

Messer Group and NSC Medical Cooling Systems are pooling their expertise in nitrogen-based cryopreservation. The two companies will establish a joint package of services in the market for the preservation and storage of organic materials. The partners want to use a new application technology to guarantee maximum temperature stability and process reliability as well as complete documentation. This cooperation is intended to benefit university clinics, private and public hospitals and blood transfusion services as well as the pharmaceutical industry and research facilities throughout Europe.

**Combined know-how has started bearing fruit**

Following the integration of BUSE Gastek's CO<sub>2</sub> process engineering and dry ice technology business units into ASCO Carbon Dioxide, the combined know-how has now started bearing fruit: the new Engineering Team is constructing the first large-scale customer-specific CO<sub>2</sub> production facility with a capacity of 7,000 kilograms per hour for a customer in Tunisia. The CO<sub>2</sub> will be extracted from a natural underground source under high pressure and treated at the new facility to produce food-grade carbon dioxide.

**A partner among experts**

In April 2014, Messer Technogas supported the opening event at the 13th International Cryogenics Conference. Held under the auspices of the International Institute of Refrigeration, the conference was attended by 112 specialists from Europe, Africa, America and Asia. The event opened with papers given by Dr. Friedhelm Herzog of Messer Group: he spoke about Messer's DuoCondex solvent recovery process as well as cooling systems for superconducting power supply cables. This topic drew particular interest from the audience and ensured a lively discussion.

**Documented supply chain**

G4-12

Messer buys tanks for customers, tankers and gas cylinders centrally throughout Europe. For these products, Messer works with long-standing suppliers who are regularly audited. Before concluding a contract with a new supplier, they must first pass a comprehensive audit. All other products, in particular the electricity for the operation of our production facilities, but also trade goods, are bought locally by the national subsidiaries. These suppliers undergo regular checks as part of ISO 9001 certification.

**Improved efficiency**

In October 2013, Messer Romania Gaz started introducing BABEL (Business Acceleration by European Labelling) for IT-supported tracking of gas cylinders and bundles at its filling plant in Deva. Up until March 2014, a team would enter the master data of 22,000 cylinders and bundles into the system manually. Analyses such as determining the pressure vessels that are due for inspection in 2015 are now possible at the touch of a button. Since June 2014, goods received from production have also been entered in the SAP system. Moreover, the company has been taking advantage of e-Invoicing since 1 April 2014, which saves paper and postage costs as well as working time, and is kinder to the environment.

## Code of Conduct and principles of cooperation

G4-DMA Compliance

### **Principles of cooperation**

Messer is committed to cooperation with preferred suppliers and other business partners, including contractors, who act in accordance with our guidelines on safety, health, environmental protection and quality. Messer complies with internationally recognised human rights and general ethical principles rejecting child and forced labour. All Messer companies, their employees, executives and managing directors are therefore bound by our Code of Conduct.

The Code of Conduct and the Group Guidelines play an important role for Messer. All first- and second-level managers are therefore required to confirm that they are familiar with the contents of these documents and undertake to comply with them. Our employees have also been informed about the contents relevant to them and have also undertaken to comply with them.

### **Anti-corruption**

In relation to corruption, § 1.6 of the Code of Conduct deals with the relationship with third parties as well as anti-corruption measures. It states that suppliers should only be chosen on the basis of objective criteria. Messer undertakes only to compete on the basis of the high quality and the price of its innovative products. No one at home or abroad may be offered or given any unlawful benefit whatsoever. § 1.7 of the Code of Conduct stipulates that all employees must avoid conflicts between the interests of the company and private interests.

§ 1.7.1 Outside Employment / Secondary Activities of the Code of Conduct stipulates that any employee who intends to conclude an additional contract of employment with another employer must inform their local personnel department. The personnel department must first give approval for the intended employment. § 1.7.2 Participation in Competitors, Customers and Suppliers states that significant shares held in competitors, customers and suppliers amounting to more than 5 per cent of the share capital require the approval of the Management Board. It is necessary to make sure that the person in question is not involved in any decision regarding the award of a contract, either directly or indirectly. The Group Legal Department will supply checklists to check the necessary criteria when working with representatives or external advisers. In 2014, no corruption cases came to light and there were no proceedings in connection with corruption.

### **Behaviour in relation to competition law**

Anti-competitive conduct is dealt with in the Code of Conduct under § 1.2.1. Antitrust and Competition Law: Messer is committed to strict compliance with the various domestic and foreign monopolies and competition laws. It follows that any commitments or actions that could lead to a restriction of trade or competition are prohibited. All employees must avoid any actions that might appear to constitute such conspiracy.

An annual report with an overview of the reported cases of non-compliance is submitted to the Supervisory Board of Messer Group by the Corporate Compliance Officer.

All employees can report violations of the Compliance Code to the Compliance Organisation. Their identity will be treated confidentially if expressly requested. Communication is possible directly with the Corporate Compliance Officer (“whistleblowing”), via a dedicated hotline or e-mail, or with the Supervisory Board via the local management. In 2014, a total of ten compliance violations were reported to those responsible, with two reports going directly to the Corporate Compliance Officer and eight to the local Compliance Officer, who then provided details of these cases via the annual report. A total of 29 compliance violations had been reported in 2013.

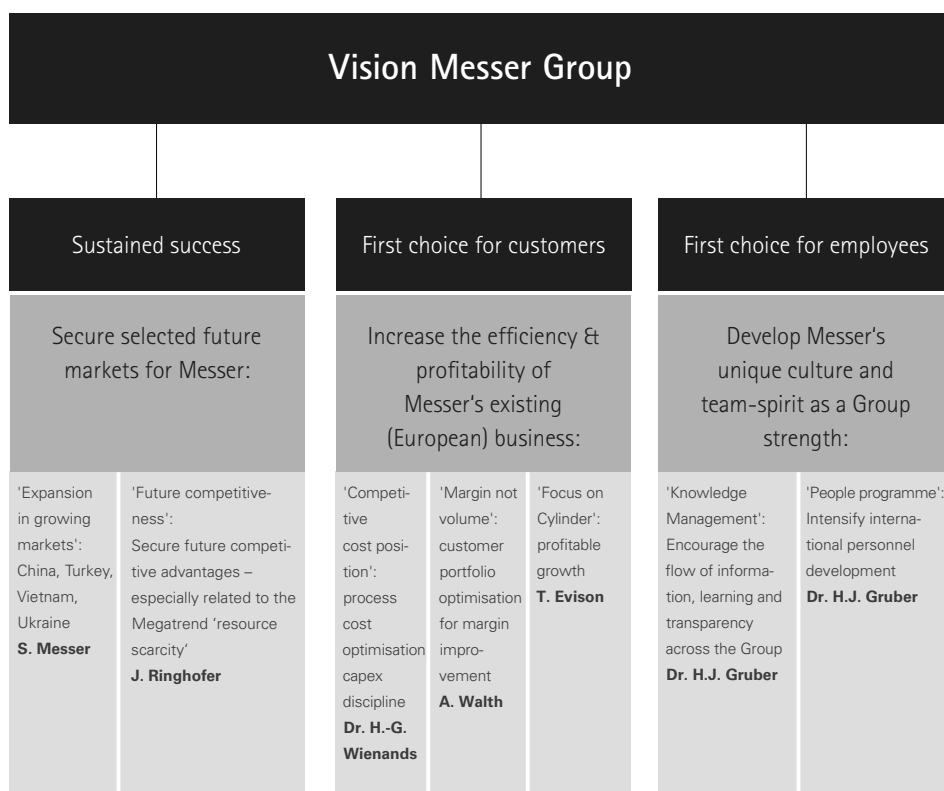
The number of compliance-relevant training events increased from 29 in 2013 to 74 in 2014.

## Strategic programme of measures (C7)

C7 (“See Seven”, comprising seven core topics) is the strategic programme of measures with which Messer wants to improve its profitability in the medium term, lower the ratio between our net debts and the EBITDA margin by the end of 2015 and significantly reduce the level of debt in Europe. The aim is to achieve sustainable success and to be the first choice for our customers as well as our employees. The appointed teams have been working on the C7 projects since the end of 2012.

1. “Expansion in growth markets” – Stefan Messer is leading the working group that is examining the move into new markets or increased investment in existing growth markets.
2. “Future competitiveness” focuses on the development of Messer’s competitive advantages, taking the current megatrends into consideration. The megatrends that are relevant to Messer are the demographic changes resulting from a growing world population, an ageing society and increased urbanisation, globalisation and future markets (for instance the BRIC countries – Brazil, Russia, India and China) as well as the challenges of climate change and the scarcity of natural resources such as (fossil) energy, water and minerals. With measures for
3. “Process optimisation”, CFO Dr. Hans-Gerd Wienands and his team want to improve capex discipline in particular. For example, the team is working on improved dunning and suitable credit management aimed at minimising customer arrears. After many years of focusing on independence in the production of gases in Europe, with corresponding investment in capital-intensive facilities, a certain cultural shift is now happening at Messer, away from volumes towards better margins, capacity utilisation and profitability.
4. “Improving the bulk margin” is the aim of another working group, in order to achieve long-term optimisation of margins in the bulk segment.
5. “Focus on the sale of cylinder gases” promises profitable growth based on control of resources and investments, personal goals and sales strategies in favour of cylinders. Several tools already exist, such as the customer survey on targeted improvements in performance or the marketing of Mega-Pack; some are being developed from scratch, such as appropriate apps and cylinder costing.
6. “Knowledge Management”: The regular international network meetings of experts have been given two additional tasks. They have been asked to regularly ascertain the need for better documentation as well as the training requirements.

7. "Personnel development": Besides the successful introduction of the Academy Messer Group and the Junior Circle launched in spring 2013, the emphasis is on modular training for our experts.



## Data security

### New Citrix environment

To ensure that Messer is also equipped for the future with Citrix, the data centre infrastructure used for virtually all our locations, Messer Information Services launched a project last year to upgrade our Citrix farm.

All IT applications in a Citrix environment only have to be installed once on servers in the data centre. The advantage of this is that Office, SAP or Baan can be used centrally by any number of employees worldwide.

For Messer Information Services (MIS), the main criterion for an upgrade to a new Citrix environment was improved user friendliness. Among other things, this is now reflected in better performance and greater data security. MIS paid particular attention to cost effectiveness in this project. The IT company therefore opted for an upgrade of the existing Citrix servers, in so far as they met the energy efficiency standards. All the other servers, which had become obsolete and consumed a lot of electricity, were replaced with new hardware. This cut the data centre's annual electricity consumption from 113.88 MWh to 48.18 MWh.

### And always has been ...

### Economy and company

2004	Refinancing of the company
2005	Development of technical centres in Europe
2006	Return to plant construction with the largest Chinese manufacturer of air separation units
2007	Strategic project "Independent product supply"
2008	Re-entry into German market
2009	Messer wins prize for financial communication
2010	Messer files applications for 20 inventions and 17 patents
2011	New company headquarters in Germany
2012	One billion mark exceeded in sales
2013	Brand awareness in Germany up 37 per cent
2014	C7 efficiency improvement programme

# Safety

Safety at work is a fundamental element of our business, as it is for the entire sector and the business of our customers. Safety, health and work protection are firmly established in our guidelines as well as our day-to-day business processes. We treat the complex topic of safety in different grouped areas to enable our experts to implement adequate measures in the individual areas of action.

The safe handling of gases, safety at work for customers, safety in our workplaces at Messer, the safety of installations, along with safe logistics and vehicles, are fundamental for our customers and partners as well as for us, and this is clearly reflected in our materiality matrix.

## Safety at work

In the consolidated companies of the Messer Group, responsibility for safety, health, environment and quality is vested in 31 staff across the companies and two at the group headquarters. This is a percentage of 0.6 per cent. In some companies of the Messer Group there are also safety officers who run courses and provide training.

## Worldwide day of action for safety at work

Following a gradual increase in the accident rates after 2011, the first worldwide safety day was held in September 2013, followed by a year of "Safety at work" at Messer under the motto that: "All work-related illness, injuries and accidents are avoidable". Over a period of 12 months, safety at work was at the forefront of our process optimisation activities – a worldwide "Safety at work action day" for all Messer companies, held on 12 September 2014, then marked the initiation of measures that are due to be implemented by September 2015.

### **"Just doing things quickly" rarely turns out well**

The aim of the "Just quickly..." campaign is to improve safety and raise awareness of hazardous situations in day-to-day working. The focus of the current safety campaign, which runs until September 2015, is on avoiding industrial accidents which are attributable to a breach of safety guidelines or negligence and carelessness. The background to the campaign is that many accidents in everyday working situations come down to experience – in other words, a result of processes that are part of an employee's everyday routine. More than 5,000-plus employees in Europe, Asia and Peru came together at their places of work at the same local time on the "Safety Day" (which we intend to institutionalise at Messer) to discuss this theme. The seeming familiarity of some everyday situations is matched by their potentially

fatal consequences. Given that more than 80,000 people in the European Union alone have to be treated in hospital every year after falling from a ladder, whilst a further 300 die as a result of such accidents, one of the topics of the "Safety Day" dealt with the code of conduct for the use of portable ladders and steps. More information on this subject was made available for all staff on the Messer intranet.

Alongside an accompanying poster campaign for all office and production areas, a series of short films have also been produced. These have the feel of psychological thrillers and capture the imagination by creating a personal connection.

The fire extinguisher "just quickly" put away in the cleaning cupboard points to the burned-out office. Or the "just quickly" put-together jumper on the electrical box results in a fatality. It's not just the sight of fake blood that gives you goose bumps in these scenes, but also the bloodcurdling soundtrack. Messer Group has therefore made the short films public on the Internet via its YouTube channel.

On the day of the launch of the previous year's campaign under the motto "This was not planned", the company organised a worldwide stoppage of several hours to draw the staff's attention to the fact that accidents have a negative impact on personal as well as company plans.

As decided by the Management in 2013, flatscreen TVs are gradually being installed at Messer locations such as canteens and recreation rooms in order to support our safety campaign by firmly anchoring a staff consciousness of the messages that the depicted accident scenarios convey.

### **Staff ideas for safety at work**

The aim of the "Safety Day" is to further improve our SHEQ performance. In concrete terms, this also means that the staff of Messer Group have the opportunity to actively contribute their ideas and thus help to make a significant improvement to our health and safety at work, our environmental protection measures and our quality management. On the 2014 day of action, our staff worldwide were called upon to submit their ideas by sending them to the safety officer for their company. All practicable ideas were presented in October at the annual Messer Group conference in Madrid, Spain. Based on a short description, each conference participant selected at least one of the practicable ideas and implemented it in his/her own area of responsibility.

On the 2014 Safety Day, 94 employees took the opportunity to contribute their ideas. Every single one of them offered potential to improve our SHEQ performance. The measures selected are therefore being developed and implemented in a targeted way. 35 ideas have been implemented locally so far, with plans for a uniform global rollout to all our national subsidiaries.

The wide range of ideas includes the following: an "Apple a day..." (a scheme to offer staff a healthy apple every day); the introduction and optimisation of walkways in the grounds of production plants; the installation of cable retainers in offices to prevent falls; driver training for environmentally-friendly and safe driving; an emergency card in credit card format with important information and advice on what to do in an emergency; customer safety material on the correct handling of gases; and safety videos showing staff the daily hazards they face in work situations.

A total of 597 ideas and suggestions for improvement were submitted in the Messer Group during the year under review.

## G4-LA6 Lower accident frequency

Our key performance indicators (KPI) for all spheres of safety show a positive development in our accident figures. For example, we managed to reduce the number of industrial accidents with lost days from 36 in 2013 to 18 in 2014. Meanwhile, the number of reportable accidents dropped from 63 in 2013 to 36 in 2014.

The frequency of accidents, measured by the number of work-related accidents with lost days per million hours worked, went down from 3.6 in the previous year to 1.7. The accident severity rate, that is the number of days lost per million hours worked, also dropped from 65.0 to 47.6. In 2014, the Messer Group's frequency rate of reportable industrial accidents per million hours worked was 3.5 in contrast to 6.3 in 2013. There were no accidental fatalities.

## Safe handling of gases

### **2014 – the year of acetylene safety**

The production of acetylene is subject to very strict safety regulations. To make employees even more aware of the need for careful handling of this highly flammable gas, Messer designated 2014 as the year of acetylene safety. As part of this initiative, the managers of acetylene plants received a safety newsletter which included details of extensive safety-related measures. A safety training event was held in May 2014. This practice-oriented training focused on the use and handling of this high-performance fuel gas. Messer's new Acetylene Manual was also presented during the training event.

## Plant safety

In the 2014 financial year, five accidents were recorded at industrial gases plants. Regular safety training was carried out and in some instances, emergency scenarios were simulated in our companies.

One example from Romania: an earthquake measuring 6.8 on the Richter scale leads to a massive escape of oxygen at an air separation unit – that was the scenario for an emergency drill at the Messer Romania Gaz production site in Resita in September 2014. The main objectives of the drill, which was initiated by the local emergency authority (ISU), were to provide joint training for the emergency intervention unit and the plant staff as well as to raise awareness of safety measures designed to deal with risk factors of this kind. Both objectives were achieved and the emergency drill was given a very positive assessment by the ISU.

## Safe logistics and vehicles

In addition to the statutory provisions on operating a vehicle fleet, Messer also implements its own safety concept for the transport of gases with tankers and cylinder trailers. For the first time since Messer Group GmbH was founded, Gumpoldskirchen, the location of Messer Austria, hosted a conference – led by the corporate logistics department – for the exchange of information and experience among European vehicle fleet managers. Vehicle fleet managers and logistics specialists from 14 countries listened to talks on transport safety, driver and staff training, vehicle technology, accident management and maintenance and repair. The aim of the event was to promote the flow of information in these areas in order to improve transport safety and reduce the cost of maintenance and repair work on our vehicles. The knowledge gained was immediately incorporated into the Messer Group’s training documents.

You can read about further measures in the area of transport safety in the 2014 Management Report of the Messer Group.

The key performance indicators (KPI) are also comparable in the area of logistics and vehicles. The number of avoidable accidents with bulk transports (transport of liquid gases in tankers) fell from 21 in 2013 to 14 in 2014. Thus the frequency rate per million kilometres driven is 0.30 for the year under review compared with 0.40 in the previous year.

G4-EN30

In the area of cylinder transport, the number of avoidable accidents rose from 9 to 11. Per million kilometres driven, this signifies an increase from 0.35 in 2013 to 0.49.

## Safety for our customers

G4-PR1

In 2014, the total number of installations belonging to Messer at customer sites was 6,644. These installations had 7,553 technical checks carried out on them. 1,199 safety audits of installations belonging to Messer at customer sites were carried out in 2014. In total, 1,697 safety training events run by Messer took place at customers’ premises, with a total of 3,841 participants. There are no comparative indicators for 2013. However, these KPI figures will provide the comparative values in the annual report for 2015.

### **Integrity of gas contents**

With many gas applications, it is very important for users of Messer gases that the integrity of the gas contents is guaranteed. This particularly applies to customers in the medical and food sectors. Following the introduction of a filling seal on the new MegaPack bundle, there is now another product that uses the seal. The new Messer ValveGuard VG1 is approved for cylinders up to 45 kilograms, equating to a capacity of 20 litres.

After filling, the seal is simply clipped into the fastened position within a matter of seconds, after which it has to be ripped off in order to connect a consumption appliance. If the seal is intact, this means that the cylinder contains the original Messer-quality filling. In addition, the ValveGuard features a moulded grip that facilitates convenient transportation of the small cylinders. It is available in the standard colours of white, blue, grey and red.

### **Safety training at the customer's premises**

In February, ten employees of an international retail chain shops received training to prepare them for an emergency – an increased level of carbon dioxide in the warehouse. The safety training gave all the participants the opportunity to familiarise themselves with the wearing of breathing masks and with life-saving measures. Preventive measures notwithstanding, the possibility of a combination of unfortunate coincidences leading to an increased level of carbon dioxide in the warehouse cannot be ruled out. To guard against this eventuality, Messer advised the customer to install an indoor air monitoring system, complete with warning system, in a central warehouse in Denmark. Messer will carry out annual calibration, tests to determine that the device is in working order and regular staff safety training.

G4-PR3

### **Kick-off meeting on CLP**

The gases industry must comply with European regulations on chemicals. The CLP Regulation (Classification, Labelling and Packaging) is based on the Globally Harmonized System (GLS) set up by the United Nations and deals with the classification, labelling and packaging of chemicals.

According to this CLP Regulation and other transport guidelines, cylinders and bundles for pure gases and gas mixtures must have special labels affixed to them. Messer Group has been using CLP for pure gases since December 2010. According to EU stipulation, compliance with the regulation will also become mandatory for gas mixtures from the end of May 2015 at the latest. A new working group at Messer Group is responsible for consistent implementation of the regulation, with preparations having begun in 2014.

2004	Messer Austria participates in EMAS
2005	22 safety awards from European Industrial Gases Association EIGA
2006	Establishment of Safety Committee (SHE)
2007	Safety standards established
2008	Signatory to European Road Safety Charter
2009	Implementation of SHEQ policy and performance of risk analyses
2010	Introduction of LISAM (software for producing safety data sheets)
2011	Reduction in accident rate with 1.2 industrial accidents per million hours worked compared with 2.9 in 2010
2012	Eleven internal SHEQ audits carried out in six countries and five risk analyses carried out in China
2013	First company-wide Safety Day
2014	Year of Safety at Work

# Environmental protection

## Environmental guiding principles of the Messer Group

Messer adheres to environmental guidelines which were developed by the company as the basis of its business activity:

The Messer Group will

- determine the material impact of its business activity on the environment and set itself targets for the continual improvement of its environmental compatibility
- reduce the environmental impact of its products and services
- endeavour to prevent pollution of the environment
- reduce waste generation and support programmes aimed at the prevention of pollution
- provide operating principles, processes, procedures and resources for the implementation of its environmental guidelines, taking into consideration the best available technology
- encourage staff to act in an environmentally friendly way, both at work and at home
- promote continuous improvement in waste minimisation
- comply with or exceed the requirements of existing environmental legislation
- carry out environmental impact assessments before building new or modifying existing facilities
- strive for open and honest communication with all stakeholders and neighbours
- minimise energy consumption and, wherever possible, reuse materials in an economically viable way

G4-EN6

### **Energy management**

Since 2004, we have always achieved our objectives of improving the energy efficiency of the air separation units operated by Messer. Our current objective is to reduce specific energy consumption by 0.5 per cent a year from 2010 to 2020. We are achieving this through better capacity utilisation of our production facilities, continuous investment in even more efficient facilities and targeted energy efficiency projects based on optimal solutions we have discovered within and outside the Group. In 2014, we created the new position of Global Energy Officer (GEO) in the Messer organisation.

The role attached to this job is to continuously monitor the operation of air separation units in order to identify optimal energy saving potential. The Messer Group develops and builds its own air separation units. Energy efficiency is a key aspect in the design of the units, and our Corporate Engineering Team is continuously working on ways to further improve the average energy consumption of our new units. This is often done in cooperation with industry partners, external experts and universities. The central logistics department has also committed itself to the goal of improving energy efficiency. Our vehicle technology is constantly being improved and in this context, we also provide relevant driver training. Progress towards this goal is being made with the aid of IT-based route planning for all Messer companies, as well as through cross-border optimisation of vehicle routes.

Our commitment to environmental protection is also reflected in our SHEQ (Safety, Health, Environment and Quality) management system, which applies across the Messer Group as a whole. We already have ISO 9001 and ISO 14001 certification in 15 companies. We use these certifications to constantly improve our relationship with our customers and employees and to develop appropriate environmental protection measures.

Our internal SHEQ management system requires all Messer companies to comply with the international standards ISO 9001 (quality management system) and ISO 14001 (environmental management system).

### **Energy consumption in production**

G4-EN3

Most energy is used in the production of our air gases. Messer operates a total of 60 air separation units at 39 locations and in 2014, these had an energy requirement of 3,878.1 GWh (gigawatt hours). The figure for 2013 was 3,738.6 GWh. Messer's total power consumption in 2014 was 4,034.4 GWh. Besides electricity, we also consume steam. In 2014, steam consumption at our air separation units totalled 23,743 tonnes. In 2014, the use of steam allowed us to save 15.1 GWh of electricity.

Energy costs therefore account for the largest part of an industrial gases company's cost structure. We spent a total of 259 million euros on energy consumption, accounting for 44 per cent of our total manufacturing costs. Compared with 2013, energy consumption fell in relation to the quantity of gas sold: the energy coefficient went down slightly from 1.3560 in 2013 to 1.3557 in 2014.

G4-EN5

In 2014, fifteen of our European production and filling plants were ISO 14001 certified. In 2013, the figure was thirteen sites.

G4-DMA Emissions

## Environmental and climate protection

G4-EN16, G4-EN17

### **Greenhouse gas emissions**

Air separation units process ambient air. During normal operation, air separation units do not produce any toxic or environmentally harmful emissions. In the event of a shut-down or fault, only air components are emitted. Our products are gases which are delivered either by pipeline, via tankers to fill storage tanks or in cylinders. Only cylinder gases are packaged products. Steel cylinders are usually rented out to customers and returned empty after use. They are therefore 100 per cent reusable after the requisite cleaning.

Our total greenhouse gas emissions are shown as CO<sub>2</sub> equivalents. The quantity of emissions is converted into greenhouse gas equivalents using the International Energy Agency's conversion factors. Our calculation of greenhouse gases is broken down into direct emissions (Scope 1) and indirect emissions (Scope 2 and Scope 3), in accordance with the GHG (Greenhouse Gas) Protocol. Scope 1 includes all direct CO<sub>2</sub> emissions from our production facilities.

Despite efficiency gains, CO<sub>2</sub> emissions are increasing in absolute terms as the number of new production facilities grows. The reduction in electrical energy, which is the biggest factor influencing the CO<sub>2</sub> equivalent at Messer, can be demonstrated using the energy coefficient. Indirect CO<sub>2</sub> emissions are emissions from the generation of purchased electricity (Scope 2). A total of 3,880.2 GWh of electricity was used to operate our production facilities and filling plants. This gave a CO<sub>2</sub> equivalent of 2,498,461 tonnes for 2014.

Indirect emissions, which come under Scope 3, include all other Group-wide emissions that are not included in Scope 1 or Scope 2, such as electricity used by the administration buildings or travel undertaken by employees. Here the CO<sub>2</sub> equivalent was 59,300 tonnes in 2014.

G4-EN15

### **Fuel consumption and other emissions**

Total fuel consumption was 27.7 million litres in 2014, compared with 29.5 million litres in 2013.

Messer operates nitrous oxide production facilities in three countries (Croatia, Czech Republic and Serbia). This gas is used in medicine and the food industry.

The total CO<sub>2</sub> equivalent for our fleet's fuel consumption and for emissions of N<sub>2</sub>O and hydrogen is 113,600 tonnes. In 2013, these emissions were 124,300 tonnes CO<sub>2</sub> equivalent.

G4-DMA Waste water  
and refuse

### **Consumption of water**

Water consumption at our plants is relatively low as we use water in a closed circuit and only need to replenish what has been lost to evaporation.

In 2014, our total water consumption was 5.1 million cubic metres; most of this is used for cooling the compressors in the air separation units.

### **Waste generation**

In 2014, the total quantity of non-toxic waste was 38.9 million kilogrammes. The total quantity of hazardous waste, such as sulphuric acid or out-of-use acetylene cylinders, was 300 tonnes.

### **Think green, print black**

Since 2014, Messer has also made available black-and-white versions of its image and specialist publications, such as the "Gases for Life" magazine, which is published quarterly, as well as brochures on gases and technologies. This measure was introduced by Messer in response to the result of a survey of readers of the magazine carried out in May 2014 concerning the twelfth issue of "Gases for Life", which was produced as an all black-and-white magazine on a trial basis under the heading "Think green, print black". About three-quarters of the 100 e-mails received from eight European countries as well as China and Peru were in favour of the black-and-white concept, particularly for environmental reasons.

By dispensing with the use of colour, we were able to make a CO<sub>2</sub> saving of approximately nine per cent in production: for those who prefer to have their information on paper rather than reading it on screen, Messer has now made all its brochures available as black-and-white versions – optimised for monochrome printing – on its website.

## Energy saving for our customers

Our gases also help to make our customers' products and processes more environmentally friendly. In 2014, we carried out 169 new installations of tank systems for our customers that, with our products, have introduced applications and technologies which protect the environment. In 2013, the number of new customer installations was 188.

### **Sustainable production**

Messer has installed a waste gas purification facility based on the DuoCondex process for specialty chemicals company Evonik Industries AG. It is being used at the company's Steinau plant to separate solvents and other hydrocarbons in order to comply with emission limits, even when production increases. Evonik produces biodegradable specialty surfactants in Hessen, primarily for the cosmetics and detergents industries.

Evonik Industries AG's Steinau plant feels it has a particular obligation to protect the environment over and above the statutory requirements, given that it is located in an idyllic setting encircled by the Rhön, Spessart and Vogelsberg Mountains. Since the plant's cooling requirements are met by the regenerative use of waste cold, it seemed suitable here, both economically and environmentally, to use the DuoCondex process – developed for the recovery of pure substances or mixtures – to separate a multicomponent mixture for further recycling of residues. In other words, the gaseous nitrogen that is produced by the vaporisation of liquid nitrogen is required for production processes anyway.

The process, developed by Messer, makes use of the extremely low temperature of liquid nitrogen to separate all the waste gas components apart from air and nitrogen in multiple stages through freezing and condensing. Moisture is separated in a pre-condenser which is cooled with a refrigerating system. The cold supply for the main condenser begins with the vaporisation of the liquid nitrogen at minus 196 degrees Celsius. Cooling for separation of the hydrocarbons takes place in a multi-stage, temperature-controlled way via circuits and the interconnection of a regenerative heat exchanger. This reduces the temperature difference between the waste gas to be cleaned and the cooling, gaseous nitrogen on the walls of the condenser. This, in turn, improves cleaning performance, prevents aerosol formation, the localised freezing-out of concentrations and blockage of the tube bundles, and extends the running time before defrosting is required.

Adapting and designing the process called for intensive cooperation between the plant engineers and the operator. Running a pilot system with appropriate instrumentation first makes sense, in particular as it allows account to be taken of the varying amounts of waste gases produced with very different compositions. Messer can offer such an approach.

### **Useful energy transfer**

Winters in Bosnia are cold. This can become a problem for the ArcelorMittal steelworks which is located there: for wastewater neutralisation, the plant uses CO<sub>2</sub>, stored in cryogenic, liquefied form. However, in winter there is not enough ambient heat to vaporise a sufficient quantity of the liquid gas. The EcoVap vaporiser from Messer will now be used to provide the necessary heat input by using waste heat from compressors.

Many production plants are supplied with industrial gases such as nitrogen, oxygen, carbon dioxide or argon in cryogenic liquid form. Liquefying the gases involves the use of a large amount of energy. Some of this is lost again when the gases are heated via air vaporisers prior to use, because they are needed in gaseous form. At factories which require both industrial gases and low temperatures in their production processes, this "cold energy" can, however, be put to good use. To this end, Messer has developed the EcoVap vaporiser. Installed into the return line of a cooling system, it ensures that the temperature of the circulating coolant is lowered as a result of the cold that is given off as the liquid gas vaporises. This relieves the load on the refrigerating machine, reducing energy costs. On top of this, the process means that the formation of ice and mist around the air vaporisers is a thing of the past. The EcoVap also ensures that the temperature of the required gas always remains constant – irrespective of the ambient conditions. However, ArcelorMittal in Bosnia requires heat rather than cold. The situation is therefore reversed here: the – previously unused – waste heat from the compressors of Messer's air separation unit is channelled into the EcoVap vaporiser in order to vaporise the liquid carbon dioxide. The heating energy saved in comparison with a steam or natural gas heating system is approximately 900,000 kilowatt hours per season, thus avoiding 180,000 kilograms of CO<sub>2</sub> emissions per year, which equates to the emissions from 40 cars.

### **CO<sub>2</sub> symposium arouses interest of potential customers**

How can CO<sub>2</sub> help reduce costs and also protect the environment? One way is to use CO<sub>2</sub> instead of chemicals in process and thermal water treatment. With these sorts of questions and answers at a CO<sub>2</sub> symposium, Messer Slovenia managed to make potential customers aware of the advantages of gas applications. The event was very successful: it was attended by 82 participants, of whom more than 50 expressed an interest in the gas applications that were presented.

### **Playful recycling**

GreenTyre in Marcali can recycle up to 20,000 tonnes of used tyres per year – that is approximately half of Hungary's tyre waste. Some of it is ground using liquid nitrogen from Messer. The cryogenic gas cools the tyres to temperatures between minus 120 and minus 150 degrees Celsius, making them brittle. In this state, they can be readily crushed and even ground into a fine powder. The raw materials obtained in this way are used in the production of, among other things, road construction material, artificial turf and floor covering for sports fields and playgrounds.

### **A useful vacuum**

Chloromethane is harmful to health. However, as a gaseous solvent, it also has some very useful properties. The chemical industry therefore uses it for the production of various intermediate goods that are then used in the manufacture of products such as shampoo and cleansing agents. Cryogenic nitrogen and a process developed by Messer allow the chemical to be sucked out of the production process without any of it being released into the atmosphere.

The process makes use of a simple physical variable: vapour pressure. For chloromethane ( $\text{CH}_3\text{Cl}$ , also called methyl chloride), the vapour pressure falls below one bar, that means a vacuum is created, at minus 24 degrees Celsius. This allows the gas to be sucked out of the production reactor. The suction process is started up by cooling a heat exchanger with cryogenic liquid. This cooling causes the chloromethane to liquefy, thus taking up much less space than in its gaseous state. As a result, it is constantly sucked into the heat exchanger. The heat exchanger therefore functions as a vacuum pump (cryogenic pump). Practically all the chloromethane is removed from the process and temporarily stored in a refrigerated vessel. This prevents emission of the harmful substance, improves the quality of the manufactured product and facilitates recovery of the solvent for further production. The cryogenic pump operates like a vacuum pump, but one which does not use any electricity. That is because the suction effect is created by the vacuum which is generated by the low temperature of the liquid nitrogen. It enters the unit as a cryogenic liquid and is gaseous and warmer when it is discharged. In this state, it can be fed into a gas network and also reused. A very small flow of nitrogen is taken from the gas network to drive an injector. This injector sucks interfering residual gases out of the heat exchanger to ensure an optimal condensation process.

**And always has been ... Environmental and climate protection**

2004	Introduction of Group-wide gas cylinder tracking system
2005	New technical centre for environmental processes in France
2006	Duo Condex: waste gas cleaning at customer sites
2007	Start-up of state-of-the-art residual gas disposal facility
2008	Messer uses application technologies to help protect the environment in, for example, China, Romania, Czech Republic, Hungary and Switzerland
2009	Objective: seven per cent improvement in average specific energy consumption of air separation units in Europe
2010	Construction of bioethanol-based CO <sub>2</sub> production facility in France
2011	"Green paper mill" concept nominated for "TRIGOS 2011" business award
2012	First study on energy storage with liquid air
2013	Newly developed "MegaPack" cylinder bundle
2014	Implementation of "Global Energy Efficiency Management" for production facilities

# Customers and markets

The gases business is characterised by the fact that all of the pure products of industrial gases manufacturers, such as oxygen, nitrogen and argon, are comparable with one another. Industrial gases, specialty gases or food gases are generally used when, for example, neither an environmentally friendly nor a more cost-effective alternative for an optimisation of procedures and processes is available to the customer. In the food industry, for example, foodstuffs are only frozen with nitrogen if the cryogenic process offers greater advantages, such as a quicker freezing result, than is the case with mechanical freezing. Messer therefore strives to improve customer applications continuously through the use of gases, with the ultimate aim of securing long-term partnerships with its customers. The customer measures Messer's performance by the economic and resource-conserving advantages that they have gained by using gases and not, as a rule, on the basis of the price of the gas.

## **The main benefits afforded by Messer are:**

- Process consulting and application technology
- Quality assurance for gases supplied
- Quality assurance for installations, liquid storage tanks, gas cylinders, hardware supplied
- Quality assurance for order acceptance
- Quality assurance for delivery of gases / order fulfilment
- Quality assurance for technical services (including installation, maintenance, application technology-related advice)
- Employees' helpfulness and care
- Employees' competence and expertise
- Flexibility and creativity
- Continuous development and improvement of performance
- Fair price-performance ratio
- Quality assurance for the accompanying data sheets, manuals, information sheets
- Quality assurance for customer support provided by supplier
- Maximum safety when using and handling gases

The sales division at Messer is geared to the needs of its customers. While smaller customers are looked after via local sales partners and supported with the aid of electronic tools, more intensive partnerships with medium-sized customers are developed by the local sales department, who personally support these teams. A Key Account Management Team centrally looks after international customers that have complex needs and requirements across several countries and an international approach when it comes to buying and/or production technology – among other factors, this approach is adopted in order to fully exploit the associated business development potential.

To manage its customer processes, one of the instruments used by Messer is a European-wide customer relationship management tool that is linked centrally to the ERP software operated by Messer in Europe.

### **Application technology as a driver of growth**

When it comes to customer acquisition, particular advantages are offered by application technology know-how and the processes involved in putting gases to use in steel and metal processing, chemistry, the food and pharmaceutical industries, medicine, research and environmental technology. In recognition of these advantages, Messer operates a central technology department which works closely with sales. The department, which employs 40 specialists in gas applications and processes, uses its know-how, market knowledge and experience to support the sales activities at Messer companies in Europe, China, Vietnam and Peru. As a driver of growth, its goal is to recognise technological trends at an early stage and to work with the customer in a timely manner to develop, supply and integrate gas application technology processes aimed at optimising and improving processes, procedures and products. The development of the main products/services in this area does not so much concern the sales products themselves, as the application processes that in their turn generate a requirement for gases. A vital success factor here is proximity to the customer, which Messer guarantees through an international and well-organised sales network. Dialogue between sales and application technology, accompanied by close contact with customers, enables new customer projects to be identified. Process developments have a major bearing on new business development and thus on the growth of the company. An annual development plan is published, covering both short-term projects and longer-term topics of interest. Worldwide, Messer currently holds some 900 patents relating to approximately 180 clusters of patents for processes and applications which involve the use of gases to optimise production and technical processes in almost every industry.

### **Competence centres support innovations**

Messer runs technical competence centres in Germany, Austria, France and Switzerland which focus exclusively on innovations for different sectors: at the technical centre for food and environment in the French town of Mitry-Mory near Paris, Messer concerns itself with pioneering processes for the food, pharmaceutical and biotechnology sectors. The centre carries out tests for customers in the food, pharmaceutical and chemical/environmental sectors as well as special CO<sub>2</sub> industrial applications for our national subsidiaries. Not far from Krefeld, Messer runs a highly specialised cold grinding test centre for tests in the areas of cold grinding and recycling. Grinding synthetic material or natural products such as spices into a fine powder presents a particular challenge. At the Hochschule Niederrhein University of Applied Sciences in Krefeld, Messer has set up a specialised technical centre for the development of new technologies in the field of welding and cutting. Close contact with the university's materials and joining technology department strengthens the exchange of expertise and our joint work on innovation projects. The technical centre at the university supplements the international network of other welding and cutting technical centres, which Messer operates in Switzerland, Hungary and China. At the metallurgy

competence centres in Gumpoldskirchen, Austria, and Chengdu, China, Messer carries out research and development for industry, metallurgy and heat treatment as well as in the area of burner technology. Over and above the infrastructure of the technical centres, we have also established networks which allow the technical experts from all of Messer's national subsidiaries to exchange and share their expertise and market experiences, thus facilitating the best possible pooling of resources in the company.

We are always looking for new ways to give our customers an edge in every aspect of the supply and application of our gases. This involves the use of our wide range of applications in most industries as well as in research and science. In our markets, however, we try to stand out by virtue of the special service that we offer. Our customers want to be satisfied with our products, delivery times and service. For us, this finds expression in a long-term partnership.

## Customer service, most important in our cylinder business

Our cylinder business is a service business. The most important aspects are: quick and precise order acceptance, prompt and reliable delivery, high-quality gases, outstanding product safety and solid competence among all staff who deal with customers. We know from surveys that cylinder gases are always an important factor in the business processes of smaller enterprises. This is not primarily a question of costs, but rather of the availability of the optimal gas in the right cylinder, since important processes are dependent upon this availability.

In the sale of cylinder gases in particular, we offer digital service options which are designed to bolster personal contact with our customers, from the time that the first pamphlet is handed to them at trade fairs, to partnerships lasting years. We want our target customers to be enthusiastic about our service so that they recommend Messer to others.

### **Technologies at my.messergroup.com**

Our online customer portal doesn't just offer services for customers – such as registration for electronic invoicing or online ordering – but also information on application technologies. Customers in every country who still receive their invoices by post can register here for electronic invoicing. Under "e-Technologies", topic-based pages link to descriptions of technologies such as freezing with nitrogen in cold chambers, solvent recovery with nitrogen, cryogenic grinding, mixer cooling in meat processing and wastewater neutralisation. At my.messergroup.com, Messer offers a balloon shop from which customers in Austria can make online purchases of balloons and the necessary balloon gas for their next party. Messer in Switzerland also uses the website to provide a hardware shop for autogenous material. Besides pressure regulators and filler metals, customers in Switzerland can also order cylinder trailers or protective clothing.

### **Laboratory portal myLab**

For the purpose of administering process and calibration gases, Messer runs the myLab portal for registered users, from where they can access comprehensive information regarding the products bought so far and retrieve the specifications and safety data sheets for standard products, as well as the certificates for individual gas mixtures. The portal also provides information on the period of stability of calibration gases and offers the possibility of quick reordering.

### **Our apps for smart customers**

Smartphones, tablets and apps don't only facilitate more mobile working; in many respects, they also make work easier and less complicated. Messer therefore offers a number of apps which create tangible additional benefits when it comes to handling gases.

Messer's first Android app was developed and released in 2012. The Messer Group now has eleven apps available for download from the Google Play store. These include tools such as a converter, which clearly presents the properties of the most important industrial and specialty gases and facilitates the conversion of units of volume and quantity. Another app dealing with welding gases offers users specific recommendations regarding the most suitable shielding gases for different materials and requirements. The new "Shielding gas flow" app from Messer helps users set the right shielding gas flow for MAG, MIG and TIG welding. The user enters the parameters and receives a recommendation for the optimal gas flow. Possible pressure differences or gas losses caused by the welding equipment should also be taken into consideration. These require the gas flow to be checked at the shielding gas nozzle. Besides the settings app, Messer offers another app which provides an overview of possible welding positions in accordance with the DIN EN ISO 6947 standard from 2011. This clearly depicts which welding position should be used for which welding job, with the DIN standard having established the PH and PJ welding positions for vertical-up and vertical-down welds on pipes. The PF and PG positions now only apply to metal plates.

Anyone searching for a pressure regulator for a particular specialty gas will find it with the assistance of the Specialty Gases-Hardware app, which generates a list of suitable pressure regulators based on the data entered.

We also offer an app on the subject of wastewater neutralisation. It provides information on efficient and environmentally friendly processes using carbon dioxide.

### **Reordering via barcode scan**

The "E-Order" app makes it very easy to reorder cylinder gases by scanning the barcode. To do this, customers start their smartphone camera from the app and take a picture of the barcode on the existing gas cylinder. The app then takes them directly to the product page where they can order the required quantity. The technical and safety data for the products can also be retrieved there.

### **Specialist information on specialty gases at [www.specialtygases.de](http://www.specialtygases.de)**

This website details our product range in specialty gases such as high purity gases, gas mixtures, liquid helium, gases in pressure cans or balloon gas, as well as our range of fittings and gas supply systems. It also provides brief and easy-to-understand explanations of the applications of specialty gases in analytical processes, ambient air monitoring, environmental analysis, leak detection or magnetic resonance imaging.

### **New cylinder bundle at [www.megapack.com](http://www.megapack.com)**

MegaPack is the name of the new product line based on the gas cylinder bundle developed by Messer. Its unique selling points, such as its form, improved safety and optimised handling, set MegaPack apart from the bundles that are in general use today.

### **“Air meets life”**

“Air meets life” – that is the title of the new Messer image brochure. At an emotional level, it links the purpose of our business – producing and selling industrial gases – with our company slogan “Gases for Life”. The image brochure imparts an initial emotional impression of Messer and provides basic information about the company. On 34 A4 pages, it presents Messer’s corporate culture, our image and our activities in the market. Readers are given a complete picture of Messer, taking in our values, the customer products in which our gases are used, our management structure, our employees and our sister companies. The brochure is suitable for customers, potential customers, business partners and banks. Its little sister brochure, “Messer compressed”, has less emotional content but makes up for this with data, facts and figures. Its twelve A5 pages are regularly updated.

### **Specialist brochures and Know-how Navigator**

In our specialist brochures, we provide summarised “know-how” on our products as well as on the specific applications and processes in which our gases are used. Our website [messergroup.com](http://messergroup.com) provides access to around 70 specialist brochures. Our “Know-how Navigator” provides customers with a means to carry out targeted searches for industry-specific information on our range of gases and applications. We have developed our first brochure in the style of the “Gases for Life” campaign for the area of pharmaceutical gases: as well as presenting “Pharmaline”, our product range for the pharmaceutical industry, the eight-page brochure also features a new layout. Brochures about medical oxygen and nitrous oxide have also been updated with a “Gases for Life” theme on the cover. The Pharmaline gases argon, nitrogen and carbon dioxide are subject to special quality management that reflect the pharmaceutical industry’s standards for process gases.

### **Cost calculator shows savings potential**

The quality of welds is considerably influenced by the choice of shielding gas mixture. The new ternary mixtures from Messer achieve much better results – saving the customer cash. The extent of the savings is shown by a cost calculation program from Messer which supports the “I’m a triple saver” campaign. The cost calculator allows a direct comparison of the manufacturing costs, taking all the important welding parameters, the electricity price and rework into account. The cost can be compared per unit or per metre of weld. The shielding gas used is a comparatively minor factor in this regard, accounting for only about five per cent of the total welding costs. However, the gas mixture does have a major bearing on quality and efficiency.

After a successful start to the “I’m a triple saver” campaign at the Euroblech 2014 trade fair in Hanover, several bodies have now implemented the campaign, together with Messer’s Welding and Cutting Team. Training workshops with the welding specialists from Messer B.V., Netherlands, and Messer Belgium, Belgium, have already taken place in Krefeld; the training events for the sales teams were held in the different countries. Further training events are held starting in April for Messer Polska in Poland, where the new ternary mixtures will be presented as well as sales aids such as the cost calculator, posters and apps.

### **Shielding gas seminars for Spanish gases centres**

For Messer Group, selling gases also means giving our customers competent advice on using them – worldwide. In February and March 2014, seminars on the subject of welding and shielding gases were therefore held in Valencia and Tarragona. Representatives of all the gases centres with which Messer Ibérica de Gases cooperates in Spain were invited to take part.

The seminars focused on the new ternary shielding gas mixtures. At both events, the theoretical part on the use of shielding gases for the different welding processes was followed by several practical demonstrations. At the end, the participants had a lively discussion about what they had learned. In Tarragona, they also visited our air separation unit in El Morell to familiarise themselves with Messer Ibérica de Gases’ new investment. The list of training topics is now to be expanded for future events.

## Further increasing customer satisfaction

As with all our Messer employees, our partners in depots and agencies throughout Europe who deliver cylinders on our behalf clearly understand that every daily contact they have with customers is ultimately reflected in customer satisfaction levels. By analysing customer feedback, we can see where we are doing well and where we can do even better.

In 2014, we implemented Messer’s survey tool behind the Messer Group’s firewall to enable direct communication with the Customer Relationship Management tool (CRM). The advantage of this is

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that customers' online responses can also be seen in the CRM system. This means that local sales staff can react more quickly to specific customer concerns when required. The survey tool can also be made available to customers upon request, i.e. via my.messergroup.com or within the framework of electronic communication such as order confirmations, invoices or e-mails. By moving the tool onto our internal systems, we are enhancing data security and facilitating direct access to the many contact details in the CRM system as a basis for regular or random contacts. The open source software used by us maximises functionality while at the same time minimising costs.

### **Customer survey**

Measuring customer satisfaction is a key element of ISO 9001. We contacted more than 17,000 customers in Peru, Hungary, Bulgaria, Switzerland, France, the Netherlands, Spain, Belgium, Poland and Austria. Almost 2,000 customers took part in the survey and completed the questionnaire. This involved customers ranking a total of 16 services in order of importance and then rating Messer's performance on a scale of very good (1) to unsatisfactory (10). Our customers attach great importance to safety, to the quality of the supply and the quality of the products. Messer did well in these services, receiving an average rating of 2.4 from the customers. For staff commitment and staff competence, our colleagues received the highest average score of 2.3. This clearly shows that personal contact with our customers has a high priority. Messer was given an overall score of 2.9 by customers. The willingness to recommend Messer is very high with an average score of 2.7. 83.6 per cent are satisfied or very satisfied with our service. 83.7 per cent would further recommend us. In spite of the good rating, the customer satisfaction analysis allowed us to identify further potential for improvement, such as improving safety at our customers' sites. Safety is one of the most important issues. Our national subsidiaries therefore offer regular safety training for our customers.

### **Customer voices and interviews**

Many of our customers are prepared to join us in publishing process-related successes in internal and external media. We are also allowed to use customer opinion in our presentations at trade fairs. Each issue of our customer magazine Gases for Life, the industrial gases magazine, features an interview with a representative from a partner company.

In 2014 we interviewed three people: the managing director of an automotive spare parts producer in Turkey, the managing director of a German laser cutting company and the owner of a Spanish manufacturer of metal structures. All three companies have been getting cylinder gases from Messer for many years.

According to them, security of supply and impeccable quality of the gases are crucial for successful co-operation. Customers also draw on Messer's experience and advice in order to optimise their processes. Messer is described as customer-oriented and reliable, and the consistently high quality of our products is also rated as very important. Our customers want solution proposals for every area of work where gases are used, as well as extensive know-how, comprehensive consulting and timely information about new developments.

## Long-term customer retention

We work to meet the following requirements: a constant willingness to learn the customer's language and to make active use of it; and an absolute determination to focus intensively on the wishes and requirements of the gas user and to link these with in-house technological know-how as well as technical expertise.

### **Security of supply guaranteed**

Ostrava, Czech Republic. MG Odra Gas has extended its supply contract with ArcelorMittal Ostrava (AMO), the largest Czech steel producer. AMO has been supplied with oxygen, nitrogen, argon and acetylene by pipeline for over 20 years. MG Odra Gas is a joint venture between Messer Group (70 %) and AMO (30 %).

MG Odra Gas has also extended its nitrogen supply contract with Green Gas DPB in the neighbouring town of Paskov. Thanks to the installation of a secondary nitrogen compressor, the customer can now be supplied with an increased quantity of nitrogen via pipeline. Green Gas DPB uses the nitrogen to inert its coal mines, thereby reducing the danger of fire.

### **Messer secures its leading position in northern Vietnam**

The new oxygen and nitrogen supply contract concluded in October by Hoa Phat Steel, Vietnam's largest steel producer, and industrial gases specialist Messer will run for a period of 25 years. With a third air separation plant for the production of oxygen, nitrogen and the noble gas argon, Messer has secured its long-term position as the market leader in northern Vietnam.

From 2016, Messer will supply gaseous oxygen and nitrogen directly to the steelworks via a pipeline. The three air separation plants have sufficient capacity to supply the necessary volumes. For the third plant, Messer is using the existing production infrastructure, allowing costs to be saved and resources to be conserved. Messer also operates the country's only production facility for certified food-grade carbon dioxide, as used in carbonated beverages or for cooling and freezing food.

The Hoa Phat Steel Group is currently the most profitable steelmaker in Vietnam, producing 1.15 million tonnes of steel a year, 850,000 tonnes of which are produced in Hai Duong. Construction of the third blast furnace has now begun and is due to be completed in March 2016. In future, the market leader will have an increased production capacity of up to two million tonnes. Hoa Phat is the only steelmaker in Vietnam that produces various types of high-quality steel bars.

### **MegaPack for high throughput**

The Romanian company MPO Prodivers Rezistent manufactures some two million welded parts every year. This producer of air filter brackets and bonnet grips for the automotive industry uses the shielding gas Ferroline C8 from Messer for its welding processes. The gas is supplied in the modern MegaPack. MPO Prodivers Rezistent is part of the French MPO Group, an important supplier to the Renault-Nissan alliance. Messer in Romania has been a supplier to the company since 2008 and its sole supplier of gases since 2013.

### **Customer retention increased**

Messer China and the International Key Account Management (IKAM) team of Messer Group have been cooperating well with the Chinese production plant of Koepfer Zahnrad- und Getriebetechnik GmbH, and this is continuing to bear fruit in China: Messer has managed to convince EMAG (China) Machinery Co., Ltd., part of EMAG Holding, of the quality and delivery reliability of its industrial gases produced in Zhangjiagang. EMAG in Jintan has been using our products in the production of lathes and grinding machines for the Chinese market since April 2014. EMAG is the world's leading manufacturer of CNC vertical lathes.

### **Strong sales partners**

Choosing the right sales partners is crucial to success in the cylinder gases sector. Messer in Slovakia recently celebrated the twentieth anniversary of a strong partnership with Zvartep in Banská Bystrica. Dušan Šimo and Michal Pal'a, the managing directors of Zvartep and Messer in Slovakia, praised the spirit of cooperation between the two companies in their speeches.

But newer partnerships are enjoying success as well: in Germany, the new headquarters of Carl Lixfeld Schweißtechnik was officially opened in Kreuztal in May. Lixfeld has been operating a Messer gases centre at its site in Kempen in the Lower Rhine region for a year now. Starting in August, the company will also run the sales operations in the Siegen region from its Kreuztal base. As a highly specialised welding company, Lixfeld supports Messer in the area of customer acquisition and also provides specialist customer consulting.

### **Gases workshop establishes contact**

Messer BH Gas and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ, German Society for International Cooperation) want to work together in a three-year project to increase knowledge of gases in companies and places of learning and to initiate new partnerships. Supported by the Chamber of Commerce in Srpska, the project sponsors organised a workshop for representatives from the food industry, universities, schools and the press on 6 November 2014. Messer BH Gas provided an insight into the world of "Gases for Life". Our Gourmet food gases preserve and improve quality when processing and packaging foodstuffs, prolonging their shelf life.

**And always has been ...**

**Customers and markets**

2004	New development centres in Germany for cold grinding/ recycling and welding/cutting
2005	Messer at "Schweissen & Schneiden" trade fair in Germany for the first time as a family enterprise
2006	Food gases become "Gourmet"
2007	Re-entry into Germany: "Gase.de" as a new supplier in the German industrial gases market
2008	Implementation of International Key Account Management
2009	Launch of e-Invoicing project
2010	Customer portal my.messergroup.com goes live
2011	Development of the Duplex bundle for gas withdrawal with a supply pressure of 200 and 300 bar
2012	"Gases for Life" campaign makes Messer gases visible
2013	"Messer Innovation Forum" campaign to market process technology-related gases applications
2014	Pharmaline: expansion of product range with gases for the pharmaceutical industry

# Social commitment

Many affiliates of Messer are involved in social and environmental projects. This involvement ranges from donations of money or goods – to social institutions, schools and hospitals – to participation in days of action, through to the sponsoring of projects. The type of involvement depends on the needs of the country in question.

Messer also implements its commitment to the social and health sectors through the Dr. Hans Messer Social Foundation set up by the Messer family. It makes donations to help people worldwide who find themselves in need through no fault of their own. The funding comes from income arising from the foundation's capital reserves and from donations – including from Messer employees who forego their gifts on company anniversaries, significant birthdays or similar events. For example, on the occasion of Stefan Messer's 60<sup>th</sup> birthday, the foundation managed to raise over 20,000 euros in donations. The reports below feature selected projects.

## Commitment to education and economic cooperation

### **Infrastructure for welding**

For many years now, Messer and Castolin Eutectic, a Messer sister company, have supported the Faculty of Mechanical Design at the University of Belgrade with donations, scholarships and by sponsoring research projects and conferences. On the initiative of Messer, a new department for welding and welded structures was set up at the faculty. It received significant elements of its equipment from Messer, and its students can use the 'CastoLab' laboratory from Messer Tehnogas for their work. Representatives of the company also actively participate in the teaching programme by giving talks and presentations. Every November, the second-year students spend five days at Messer's Serbian subsidiary – which includes Messer Tehnogas and Castolin.

Messer Tehnogas has been awarded a plaque of honour in recognition of its contribution to the faculty.

### **Mutual benefit**

Messer BH Gas and the Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ, German Society for International Cooperation) have signed a cooperation agreement under the develoPPP.de programme (Public Private Partnership). With develoPPP.de, the German Federal Ministry for Economic Cooperation and Development (BMZ) is promoting the involvement of private companies where business opportunities and the need for development policy action coincide. Messer BH Gas is supporting the programme by passing on practically orientated knowledge concerning every aspect of our 'Gases for Life' to business representatives, authorities, universities and schools.

### **Welding competition for artists**

The summer of 2014 saw the launch of the welding competition 'Focus on art – for artists of the trade', in which 32 companies took part in Hungary. Following the launch event in June 2014 and several preliminary selection rounds, the family enterprise Gyegep Kft. secured victory in the final on 6 November 2014. This competition was co-organised by Messer Hungarogáz and Rehm Kft. Our new ternary mixture Ferroline C12X2 was successfully used as a shielding gas. Messer is planning to support the 'Focus on art' competition once again in 2015.

### **Mechatronics training programme in Vietnam**

Two years ago, on 18 March 2013, industrial gases specialist Messer and pharmaceutical and medical supplies company B. Braun signed an agreement in Vietnam with Hung Yen University of Technology and Education (UTE HY). The project, which is being run under the develoPPP.de programme, marked the beginning of the joint pilot project in Vietnam – a cooperative training programme in the area of mechatronics which includes periods of on-the-job training. The first 14 trainees have now successfully completed their two-year dual training programme. They have all received permanent contracts of employment with Messer and B. Braun, the companies who provided the training.

With the aim of further improving the training programme, Messer and B. Braun have analysed the experiences of the first two years with the partners involved in the project – the General Department for Vocational Training (GDVT) at the Vietnamese Ministry of Labour, Invalids and Social Affairs (MOLISA), the German/Vietnamese Chamber of Commerce and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German Society for International Cooperation). Optimisation of the dual vocational training scheme is due to be completed by the end of 2016, so that the second round of training can then begin. Competent skilled workers are in great demand by every company in Vietnam. However, at present the Vietnamese vocational training system is not able to meet this demand. Our pilot project is intended to act as a model of practice-oriented training and to attract further companies to join the training programme.

### **Outstanding graduates receive Hans Messer Prize**

On 11 February, the Frankfurt am Main Chamber of Commerce (IHK) awarded the Hans Messer Prize 2014 to two graduates of Frankfurt University of Applied Sciences. The two prize-winners received the award in recognition of their outstanding academic achievements. The total prize money is 6,000 euros and is divided equally between the two prize-winners. The IHK Frankfurt awards this prize annually in acknowledgement of the practically relevant work done by outstanding students. The prize is awarded in honour of long-time IHK president Dr. Hans Messer.

Thekla Behrens, a master's graduate in Leadership from Faculty 3, Business and Law, did her thesis on new ways of recruiting staff, with a particular focus on the Internet. In cooperation with Alnatura Produktions- und Handels GmbH, Behrens analysed current changes in the labour market, highlighted new methods of recruitment via the Internet and social networks, and then presented the practically-oriented

implementation of the new methods for staff recruitment at Alnatura. Her master's thesis was graded as "excellent", while for the course as a whole Behrens received the top grade of 1.0.

Oral Mutaf, a mechanical engineering graduate from Faculty 2, Computer Science and Engineering, developed a software concept in his bachelor's thesis. In cooperation with and support from Hyundai Motor Europe Technical Center GmbH, he developed a computations programme that can be used to simulate the fuel consumption and carbon dioxide emissions of a motor vehicle. This allows the effect of fuel-saving measures to be simulated and estimated in advance. Oral Mutaf was awarded the top grade of 1.0 for his thesis, and he completed his bachelor's degree with an overall grade of 1.2.

The prizes were presented as part of the 17th Hans Messer Lecture. The keynote speaker Dr. Jürgen Heraeus, who among other things is Chairman of the Supervisory Board of Messer Group GmbH, gave his lecture on the subject of 'Germany's future prospects as an industrial location'.

### **Adolf Messer Prizes awarded in Darmstadt and Frankfurt**

The Adolf Messer Prize, worth 50,000 euros, was awarded at the Technical University of Darmstadt on 4 December 2014. The prize-winner, Annette Andrieu-Brunsen, associate professor at TU Darmstadt's Faculty of Chemistry, was awarded the prize for a research project on nanoscale chemical reactions.

The Adolf Messer Foundation Prize, worth 25,000 euros, was awarded at the Goethe University in Frankfurt on 30 June 2014. The prize was awarded to Dr. phil. nat. Markus Stefan Schöffler from the Faculty of Physics for his research project 'Determination of the chirality of complex chiral molecules with a reaction microscope'.

The Adolf Messer Foundation uses the award of these two prizes to promote outstanding achievements in the fields of natural science, medicine and engineering, as well as in economics, social science and the humanities. The foundation was established by the Messer family in 1978. Adolf Messer founded Messer in Höchst am Main in 1898. At that time, the company focused on the production of acetylene generators. Today, the Messer Group is the world's largest family-owned industrial gases company and is now being managed by Stefan Messer, the third generation to run the firm. In 2011, Stefan Messer was appointed Honorary Senator of TU Darmstadt in recognition of his contribution to the promotion of research and teaching for outstanding young scientists. This was followed in September 2013 by his appointment as Honorary Senator at the Goethe University in Frankfurt.

### **Messer opens its doors to the Mouse**

An 'Open Doors Day' initiated at companies and institutions across Germany, allowed Messer Industriegase to offer fans of 'The Program with the Mouse' – both young and old – a look behind the scenes. Instructive experiments from the invisible world of gases awaited families with children in the Adolf-Messer-Forum in Bad Soden am Taunus. Among the things that Mouse fans could discover at Messer was why crisp bags make a hissing sound when you open them, how artificial fog is created in theatres, and in what mysterious circumstances rubber nails can be hammered into a piece of wood with a banana. The response to Messer's online announcement was so great that the 'Open Doors Day' was quickly booked up: a total of 150 guests attended the event.

The 'Programme with the Mouse', with its funny and factual stories and the Mouse as the leading figure, is one of the most successful children's programmes on German television and has been produced since 1971.

## Social commitment

### **Messer helps flood victims**

The worst affected areas of May's historic flood in Southeast Europe were Serbia, Bosnia-Herzegovina and parts of Croatia. Several Messer companies spontaneously provided aid, and the results were impressive: the fundraising campaign raised 100,000 euros in cash, as well as 30,000 euros worth of goods.

The government's crisis management team first provided a list of regions where there was a lack of drinking water and baby food. Within two days, Messer in Bulgaria and Macedonia transported almost 40,000 litres of mineral water to the towns of Šabac and Smedevereska Palanka. In Paraćin and Svilajnac, we joined forces with customers to organise further relief operations. Numerous staff helped build temporary dams in the flood-hit regions.

All of the 300-plus employees of Messer Tehnogas in Serbia donated ten per cent of their monthly salary to the flood victims. At the headquarters of Messer in Germany, the relief operation began with a central appeal for donations from all the national subsidiaries. What followed was an enormous wave of help: the staff in Krefeld donated 3,725 euros as well as materials. The campaign was extended to the townsfolk of Krefeld, leading to further donations of goods. A logistics partner of Messer Tehnogas handed over the donated items to the Red Cross at the Serbian border. On the ground, Messer met the transport costs into the flooded areas and supported the distribution of clothes as well as food, water, nappies and cleaning materials. Messer Albagaz, Albania, supported the campaign with a donation of 2,500 euros.

Messer Romania Gaz, Romania, managed to get relief aid, including food and woollen blankets, to Svilajnac in Serbia within just a week. Messer Technogas, Czech Republic, supported Messer's appeal and transferred 3,600 euros to the donations account opened by Messer in Serbia. Slavonia, in the east of Croatia, did not escape the flood disaster either. Messer Croatia Plin in Croatia donated money to the Red Cross to help people rebuild their homes after the floods. Messer Hungarogáz in Hungary also donated money, or the staff bought relief supplies directly. All donations went to Županja in Croatia via Caritas. The staff of Messer Slovenija in Slovenia donated basic necessities to the Red Cross and Caritas in Slovenia and transferred money to both aid organisations, which further benefited the flood victims in the Balkans. An employee of Messer Austria organised an aid consignment, which a driver from our logistics partner Hoyer not only transported to Serbia, but even distributed locally, all without a hitch. All the staff of Messer France donated canned food, hygiene products and cleaning materials. The company also helped with the purchase of goods. The relief aid was handed over to the Red Cross, who distributed it to the flood victims.

### **Food support**

At the end of 2014, Messer Ibérica launched another staff campaign to provide renewed food support to the charitable organisation 'Banco de Alimentos'. "Thanks to the generosity of my colleagues, we were able to donate 800 kilos of food to the food bank, which daily provides for 33,000 people in need in the province of Tarragona alone", says Marion Riedel, Messer Ibérica. "In 2014, Messer was also one of the sponsors of the New Year's Eve race in Tarragona, from which the proceeds go to the 'Fundació Bonan-it', an aid organisation that looks after homeless people. The runners included several of my colleagues, who took this opportunity to see out the old year by doing something sporty", Marion Riedel adds.

### **Giving away toys**

In many children's rooms, we see the consequences of increasing consumerism: our offspring have too many toys. Tatjana Glažar of Messer Slovenija therefore initiated the 'Special Friends' project. 'Special Friends' involves collecting toys that are no longer needed, such as soft toys, dolls etc., and then giving them away to kindergartens, schools and toy shops. Beforehand the toys are revamped in a home for the disabled.

## Commitment to health and quality of life

### **A little help for vital research**

In May 2014, 'St. Anna Kinderkrebsforschung', a children's cancer research institute in Austria, invited people to its '10th Long Night of Children's Cancer Research'. The visitors were impressed by the insight they got into the day-to-day work of the laboratory and the methods used in molecular oncology, which is concerned with the causes of tumours. The younger guests were very taken with the many red balloons, for which Messer Austria provided balloon gas and extraction valves.

### **Support for transfusion medicine**

Messer Tehnoplín and its partner Demaco jointly supported the Institute for Transfusion Medicine in Sarajevo: the two companies bore all the costs associated with the delivery and installation of a liquid nitrogen pipeline. The new supply system will enable the institute to carry out its work far more efficiently. The uses to which our nitrogen is being put include freezing cells and tissue.

### **Young footballers**

Messer Technogas supported the young footballers at Czech football club MFK Klub Chrudim. The young footballers play in the Pardubice regional mini league. The first time they lined up in their new Messer-sponsored 'Gases for Life' strip was in the 2014 E.ON Cup tournament.

And always has been ...

Society

2004	Messer family active with the Dr. Hans Messer Social Foundation for people who find themselves in need through no fault of their own
2005	Donation to neonatal intensive care unit at Binh Duong Hospital, Vietnam
2006	Donation of a vehicle for mobile nursing care for children
2007	With the book "100 per cent Messer – The return to the family firm, from 1898 to the present day", Messer shows just how important it is to know this history
2008	Help for the victims of the earthquake in China
2009	Campaign to promote protection against swine flu
2010	Messer supports children in different countries, for example in Spain and Brazil
2011	China: help for autistic children
2012	Spain: donations of food and money
2013	Bosnia-Herzegovina: schoolchildren supported with learning tools
2014	Relief action in Southeast Europe

## Messer Group – GRI Content Index - 'in accordance' Core

The GRI Content Index shows at a glance how the Messer Group's corporate responsibility report meets the requirements of GRI. The Index shows the standard indicators we have considered and to what extent, as well as where these can be found on the company's website or in the Corporate Responsibility Report and Annual Report (CRR&AR). In addition, the GRI Content Index includes explanations and supplementary information on selected standard indicators. Further information can be found in the GRI Annex under

[www.messergroup.com/de/sustainability/index.html](http://www.messergroup.com/de/sustainability/index.html). For this report, GRI conducted a Content Index Service. GRI hereby confirms that the GRI Content Index is accurate and aligned with the defined requirements (G4-32), and the Standard Disclosure Labels are clearly indicated in the report (e.g. "G4-18", "G4-DMA" or "G4-EN5"). The disclosures on material issues that are not represented by a GRI aspect (at the end of the Index) are not within the scope of GRI's service.



General standard disclosures		
General standard disclosures	Page or link	External Assurance
<b>Strategy and analysis</b>		
G4-1	CRR&AR p. 23	–
<b>Organisation's profile</b>		
G4-3	CRR&AR p. 3	–
G4-4	CRR&AR p. 3, p. 4	–
G4-5	CRR&AR p. 149	–
G4-6	CRR&AR p. 3, p. 148	–
G4-7	CRR&AR p. 140	–
G4-8	CRR&AR p. 6	–
G4-9	CRR&AR p. 6, p. 118, p. 123	–
G4-10	CRR&AR p. 6, p. 108	–
G4-11	CRR&AR p. 46	–
G4-12	CRR&AR p. 55	–
G4-13	CRR&AR p. 104	–
G4-14	CRR&AR p. 129	–
G4-15	CRR&AR p. 24, p. 34	–
G4-16	CRR&AR p. 34	–
<b>Identified material aspects and boundaries</b>		
G4-17	CRR&AR p. 148	–
G4-18	CRR&AR p. 24, p. 26	–
G4-19	CRR&AR p. 27, p. 28	–
G4-20	CRR&AR p. 26	–
G4-21	CRR&AR p. 26	–
G4-22	no restatements of previous information revealed	–
G4-23	CRR&AR p. 104	–

Stakeholder engagement		
G4-24	CRR&AR p. 25	–
G4-25	CRR&AR p. 25	–
G4-26	CRR&AR p. 25, p. 26	–
G4-27	CRR&AR p. 26	–
Report profile		
G4-28	01.01.2014 - 31.12.2014	–
G4-29	01. April 2014	–
G4-30	CRR&AR p. 35	–
G4-31	CRR&AR p. 149	–
G4-32	This GRI Content Index. Further information can be found in the GRI Annex published on the Internet at: <a href="http://www.messergroup.com/de/nachhaltigkeit/gri/index.html">www.messergroup.com/de/nachhaltigkeit/gri/index.html</a>	–
G4-33	CRR&AR p. 19; the sustainability report has not been audited externally	–
Governance		
G4-34	CRR&AR p. 18	–
Ethics and integrity		
G4-56	CRR&AR p. 30, p. 32	–

Specific standard disclosures			
DMA and indicators	Page or link	Omissions	External Assurance
<b>Category: Environmental</b>			
<b>Aspect: Energy</b>			
G4-DMA	CRR&AR p. 68		–
G4-EN3	CRR&AR p. 71		–
G4-EN5	CRR&AR p. 71		–
G4-EN6	CRR&AR p. 70		–
<b>Aspect: Emissions</b>			
G4-DMA	CRR&AR p. 72		–
G4-EN15	CRR&AR p. 72		–
G4-EN16	CRR&AR p. 72		–
G4-EN17	CRR&AR p. 72		–
G4-EN20	none		–

**Category: Environmental**

<b>Aspect: Effluents and waste</b>			
G4-DMA	CRR&AR p. 75		–
G4-EN24	none		–
G4-EN25	none		–
<b>Aspect: Compliance</b>			
G4-DMA	CRR&AR p. 56		–
G4-EN29	none		–
<b>Aspect: Transport</b>			
G4-DMA	CRR&AR p. 62		–
G4-EN30	CRR&AR p. 65		–

**Category: Social**

**Sub-Category: Labor practices and decent employment**

<b>Aspect: Employment</b>			
G4-DMA	CRR&AR p. 42		–
G4-LA1	CRR&AR p. 42		–
<b>Aspect: Occupational health and safety</b>			
G4-DMA	CRR&AR p. 62		–
G4-LA6	CRR&AR p. 64		–
G4-LA7	none		–
<b>Aspect: Training and education</b>			
G4-DMA	CRR&AR p. 44		–
G4-LA9	CRR&AR p. 44		–
G4-LA10	CRR&AR p. 44		–
G4-LA11	100%		–

**Sub-Category: Human rights**

<b>Aspect: Non-discrimination</b>			
G4-DMA	CRR&AR p. 45		–
G4-HR3	CRR&AR p. 46		–

**Sub-Category: Society**

<b>Aspect: Compliance</b>			
G4-DMA	CRR&AR p. 56		–
G4-SO8	none		–

**Sub-Category: Product responsibility**

**Aspect: Consumer health and safety**

G4-DMA	CRR&AR p. 62		–
G4-PR1	CRR&AR p. 28, p. 65		–

**Aspect: Product and service potential**

G4-DMA	CRR&AR p. 80		–
G4-PR3	CRR&AR p. 66		–
G4-PR5	CRR&AR p. 85		–

**Aspect: Compliance**

G4-DMA	CRR&AR p. 56		–
G4-PR9	none		–

**Further material issues for Messer Group (not represented by a specific GRI Material Aspect)**

**Issue: Open communication and cooperation with stakeholders**

DMA & Indicators	CRR&AR p. 25, see G4-24 - G4-27		–
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**Issue: Independence, secure finances, sustainable economic resources**

DMA & Indicators	CRR&AR p. 32, see G4-56		–
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# Group Management Report

of the Messer Group GmbH 2014

## General Information on the Group

G4-13, G4-23

### Changes in the financial year 2014

The group reporting entity changed as follows during the year under report:

#### **First-time consolidations**

The following entities were founded and commenced operations in 2014:

- Messer Management Consulting Shanghai Co. Ltd., China, 100 %
- VPSA Järvakandi OÜ, Estonia, 50 %

With effect from March 12, 2014, Messer France S.A.S. acquired 100 % of the shares in Praxair S.A.S. from Praxair Euroholding, Spain, for a purchase price (free of cash and debt) of K€ 40,816. Praxair S.A.S. was then merged with Messer France S.A.S. The acquisition of Praxair France boosts our strong competitive position on the French market. The newly acquired activities will be integrated into the existing business, with a view to achieving the planned efficiency improvements as quickly as possible. Synergies will derive mainly from economies of scale in production and distribution, as well as in administration.

#### **Successive purchases of shares**

With effect from November 3, 2014, the German firm BUSE Gastek GmbH & Co. KG, headquartered in Bad Hönningen, merged its business divisions for CO<sub>2</sub> production and recovery plant construction and dry ice technology, including all related intangible and tangible assets and other business assets and liabilities, with the Swiss firm ASCO CARBON DIOXIDE LTD., Romanshorn. In exchange, BUSE received 30 % of the shares and voting rights of ASCO.

#### **Deconsolidations**

By purchase contract of March 10, 2014, which came into effect on March 11, 2014, the Messer Group sold its industrial gases business in Italy to an Italian joint venture, in which the Praxair Group has a shareholding. Messer Italia S.p.A. therefore no longer forms part of the group reporting entity. This operation generated a gain of K€ 18,224.

The Messer Group sold its 50 % shareholding in ASCO Real Estate Holdings Ltd. with effect from August 19, 2014. The sale is part of the reorganization of the ASCO Group. Changed market requirements led to the closure of the New Zealand site with effect from December 31, 2014. Our shareholding in ASCO Carbon Dioxide Ltd. remains part of the group reporting entity until this operation is finally completed.

## Other

2014 saw the merger of ASCO Carbon Dioxide S.a.r.l., France, with Messer France S.A.S., France. The newly acquired firm Praxair France S.A.S., France, was also merged with Messer France S.A.S., France.

Messer MOL Gáz Kft., Hungary, was renamed Messer Széndioxid Kft. in 2014.

## Financial performance indicators

For control purposes, the Messer Group mainly uses parameters based on operating performance indicators derived from the income statement (sales, EBITDA) and from capital expenditure, net debt and ROCE indicators. Further explanations and the make-up of the indicators are provided in the sections on earnings performance and financial position.

## Non-financial performance indicators

Safety, health, environmental protection and quality ("SHEQ") have been firmly embedded in Messer's guiding principles since its foundation in 1898 and continue to have the utmost priority in the operations of the family-owned company. Messer is aware that well-organized safety and quality guidelines form the basis for dealing safely with operational risks and improving operational performance. For this reason, the health and safety of our workforce and the protection of the environment are integral components of the Group's total quality management systems, as reflected in various Messer Group standards.

To take account of the growing importance of ensuring a healthy environment, social justice and effective business management, the Messer Group has embarked on the introduction of a system of Corporate Responsibility Management ("CRM"). CRM follows a long-term approach and will contribute to the sustainable development of Messer. To this end, the Messer Group has also enhanced its SHEQ performance indicator system.

During the past financial year, 781 (2013: 603) SHEQ-related inspections and checks were carried out throughout the Messer Group (of which 675 in Europe), resulting in a large number of improvement measures.

In addition, 597 ideas and suggestions for improvements were submitted by our staff members throughout the Messer Group (of which 249 in Europe). The suggestion rate within the Messer Group therefore stood at 0.10 ideas per employee.

## Occupational safety

Occupational safety is of the utmost importance for all Messer companies. The Messer safety guidelines clearly reflect our position: "All industrial illnesses, injuries and accidents are avoidable".

Messer uses its global management system to identify and control potential operational risks. The principles of this system are carefully documented in a SHEQ manual and cover all safety-relevant areas: risk management, safety training, safety inspections, personal protective equipment, communication safety, accident investigations, etc. In recent years, a large number of SHEQ audits have been carried out to ensure compliance with these guidelines.

In addition, work started in 2014 on drafting additional safety guidelines especially for work in laboratories and acetylene plants.

During the financial year 2014, four safety audits were conducted in three countries to ensure compliance with the SHEQ standards throughout the Messer Group's operations. The success of the safety guidelines is assessed by means of annual performance indicators: working accidents causing lost days and accident frequency (number of working accidents causing lost days per million hours worked) and accident severity (days lost per million hours worked).

In 2014, 18 working accidents causing lost days were reported. Accident frequency has therefore fallen sharply. Additional efforts are nevertheless needed to raise safety levels. It is pleasing to report that the level of accident severity, at 47.6 days lost per million hours worked, has fallen.

	2008	2009	2010	2011	2012	2013	2014
Working accidents causing lost days	16	17	29	12	23	38	18
Accident frequency	1.9	1.9	2.9	1.2	2.2	3.6	1.7
Accident severity	61.8	60.6	47.5	44.5	74.4	61.3	47.6

After two tragic fatal accidents had occurred in 2012, the management decided in 2013 to conduct a new safety campaign to avoid working accidents at all sites. The aim of this campaign is to improve occupational safety and to raise employee awareness of a safe working environment, especially at production sites. The focus is placed in particular on the prevention of working accidents which are attributable to a breach of safety guidelines or negligence and carelessness. Ultimately, all occupational illnesses, injuries and accidents are avoidable.

During 2014, five accidents at industrial gas plants and four road accidents were recorded. Greater awareness of hazardous situations at work and on the journey to and from the workplace, combined with inspections and checks, averted any serious accidents resulting in fatalities occurring in 2014.

Alongside individual measures, such as safety inspections, tailor-made training programs and risk analyses, as well as safety audits carried out at various locations, there were also two poster campaigns

in over 30 languages. The poster images for the “Just doing...” campaign carried out in 2014, which were photographed in our own areas of operation, such as gas filling plants, cylinder storage locations or offices, depict accident situations that are intended to encourage identification on the part of the viewer: a burnt-out junction box, a fall from a ladder or an accident handling unsecured gas cylinders. Messer is not afraid to display its “Messer – Gases for Life” brand on the poster images. The posters make it clear, in this campaign too, that it is not about image, but about people’s sense of responsibility, which is a dynamic process that is subject to continuous improvement. Workers’ own health and that of their colleagues serves as an incentive in this regard – it is one of the most precious assets and is irreplaceable.

The strictest safety regulations apply during acetylene production. In order to enhance employees’ awareness of the need to handle highly flammable gases with care, Messer designated 2014 as the Year of Acetylene Safety. A safety newsletter setting out comprehensive safety measures was distributed to the acetylene plant managers. Additional practical training also focused on how to handle this high performance fuel gas.

With a view to improving safety in gas transport, the “Rollover” training course and safety training courses were provided in 2014 and were attended by 85 % of the drivers.

Messer is an active member of the European Industrial Gases Association (EIGA) and our experts actively exchange experience, knowledge and what they have learnt from incidents in the industrial gases sector. In addition, the Messer Group companies cooperate with local research institutes and universities to enhance safety in production processes.

The publication of safety newsletters is a matter of particular concern to us. In the past financial year, three safety newsletters with detailed descriptions of incidents or near-accidents were communicated.

### **Transport safety**

Since most of the products sold by the Messer Group are transported by road, increasing safety awareness and achieving a greater understanding of risks are objectives which can be considered just as important as improving safety measures.

The transportation of gases, equipment on the road and customer deliveries are activities which involve the most risks in the gases industry. For this reason, the Messer Group places particular emphasis on transport safety. In addition to the laws and regulations on operating a vehicle fleet (minimum standard), the Messer Group has found that it has proved invaluable to follow a transport safety plan of its own.

A large proportion of the drivers working for Messer are outsourced to transport firms, with which the prime responsibility for training drivers according to the ADR rests. Messer has also drawn up its own modular driver training program, which is used to train all drivers. So far, some 85 % of the drivers in Europe have participated in this standardized training scheme.

The main themes covered by the training are:

- Laws and regulations (ADR and national provisions)
- Defensive, economical driving
- Technical aspects (hazards arising from product, vehicle and tank technology, vehicle checks, safety technology)
- Accident avoidance
- What to do in the case of an accident

In addition, all drivers receive a driver manual specific to their work (bulk, cylinders or service vehicles). This ensures that the driver has immediate access to all important information relating to his activity.

In 2014, Messer organized a two-day exchange of experience for European fleet and logistics managers. The emphasis was placed on issues including vehicle safety and transport safety. During the conference, road accidents in the gas industry were re-examined and possibilities were worked out together to ensure that similar accidents are avoided in the future. Relevant findings were incorporated in the driver training courses.

The road accidents nevertheless recorded in 2014 were for the most part minor in terms of injuries and damage. No accidents were reported with time off work.

Furthermore, Messer specialists are actively involved in improving transport safety in all relevant bodies of the EIGA and to a large extent too in the national associations.

Through ongoing integration of the new findings and experiences in training and the driver manual, the Messer Group is also making its contribution to a steady reduction in the number of transport incidents.

## Employees and corporate culture

### G4-10 **Worldwide workforce**

The Messer Group had an average worldwide workforce in 2014 of 5,550 employees, each contributing to the success of the business with his or her extensive knowledge, ideas, know-how, motivation, attitude to work, active commitment and in many cases longstanding experience. In the previous year, the Group had an average worldwide workforce of 5,400 employees. The increase in 2014 was due not only to the growth market China, where new jobs continue to be created, but also to the takeover of the workforce of Praxair France S.A.S., France.

The average number of employees per region was as follows:

	Jan.1 - Dec. 31, 2014	Jan.1 - Dec. 31, 2013
Western Europe	1,111	985
Central Europe	734	730
South-Eastern Europe	1,351	1,368
China, Vietnam and Peru	2,354	2,317
<b>Total number of employees</b>	<b>5,550</b>	<b>5,400</b>

As at December 31, 2014 approximately 91 % of our employees were working in non-German-speaking countries.

### Remuneration

Personnel expense in the year under report amounted to K€ 174,891 (2013: K€ 170,363). Variable remuneration components are designed to encourage employees to focus on the Group's strategic objectives. To this end, a uniform bonus system has been introduced for managers and white-collar workers. This enables staff to earn additional gross salary if they meet general targets (70 %) and personal targets (30 %). Parallel bonus systems are also in place for blue-collar workers.

### Training and the Messer Group Academy

The expertise and experience of our workforce of well-motivated and well-qualified employees provides the foundation for the Messer Group's success. They are constantly being required to rise to the practical challenge of highly demanding tasks and projects, at which stage they can also draw on the knowledge gained through regular attendance at internal and external training courses, specifically designed to meet their needs. This combined approach gives them the wherewithal to master the vast array of constantly changing work requirements, while at the same time enhancing the professional manner with which they go about their work. A transparent leadership style, based on an "open door" principle, allows for open communication and represents a core element of our management culture.

We endeavor to make school pupils and students aware of the potential of the fascinating world of gases, also with an eye to winning well-trained staff in the future. It is considered to be a crucial aspect of business to develop employee skills from an early stage. The Messer Group is committed to providing educational and vocational training opportunities to young people, based on the tenet that investment in the next generation is essential for the future competitiveness and underlying strength of our business. In Germany we offer vocational training to ambitious school and college leavers in the areas of industrial business studies, mechatronics, IT data processing and IT support. Training takes place at various sites, in some cases supplemented by several weeks spent at international locations.

The Messer Group Academy was established to expand the range of systematic development programs available to employees. The Messer Group Academy offers various training courses and lectures, including the annual autumn lectures for our managers and junior executives. Spring 2013 saw the launch of the Junior Circle with 18 participants from various national companies and specialist areas.

The application round for the second Junior Circle will be launched in the coming spring. The Academy will also offer training for cylinder sales staff from 2015.

The focus will be on the dissemination of knowledge by our own experts from various functions within the organization. Aspiring managers will attend five one-week modules covering various fields of focus, including inter-cultural training. The principal objective of the Messer Academy will be to provide an insight into our products, technical solutions, structures and specific internal issues based on a comprehensive and practice-oriented approach. Effective networking of the participants is also a primary concern. Training in the Junior Circle is organized over a two-year period, with candidates being selected and invited directly by the management under an internal application procedure. Modules 3 and 4 of the Junior Circle focused on inter-cultural training (China) and sales respectively.

Furthermore, work is in progress in cooperation with the technical departments on modular training courses for our experts with a view to the forthcoming annual meetings. The first of these international training courses will consist of a five-module, comprehensive, standardized sales training course, which will be held mainly in the national language. To ensure continued success in the "battle for talent", a mentoring program for technicians will also be on offer.

The Messer Group has drawn up specific training plans for some 380 employees, while the local HR departments are in charge of the others. The need for training is in any case one of the topics raised during the annual employee performance reviews.

An "English offensive" has been launched worldwide to increase knowledge of English in the Group. In each company, employees, split into three groups, have the opportunity to improve their language skills.

Each year, the succession planning for managers and technical specialists is updated. Here too, the need for training is determined. Alongside the horizontal succession planning within each company, vertical cross-company succession planning has also been started this year for the various specialist areas.

### **Uniform employer branding**

The Messer Group's Employer Branding project is an international program aimed at depicting a corporate culture that is easy to recognize and understand. It is also seen as a way of tying in new and current employees more closely to the business as well as a means of getting potential employees to be enthusiastic about us, our products and our solutions. The job ads to recruit new employees have already been adapted groupwide, achieving the anticipated result of receiving fewer, but more qualified applicants. Image promotion films and posters have been completed and work is in progress on the Group's website, including an attractive reorganization of our career page, and on optimizing our intranet site. An in-house job applications portal has been created which can also be made available to the Group companies for adaptation. In this way, the Messer Group will be able to showcase itself as an international, versatile, attractive employer using a uniform employer branding approach.

The job applications portal on our website will go online in April 2015, thus rounding off our employer branding measures.

Messer invests in vocational training for young employees. This human resources strategy, in combination with the know-how of our workforce and our high-quality products, ensures that we enjoy an excellent reputation among customers, partners and job-seekers. This is evidenced by Messer BH Gas, Bosnia-Herzegovina, receiving an award in the oil and gas category in the vote held on April 25, 2014 for the Most Preferred Employer 2014 under the direction of online job portal Posao.ba. During the prize-giving, awards were conferred on the country's firms for their human resources management.

### **Environmental management**

The environment must be protected at all times and in all places. As a company, Messer takes this obligation very seriously and employs its global management system to further the protection of the environment. Internal environmental protection guidelines are documented in the Messer Group's SHEQ manual. These and the environmental management systems in place at all the subsidiaries follow international standard ISO 14001 and recommendations of the European Industrial Gases Association EIGA (for example, IGA IGC Doc. 107 — Guidelines on Environmental Management Systems). In 2014, 15 of our subsidiaries obtained external certification of their environmental management systems, after 13 had already done so in 2013.

Efficient use of energy goes without saying at Messer and is clearly in the Group's own interests. With the main aims of cost-cutting and economic use of resources, energy management is an ongoing process which also makes a contribution to reducing our CO<sub>2</sub> emissions. Our energy management system has been certified in accordance with ISO 50001 at all Messer production facilities in Germany and Spain.

Messer uses atmospheric air and electrical power at its production sites as the main raw materials to produce the air gases nitrogen, oxygen and argon. Production by means of air separation plants accounts for over 75 % of total energy consumption. Particular emphasis is therefore placed on the ongoing improvement of energy efficiency. Accordingly, Messer has assigned the specific task to a global energy manager to increase the energy efficiency of the Group's air separation plants.

Continuous monitoring of plant efficiency brings to light any energy variations and enables potential for improvement to be identified. Working together with local managers, a wide range of projects have already been launched to improve energy efficiency.

This year, a new condenser was brought into service at our Spanish subsidiary to replace an older model. The new liquefaction plant is currently the largest in the Iberian Peninsula and not only meets the more demanding requirements of customers, but also consumes approximately 30 % less energy, an aim which was accorded top priority in the process design. A 2.5 million liter nitrogen storage tank was also newly installed, together with a nitrogen backup system for our pipeline customers.

To bring about a reduction both in transport costs for the delivery of liquefied gases and at the same time in CO<sub>2</sub> emissions, we also commissioned new on-site plants in 2014. These plants are used for on-site gas production and save approximately 500 truck journeys and 100 tons of CO<sub>2</sub>. As a result, local customers benefit from flexibility and security of supply.

During 2014, a plant for environmentally-friendly, efficient cleaning of used gas cylinders, which meets stringent safety standards, was brought into operation at our site in Austria. This plant is a unique investment and enables Messer Austria GmbH to assume a leading role in the field of recycling of used gas cylinders in the region. From the start of the new financial year, the Austrian plants will be supplied with electricity generated fully from renewable sources of energy from Europe. The supply of this product gives rise to neither CO<sub>2</sub> emissions nor radioactive waste.

The key environmental data of Messer's production activities during the past year are as follows:

The volumes of gases produced rose by 2.5 % compared to the previous year, as a result of which the electricity consumption of the Group's air separation plants also rose. Energy efficiency, measured in terms of energy consumption per cubic meter of gas sold, remained at the same level as the previous year.

### **Health management**

Messer is aware of its social responsibility and its impact on employees, as employees play a decisive role in all work processes. Messer therefore aims to ensure the health and well-being of the individual through its working standards. This was clearly demonstrated by a health campaign organized by the Messer Group. Ideas for improvement measures and practices were examined and shared by staff at the 2014 Corporate Conference. For instance, Messer introduced various health programs, such as free access to fitness and wellness centers for employees and their families. Measures of this kind are designed to promote a healthy lifestyle among employees. The subsidiary in Slovenia was even awarded the "Family-friendly Firm" certificate for this.

Furthermore, a comprehensive training program for handling gas cylinders was initiated, with a view not only to reducing accidents associated with this, but also to improving the prevention of industrial diseases such as musculo-skeletal disorders.

During the swine fever epidemic (N1H1) in 2009/2010, Messer, as part of its crisis management, developed a worldwide plan with the objective of protecting employees' health in the event of a pandemic.

The average number of days lost through illness per employee came to four in 2014, which is 43 % down on the previous year (7).

## **Customer satisfaction**

The Messer Group's values include customer orientation and a high level of technical expertise. With a view to boosting their confidence in our products and applications, we invite customers to regular seminars at our sites all over the world. These events, which are attended by customers and interested parties from all parts of the country, focus on new developments and improvements of existing processes aimed at boosting employees' health, environmental protection and process efficiency. These events enable customers to obtain practical experience of the advantages of new technologies.

Most of the Messer Group companies are certificated in accordance with ISO 9001. This standard lays down the requirements for the Group's quality management system, which include regular customer satisfaction surveys. Our customers are aware that where gases are concerned there is far more at stake than merely the price of the products.

Since the beginning of 2011, several Messer Group companies conduct customer satisfaction surveys using an online tool. More than a thousand customers from Germany, Austria, Italy, Hungary, Spain, the Czech Republic, Poland, France and Bulgaria have already taken part in them. The high response rate shows that our customers appreciate this opportunity to provide feedback.

Customer participation so far has been encouragingly high. Points considered to be particularly important include rapid, accurate order acceptance; prompt reliable supply; high quality gases; outstanding product safety and sound expertise of all who have contacts with customers.

Constant improvements are also made to measuring customer satisfaction. In 2014, a Messer survey tool was implemented behind the Messer Group's firewall. This tool has the advantage that online responses by customers are immediately visible to the sales staff on the spot, who can react more swiftly if necessary to specific customer needs. The open source software used maximizes the functionality and at the same time minimizes the costs of compliance with strict data protection requirements.

# Report on economic position

## General and sector-specific environment

The industrial gases business is not concentrated on a single economic segment or selected sectors. The various products, services and technologies are used in nearly all branches of industry, as well as in foodstuffs technology, medicine and research and science. As a cross-sector business development indicator, gross domestic product (GDP) is therefore relevant to measure the economic development of the Messer Group.

In 2014, global economic recovery failed to live up to expectations. According to the data published by the International Monetary Fund (IMF)<sup>1</sup> and the World Bank,<sup>2</sup> the global economy picked up only slightly compared to the previous year. For example, the World Bank figures indicate that global GDP grew in real terms by an estimated 2.6 % compared to 2.5 % the previous year, with developed industrial countries (1.8 %) and emerging and developing markets (4.4 %) again faring very differently. Year-on-year comparison shows diverging trends: the economic growth rate was 0.4 percentage points higher in the developed industrial countries, but 0.5 percentage points lower in the emerging and developing markets.

The European economies revived to some extent in 2014, with the euro area in particular managing to put the recession of 2012 and 2013 behind it. According to the IMF figures, GDP in the euro area rose by an estimated 0.8 % in 2014. GDP growth in Europe outside the euro area was considerably stronger. According to the figures of the Organization for Economic Cooperation and Development (OECD)<sup>3</sup>, strong growth was achieved especially in countries such as Poland, Hungary, Slovakia and the Czech Republic, where growth rates for 2014 were well over 2 %.

In China, on the other hand, the GDP growth rate decelerated and, according to the World Bank, after 7.7 % in 2013, is expected to finish at an estimated 7.4 % in 2014. The government's policy of boosting domestic demand to reduce the dependence of the Chinese economy on exports is leading to more moderate growth rates in the long term. For all that, Chinese GDP growth still remains the strongest in the world.

<sup>1</sup> World Economic Outlook, Update January 19, 2015.

<sup>2</sup> Global Economic Prospects, Update January 2015.

<sup>3</sup> OECD Economic Outlook – No.96, Update November 2014

## Review of operations

For the Messer Group, the financial year 2014 was influenced by a continued slowdown in the relevant economic sectors in China, and in particular persistently low levels of steel production. On the other hand, there was selective economic recovery in Europe. These macroeconomic conditions enabled the Messer Group to increase sales revenue only slightly (+2 %) in 2014 compared to the preceding year. We therefore failed to achieve our forecast for 2014 of significant growth in sales, primarily due to the absence of hardware sales in 2014 recognized in accordance with the requirements of IAS 17 (in conjunction with IFRIC 4), which were deferred until 2015 due to the later commissioning of an air separation plant. Furthermore, continued difficult economic conditions in China prevented the expected growth in sales in the industrial gases business proper. The Messer Group's EBITDA for 2014 was 4 % up on the previous year, which meant that our forecast of a further slight fall in EBITDA was improved on. However, the result also contains a one-time gain of K€ 18,224 arising on the deconsolidation of Messer Italia. Taking account of the USPP currency hedge, the Messer Group was able to reduce its net debt from K€ 458,446 at the end of the previous year to K€ 430,318 at December 31, 2014, thereby achieving its forecast of a slight reduction.

## Overall situation

### Earnings performance

Messer Group generated worldwide sales of K€ 1,047,127 in 2014 (2013: K€ 1,026,622) which can be analyzed by region as follows:

Sales	Jan. 1 – Dec. 31, 2014	Jan. 1 – Dec. 31, 2013	Growth 2014
Western Europe	346,697	336,292	3 %
China, Vietnam and Peru	334,137	330,314	1 %
Central Europe	189,005	187,435	1 %
South-Eastern Europe	177,288	172,581	3 %
	<b>1,047,127</b>	<b>1,026,622</b>	<b>2 %</b>

The Messer Group's sales in the financial year 2014 were 2.0 % up on the previous year's figure. Business developed in the various regions as follows:

### Western Europe

Sales rose by 3 % in the region compared to the previous year. Business activities in Switzerland, Spain, the Netherlands and France made a significant contribution to this result. The increase in sales in 2014 compared to the previous year in the Netherlands was spread over all product groups, whereas the main impetus for growth in Switzerland came from the liquefied gases market and helium sales. The industrial gases operations in Spain received a fillip from the start-up of a new condenser at the start of the year. In

France, the takeover in March 2014 of the industrial gases activities of Praxair was a notable success and more than compensated for the impact of the deconsolidation of Messer's industrial gases operations in Italy, undertaken in exchange. Business development in Germany also led to a moderate increase in sales of 1.5 %. On the other hand, negative effects resulted from the decline in sales in Messer's business activities in Algeria and Belgium.

#### **China, Vietnam and Peru**

Sales in China stagnated in 2014 at a similar level to the previous year. Overall, the slower economic growth rate in China and in particular the persistently low level of output of our steelworks customers exerted a negative impact throughout the financial year 2014. An additional factor was the continued surplus capacity in the liquefied gas market, with the corresponding detrimental impact on prices. Impetus to growth provided by new production capacities was sufficient at least to stave off the negative effects arising from the challenging economic conditions.

In Vietnam, sales rose once again year-on-year by a good 40 %, helped by the commissioning of a second air separation plant for on-site customers in Hoa Phat in September 2013 and by good production capacity utilization for liquefied gases in the north of the country. In Peru, a sharp downturn in sales (-7 %) was recorded, which was attributable mainly to the gloomy business climate and flagging economic growth rate.

#### **Central Europe**

Compared to the previous year, sales recorded for the Central Europe region were up slightly by 1 %. The region benefited in particular from the continuing favorable business climate in Poland, which made a significant contribution to the sales growth of Messer's liquefied gas operations of a good 4 %. Furthermore, business activities in Slovakia led to sales growth of just over 2 %. In Austria, on the other hand, the continuing generally difficult economic conditions were reflected in a slight drop in sales. In addition, business activities in the Czech Republic contracted by 3 %, although this drop was attributable exclusively to the devaluation of the Czech koruna against the euro; adjusted for exchange rate effects, sales in that country rose by 3 %.

#### **South-Eastern Europe**

In spite of the continuing generally difficult economic climate, exacerbated by the tight financial situation in several countries, the Messer Group's sales in South-Eastern Europe rose by 3 %. The strongest growth rates were recorded in Bulgaria (a good 10 %) and Hungary (over 6 %). In addition, the industrial gases business in Romania and Serbia achieved moderate sales growth of approximately 2 %, whereas sales remained largely flat in Bosnia, Croatia and Slovenia. Only in Turkey was a fall in sales recorded, which is attributable exclusively to the further strong depreciation of the Turkish lira against the euro. Adjusted for currency factors, sales rose sharply once again by 10 %.

The Group recorded a worldwide EBITDA of K€ 240,416 for the financial year 2014 (2013: K€ 231,143).

<b>EBITDA</b>	<b>Jan. 1 – Dec. 31, 2014</b>	<b>Jan. 1 – Dec. 31, 2013</b>
EBIT	117,406	<b>103,902</b>
Amortization/depreciation of intangible assets and property, plant and equipment	122,435	127,203
Dividend income <sup>1</sup>	575	38
<b>EBITDA</b>	<b>240,416</b>	<b>231,143</b>
: Sales	1.047,127	1,026,622
Margin:	23.0 %	22.5 %

<sup>1</sup> Dividend income from non-consolidated companies.

The Messer Group's EBITDA for 2014 was 4 % up on the previous year, which means that the forecasted slight fall in EBITDA was successfully averted. The one-time gain of K€ 18,224 arising on the deconsolidation of Messer Italia S.p.A., following its sale in March 2014, had a corresponding positive impact.

#### **Messer Group**

Overall, the Messer Group recorded a group net profit (including profit attributable to minority interests) of K€ 78,170 for the financial year 2014 (2013: K€ 65,899). The gross profit amounted to K€ 462,205 (44.1 % of sales) and the operating profit amounted to K€ 117,406 (11.2 % of sales), K€ 13,504 higher than one year earlier, mainly due to the 2 % rise in sales and the gain of K€ 18,224 arising on the deconsolidation of a subsidiary. Impairment losses amounted to K€ 2,819 on goodwill (2013: K€ 4,000) and K€ 580 on property, plant and equipment and other intangible assets (2013: K€ 10,037). The entities affected have so far only recovered slowly from the financial and economic crisis and their outlook for future developments was rendered uncertain by the re-emergence of the euro debt crisis in 2011/12. For this reason, forecasts of future net cash inflows for these entities were revised down.

Profit before tax and minority interests is stated after a net interest expense of K€ 24,265, which represented a further deterioration of K€ 776 on the previous year due to the higher level of debt during the year. Other financial result for the year 2014 deteriorated by K€ 4,755 compared to the previous year, mainly due to the lower fair values of derivatives not designated as hedges (and for which a profit was recorded in the previous year). Taking into account all the above factors, the group net profit after deduction of profit attributable to minority interests totaled K€ 63,392 and was therefore K€ 17,412 higher than in the previous year.

## Financial position

Group Treasury is responsible for overall liquidity, interest rate and currency management. The most important objective of Group Treasury is to ensure that a minimum level of liquidity is always available to ensure solvency at all times. High levels of liquid funds help to improve our flexibility, security and independence. If necessary, we can call on additional liquidity potential under further various available credit lines amounting to € 37.9 million.

## Financing

Net debt as of December 31, 2014 stood at K€ 430,318 (2013: K€ 458,446) and is broken down as follows:

Net debt	Dec. 31, 2014	Dec. 31, 2013	Change 2014
Financial liabilities	597,746	543,577	
USPP currency hedging	(11,528)	17,295	
Cash and cash equivalents	(155,900)	(102,426)	
	<b>430,318</b>	<b>458,446</b>	<b>-6.1 %</b>

The Messer Group was able to reduce its net debt in 2014 by K€ 28,128 compared to the previous year. Based on financial liabilities of K€ 597,746 at the end of the reporting period, the ratio of financial liabilities to the balance sheet total was 26 %.

In 2005 the Messer Group took up a US Private Placement ("USPP I") amounting to a total of USD 252 million with various investors. An amount of USD 116.5 million fell due on August 2, 2012 and an amount of USD 135.5 million (subject to an interest rate of 5.46 % p.a.) falls due on August 2, 2015.

The second US Private Placement ("USPP II") dated June 8, 2011 was concluded with various banks and has a term of ten years. USPP II falls due for payment at the end of the term and is broken down as follows:

Amount	Interest rate p. a.
€ 80.0 million	4.55 %
€ 80.0 million	4.6975 %
USD 57.0 million	4.86 %

The Revolving Facility Agreement ("RFA") dated June 8, 2011 and amended on July 11, 2012 for an amount of € 150 million falls due for payment on August 2, 2015 and has been made available by various financial institutions. Interest is based on IBOR (Interbank Offered Rate) in the currency in which amounts are drawn down plus a margin, depending on the ratio of net debt/EBITDA. On June 16, 2014 the Messer Group gave notice on € 50.0 million of this financing line, which has therefore been reduced to € 100.0 million.

On August 2, 2012 the Messer Group refinanced the portion of the USPP I that fell due on that date. The following terms and conditions apply to the credit arrangements in conjunction with the refinancing: US Private Placement ("USPP III") for USD 100 million and € 46.3 million. USPP III falls due for payment at the end of the term and is broken down as follows:

Amount	Interest rate p. a..	Maturity
K€ 23,148	3.680 %	August 2, 2022
K€ 23,148	3.680 %	August 2, 2022
K'USD 12,500	4.040 %	August 2, 2022
K'USD 25,000	4.160 %	August 2, 2024
K'USD 25,000	4.430 %	August 2, 2027
K'USD 37,500	4.040 %	August 2, 2022

The USD-denominated amounts were fully hedged by cross currency interest rate swaps at a rate of € 1: USD 1.32626, therefore giving an equivalent of K€ 75,400.

USPP III is secured by the same collateral given to secure existing credits. In this context, shares in individual group entities have been pledged and guarantees provided by individual group entities. USPP I (USD 135.5 million) and the RFA (EUR 53.6 million) fall due for payment on August 2, 2015. If all covenants are being complied with at that date, the USPP II and USPP III lenders will release the collateral given. One point worthy of mention is that the net debt (i.e. gross debt less liquid funds)/EBITDA covenants has been expanded to include a computation for the Messer Group excluding China.

#### Cash flow statement

Abridged version in K€	Jan. 1 - Dec. 31, 2014	Jan. 1 - Dec. 31, 2013
<b>Profit before tax</b>	<b>93,766</b>	<b>86,458</b>
Cash flows from operating activities	210,618	217,771
Cash flows from investing activities	(137,750)	(181,627)
Cash flows from financing activities	(15,073)	(45,495)
<b>Change in cash and cash equivalents</b>	<b>57,795</b>	<b>(9,351)</b>
<b>Cash and cash equivalents at the beginning of the period</b>	<b>102,426</b>	<b>115,027</b>
Currency translation impact on cash and cash equivalents	(4,171)	(2,555)
Cash, change in group reporting entity	83	(21)
Cash and cash equivalents classified as held for sale	(233)	(674)
<b>at the end of the period</b>	<b>155,900</b>	<b>102,426</b>

At K€ 210,618, cash flows from operating activities were K€ 7,153 lower than in the previous year, which was mainly due to the greater negative impact on operating cash flow resulting from the increase in finance lease assets due to the application of IAS 17 (in conjunction with IFRIC 4). Expenditure on the construction of new air separation plants which fall under the requirements of IAS 17 (in conjunction with IFRIC 4) was higher overall in the financial year 2014.

Cash outflows for investing activities, although lower, still reflected the continued high level of investments made by the Messer Group. The reduction in cash flows from investing activities was mainly attributable to lower expenditure in the China region.

Cash outflows from financing activities amounted to K€ 15,073, which was K€ 30,422 lower than the previous year's figure and was attributable to a range of factors.

The parent company made no withdrawals from capital reserves during the financial year 2014. A part of the (reduced) cash outflows from financing activities relates to the net increase in financial debt. The increase in 2014 contrasts with a reduction in net financial debt in 2013 of K€ 5,728. New debt was raised mainly in China to finance growth in this region. Dividend payments to other shareholders amounted to K€ 11,999.

These outflows were offset by payments from other shareholders amounting to K€ 511 and capital reductions at the level of affiliated companies amounting to K€ 5,287. The Messer Group's cash and cash equivalents, at K€ 155,900, were therefore higher than their previous year's level of K€ 102,426.

In 2015, the Messer Group will require further capital to fund its expanding business operations and scheduled capital expenditure and to repay loans and interest as they fall due, even though our focus in the medium-term will be to consolidate net debt levels relating to operations outside China. These funds will be generated out of cash flows from operating activities, existing funds and credit lines available to the Group. The Messer Group's strong position in the various markets in which it already operates, combined with expansion into new markets, will enable us to maintain our robust financial position.

The Group has committed to purchase or invest in the construction and maintenance of various production facilities. Obligations under these agreements represent commitments to purchase plant and equipment at market prices in the future. The Group is also party to long-term contracts which give rise to obligations. As of December 31, 2014, purchase and capital expenditure commitments and long-term contracts amounted to K€ 118,383 (2013: K€ 126,123).

#### **Capital expenditure**

Capital expenditure is aimed at safeguarding existing business and opening up opportunities for growth. In accordance with normal business principles, the Messer Group invests primarily in projects which will secure supply capabilities and/or which create opportunities for profitable growth. In addition, production plants and distribution channels are regularly invested in and modernized to ensure they meet current needs.

The Messer Group's capital expenditure on property, plant and equipment and financial investments in totaled € 187.3 million in 2014. The capital expenditure ratio corresponds to 18 % of sales. The main item of expenditure on financial investments was the acquisition of Praxair S.A.S, France, for a total of € 40.8 million. For further information on this investment, please see the comments made in section 2 "Changes in the financial year 2014". Our forecast of a sharp decline in investing activities therefore proved to be incorrect.

Also worthy of mention is an amount of € 17.8 million invested in production facilities for customer supplies which – following their completion in 2015 – will require to be treated as a finance lease arrangement in accordance with IAS 17 (in conjunction with IFRIC 4) and are reported within cash outflows for operating activities. A large proportion of capital expenditure in 2014 related, as in the previous year, to the upgrading of production plants.

Capital expenditure by region was as follows:

Capital expenditure	Jan. 1 - Dec. 31, 2014	Jan. 1 - Dec. 31, 2013
Western Europe	72,139	43,255
China, Vietnam and Peru	50,666	90,424
Central Europe	38,723	23,984
South-Eastern Europe	25,738	30,629
	<b>187,266</b>	<b>188,292</b>

Capital expenditure in Europe is still focused on investment in distribution channels and selected growth projects. The latter include the construction work under way in Poland for a second air separation plant for liquefied gases, which will ensure continued participation in Poland's strong economic development, and the construction of a second air separation plant in Serbia to cover the increased demand of an existing on-site customer. The beginning of 2014 already saw the commissioning of a 15,000 Nm<sup>3</sup>/h liquefaction plant at the Tarragona site, which will enable a further increase in the Group's share of the liquefied gases market in Spain. Additional investments include a helium filling plant in Serbia, the first filling plant in Romania and the expansion of an existing filling plant in Germany. Messer also invested in its first customer CO<sub>2</sub> plant in Switzerland.

Messer continues to push ahead with several investment projects in China, so as to enable it to follow the expansion strategies of its on-site customers and participate in the general growth of this market. Construction work on a second air separation plant with a capacity of 40,000 Nm<sup>3</sup>/h is near completion at the main site of our joint venture partner Pangang in Panzhihua, and is scheduled to be commissioned in 2015. As well as supplying products for the Chinese steel industry, Messer is also raising the tempo at which liquefied gases business in China is being expanded. New plants for the bulk gases market at several suitable sites were commissioned. The new joint venture Chongqing Pangang Messer Gas

Products Co. Ltd., for instance, invested in an air separation plant at a new chemical park in Changshou in Chongqing province, which was taken into service in September 2014. This will be Messer's first air separation plant in Chongqing province, and will open up opportunities to forge new business relations with chemical sector clients and generally benefit from the market potential of this province. A further air separation plant was commissioned in August 2014 in an industrial park of the city of Shunde in Guangdong province, in order to enable Messer to participate in the fast-growing local market for liquefied gases. Construction work was also completed on a second air separation plant in a high-technology park in Chengdu, in Sichuan province, which will secure future product supplies to local firms and the bulk gases market in the vicinity of Chengdu. A further air separation plant to expand the bulk gases market is still under construction in Zhejiang province and will be taken into service in mid-2015. All our investments shall reduce the dependence on the steel industry and therefore create new growth potential and reduce the market risk.

Other investments have been aimed at broadening the base of our operations in China, notably by entering the CO<sub>2</sub> business. At the turn of the year, construction was completed of the first Messer CO<sub>2</sub> plant in Mianyang in Sichuan province, via a joint venture with Sichuan Meifeng Chemistry Co. Ltd., a Chinese stock-exchange listed company in the chemicals sector. A second CO<sub>2</sub> plant is under construction in Kunming, in Yunnan province, and will be taken into service at the beginning of 2015. A start is also currently being made on the construction of a third CO<sub>2</sub> plant in Nanjing, in Jiangsu province.

Construction of a state-of-the art specialty gasworks in Wujiang, in Jiangsu province is scheduled for completion in 2015. On top of this, investments in in-house krypton and xenon production in Panzhihua province are well advanced and will enable operations to commence during the first quarter of 2015. Last but not least, in the second half of 2014, a start was made on the construction of an on-site air separation plant for a copper producer in Hunan province.

In Vietnam, construction work started at the end of 2014 on the third air separation plant for the on-site customer, Hoa Phat.

### **Net assets**

The consolidated financial statements are drawn up in accordance with International Financial Reporting Standards (IFRS), as applicable in the EU. The balance sheet total at December 31, 2014 amounted to K 2,216,221, of which the largest proportion (78.4 %) related to non-current assets (2013: 80.3 %). Tangible and intangible assets represented the largest combined item on the assets side of the balance sheet (68.6 %). The carrying amount of these two items together increased by K€ 81,880 as a result of further investments. Non-current lease receivables and cash at banks account for 6.0 % and 7.0 % respectively of total assets.

Currency factors added K€ 45,892 to the balance sheet total and were attributable mainly to our Chinese company.

At 56.3 %, the equity ratio (including minority interests) remained at a similar level to the previous year. Gross debt accounted for 27.0 % of the balance sheet total and increased by K€ 54,169 compared to one year earlier.

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### Return on capital employed

The ROCE for the past year was 8.3 %, calculated as follows:

ROCE	Jan. 1 - Dec. 31, 2014	Jan. 1 - Dec. 31, 2013
EBIT	117,406	103,902
+ Amortization of/Impairment losses on goodwill	2,819	4,000
<b>EBIT adjusted</b>	<b>120,225</b>	107,902
: Capital employed	1,447,758	1,346,913
<b>ROCE in %</b>	<b>8.30 %</b>	8.01 %
<b>Derivation of capital employed from the balance sheet</b>		
<b>Other intangible assets and property, plant and equipment</b>	<b>1,208,145</b>	<b>1,127,508</b>
Finance lease receivables	143,185	138,974
Net working capital	96,428	80,431
<b>Capital employed</b>	<b>1,447,758</b>	<b>1,346,913</b>

### Operating assets

Net working capital stood at K€ 96,428 at the end of the reporting period (2013: K€ 80,431) and comprised the following:

Net working capital	Dec. 31. 2014	Dec. 31. 2013
Inventories	77,293	57,173
Trade receivables	172,849	164,906
Trade payables	(148,634)	(137,797)
Advance payments received	(5,080)	(3,851)
	<b>96,428</b>	<b>80,431</b>

The increase in net working capital compared to the previous year was mainly attributable to higher levels of inventories and trade receivables, which increased more than trade payables in 2014. The ratio of inventories less advance payments from customers plus receivables on the one hand and trade payables on the other was, as in the previous year, approximately 2:1; the ratio of net working capital to sales went up from 8 % to 9 %.

Receivables management measures initiated in 2012 enabled us to maintain DSO (Days of Sales Outstanding) in 2014 at roughly the previous year's level (59 days at December 31, 2014 compared to 58 days one year earlier).

### **Overall statement on the Group's financial condition**

Despite the continued challenging economic climate, the Messer Group was able to increase its worldwide sales year-on-year by 2 %. The improvement in the operating EBITDA margin from 22.5 % to 23.0 % is particularly gratifying, with EBITDA rising by some € 9 million compared to the previous year's figure of around € 231 million.

The Messer Group's return on capital employed (ROCE) amounted to 8.3 % (2013: 8.0 %). Comparison with the previous year highlights the positive effect of the more pronounced increase in operating result than the net increase in property, plant and equipment. These factors combined to ensure that forecast of a declining ROCE did not materialize.

Good progress is being made in consolidating net debt levels relating to our operations outside China, which currently forms the focus of our medium-term planning. In 2014, for instance, net debt relevant for the net debt covenants was reduced year-on-year by a further € 24 million to € 407 million. This is also reflected in the net debt figure of € 430 million for the Messer Group as a whole, which was lower than at the end of the previous year.

The fact that business fared favorably overall is testimony to the stability and sustainability of the Group's business model. The Messer Group, operating in the two principal regions of Europe and China, has a global presence and good regional diversification in a number of countries or provinces within the two core regions, so that falling demand in individual markets or downturns in specific sectors can often be offset.

## **Events after the end of the reporting period**

In January 2015, the Swiss National Bank ("SNB") discontinued the exchange rate peg of the Swiss franc to the euro. In order to restrict appreciation of the Swiss franc, the SNB had purchased euros on the foreign exchange markets regularly since 2011 with the aim of ensuring an exchange rate of at least CHF1.20 to the euro. The SNB has now ended this intervention, thus allowing the exchange rate to float. A minimum rate is no longer guaranteed, with the outcome that, since December 31, 2014, the average CHF exchange rate has risen by 9 % and the closing rate by as much 13 %.

The main impact of the change in the exchange rate will arise in conjunction with the subsequent recognition in profit or loss of fair value changes of euro-denominated monetary items carried in our Swiss subsidiaries' balance sheets on the one hand and the translation of the functional currency (CHF) to the Group's reporting currency (EUR) which will be recognized in other comprehensive income.

Floating the exchange rate may weaken the competitive situation of our subsidiaries.

# Outlook

## Macroeconomic and sector-specific risks

Sluggish economic growth in 2014, especially in Europe and China, coupled with the escalation of a number of crises around the world, resulted in expectations for 2015 being scaled back over the course of the year, such that they are now on the modest side. This trend was evident in the forecasts published at the beginning of 2015 by the world's leading economic institutes, among them the IMF<sup>1</sup> and the World Bank<sup>2</sup>. Although these forecasts predict that growth will be higher than in 2014, the growth rates for 2015 are below the figures forecast in the previous year for 2014. The IMF forecasts that worldwide GDP in 2015 will grow in real terms by 3.5 %, an improvement of 0.2 percentage points over the previous year, while the World Bank expects the growth rate to accelerate from 2.6 % to 3.0 %. Both organizations expect the advanced economies to continue to be the driving force for the slight increase in global GDP, with the USA likely to contribute significantly to the pace of growth by achieving GDP growth of well over 3.0 % in 2015. The economic recovery is expected to continue in the euro area, although growth is only expected to pick up slowly, reflected in a GDP growth rate of just over 1.0 % for 2015. Plummeting oil prices since mid-2014 should help to reinforce economic growth around the world, including Europe, but are also likely to cause the economies of oil-exporting countries to slow down. Under these circumstances, it therefore seems unlikely that the world's emerging economies, taken as a whole, will not grow with the previous years' dynamism. The first country to mention in this context is Russia, given that its economic prospects have become significantly bleaker due to the Ukraine conflict. The IMF and World Bank forecast a deep recession for Russia in 2015. In the case of other major commodities-exporting countries, such as Brazil, the forecast is for economic growth to be slower than for the euro area. China, on the other hand, should retain its leading position in terms of growth rate. That said, the government's policy of boosting domestic demand to reduce the dependence of the Chinese economy on exports will continue to act as a curb on the growth rate. According to the IMF and the World Bank, this tempo should nevertheless suffice for continued strong GDP growth of 6.8 % to 7.1 % in 2015. Overall, emerging economies should manage to gather some pace in 2015 on the back of low oil prices. The World Bank, for example, forecasts that emerging and developing economies as a whole will achieve GDP growth of 4.8 % in 2015, compared to 4.4 % one year earlier.

The global economy remains vulnerable and, for the time being at least, is not capable of achieving pre-financial crisis levels. In the opinion of the World Bank, both the European Monetary Union and Japan are still at risk of protracted economic stagnation with years of zero growth or even of sliding into a deflationary downwards spiral of falling prices and faltering growth – with negative consequences for the global economy.

<sup>1</sup> World Economic Outlook, Update January 19, 2015

<sup>2</sup> Global Economic Prospects, Update January 2015

Our forecast continues to be based on the assumption, backed by assertions made by the Serbian State, that the operations of the steelworks will not be discontinued. The payment of approximately € 16.5 million received at the end of 2014 for outstanding receivables from the steelworks provides further grounds for this assumption. We refer to the Risk Report for further information.

### **Outlook for the Messer Group**

The ratio of net financial debt to EBITDA stood at 1.8 at December 31, 2014. The focus in the medium term remains the same: to consolidate net debt levels for operations outside China, with the aim of attaining a ratio of net financial debt to EBITDA not exceeding 2.5 by the end of 2015. As well as the pursuit of investment activities at a level conducive to achieving this aim, we also intend to raise sales at a pace appropriate for the prevailing economic conditions and to take advantage of opportunities, wherever they arise, in order to stabilize or improve the profitability of the Messer Group. To this end, an internal profitability program was developed and implemented in 2013, with the emphasis placed on the liquefied and cylinder gas business.

We continue to view economic prospects in Europe with cautious optimism. The main focus in this region will therefore be on further exploiting the production capacities created in recent years, in particular in Germany, France, Austria, Poland and Spain. Future investment decisions will be taken in line with the stated strategy of consolidating net debt levels in the medium term.

The China region accounted for 29 % of net sales and more than one third of the EBITDA of the Messer Group in 2014. The net debt/EBITDA ratio for the China region is 0.3 and is therefore significantly lower than that of the Messer Group of 1.8, underlining the importance of Chinese operations with the overall context of the Messer Group's sales, profitability and internal financing. We remain confident in our prediction that the market will continue to burgeon in this region. The most recent economic performance figures nevertheless illustrate how vulnerable the local steel industry is. We have now in the implementation phase of an extensive package of measures aimed at reducing the high level of dependency of our Chinese operations on the local steel industry over the coming years. These measures include concentrating on on-site projects in the chemicals sector, developing the liquefied and specialty gases business and expanding the scale of CO<sub>2</sub> business.

According to the current estimates of the various economic research institutes, we expect energy costs, which are all-important for our industry, not to rise significantly for the time being. We have also assumed in our forecasts that our Serbian subsidiary's largest customer will remain in business.

The main financial performance indicators for the Messer Group are forecast to develop as follows in the coming year:

	2015 compared to 2014
Sales	significant growth
EBITDA	significant decrease
Capital expenditure*	significant increase
Net debt	significant increase
ROCE	significant decrease

\*Excluding investment in non-current financial investments

### Overall statement by management

Economic growth is expected to continue to gather pace slightly in the new financial year 2015, but will remain vulnerable to geopolitical crises on the one hand and risks of deflation within the euro area and/or Japan on the other. The developed economies are expected to continue to make a useful contribution towards a slightly higher growth rate.

The Messer Group considers that it is well placed to meet the forthcoming challenges and aims to achieve strong sales growth in 2015, helped in part by the recognition of hardware sales in accordance with IAS 17 (in conjunction with IFRIC 4). In terms of actual industrial gases business, sales growth is still expected to be stronger in Asia, with particular importance being attributed to the expansion of the liquefied gases business in China. A moderate contribution to growth is expected to come from business in Europe on the back of the continued efficient utilization of the production capacities created in recent years. EBITDA and ROCE will be influenced, especially in the short term, by the absence of positive one-off items and by further upfront expenditure necessary to achieve the desired diversification of our business in China.

Decisions with respect to future levels of investment are taken in line with the medium-term strategy of consolidating net debt levels – especially in relation to operations outside China. Investment activities at a level conducive to the pursuit of this aim, combined with a sound earnings performance, should ensure that the Messer Group’s net debt does not increase.

### Forward-looking assertions

The Outlook Report contains forward-looking assertions which are based on the management’s current appraisal of future developments. These assertions are not to be interpreted as a guarantee that these expectations will in fact be met. Future business performance and earnings of the Messer Group are dependent upon a number of risks and uncertainties and may therefore diverge significantly from the forward-looking assertions made here.

## Report on opportunities

As an international supplier of industrial gases, opportunities basically arise for the Messer Group from the multifarious usages of industrial gases to produce products needed in all fields of life and in all countries of the world. Through investment, we are able to exploit available opportunities to realize the full potential of the business and to maintain/strengthen our market position. We are also taking advantage of the opportunities arising from internationalization – in particular in the light of positive developments in emerging economies – by selectively expanding our facilities in these regions. This also enables us to engage in new markets with long-term growth potential. We encourage the identification of new opportunities by embedding employee motivation in the Group's values and by fostering ideas management.

The main opportunities which could be significant for the net assets, financial and earnings position of the Messer Group are as follows:

### **Macroeconomic opportunities**

The general economic environment plays an important role for our operations, our financial and earnings position and our cash flows. Our forecast for 2015 is based on the expectation that future macroeconomic conditions correspond to the description provided in the Outlook Report section of the management report. If the world economy as a whole, or in regions or countries of relevance for our business, performs better than described, our sales and earnings could exceed the forecasted amounts.

### **Market opportunities**

We still expect the market to grow sharply, particularly in China, but, for the purposes of the outlook for 2015, have not assumed a further increase in the growth rate. A sharp economic upswing could have a positive impact on the Group's sales and earnings.

We forecast a modest economic recovery in Europe. A faster economic recovery, especially in the southern European countries of the euro area, could have a positive impact on our sales and earnings.

### **Opportunities arising from industrial gases applications**

Our products are used worldwide in a variety of production processes. In the field of application technology, the Messer Group continuously analyzes multifarious processes in order to facilitate more efficient production processes for our customers through the use of industrial gases. New applications identified in this way may open up new business opportunities which could have a positive impact on our sales and earnings.

### **Opportunities arising from optimization measures**

The strategic program "C7" implemented in 2013 with a view to improving profitability includes specific measures aimed at boosting sales, improving business processes and reducing costs by 2015. If the various measures are implemented more quickly or more successfully than expected, this could have a positive impact on our sales and earnings.

### **Opportunities created by our employees**

The Messer Group promotes "ideas management" at all levels of the organization and employees are encouraged to submit improvement proposals with local and/or international relevance. Furthermore, human resources development programs and other training offers are available to encourage the systematic development and exploitation of our employees' potential. If we achieve better progress with these measures and methods than currently expected, this could have a positive impact on our sales and earnings.

## **Risk report**

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As an international supplier of industrial gases, the Messer Group is exposed to opportunities and risks which inevitably arise in connection with entrepreneurial activities. Moreover, future earnings will depend both on the operating performance of the gases business and on the state of the economies in individual countries, a factor over which the Messer Group has no influence. It is the task of all concerned to take advantage of opportunities when they arise, whilst at the same time ensuring that risk is kept to a minimum and pro-actively managed.

The main risks which could be significant for the net assets, financial and earnings position of the Messer Group are as follows:

### **Risks arising from general economic trends**

The industrial gases business is subject to intense competition. The level of competition is increasing in conjunction with the process of globalization. This highly competitive environment could reduce Messer's earnings and cash flows in the future. The Messer Group operates globally, making it susceptible to local political, social and economic conditions and to the resulting risks arising in each market.

### **Market risks**

We supply a cross-selection of industries and sectors (including steel, metal processing, chemicals, petrochemicals, food and beverages, healthcare and glass) on the basis of long-term contracts over periods of up to 15 years in Europe and up to 30 years in Asia. A significant reduction in market demand in any

one of these key industries or sectors could adversely affect future earnings and impair future growth prospects. Our strong position in China also means that this region makes an above-average contribution to our earnings, and conversely, any economic downturn on this market would have a negative impact on earnings.

### **Cost risks**

Regulatory or government amendments or interventions in the energy sector may lead to rising energy prices in some countries. The re-occurrence of crisis situations within oil-producing countries and the growing demand for energy in emerging economies, particularly in China and India, give reason to believe that long-term oil and energy prices will continue to rise with a corresponding impact on the prices of supplies and primary products necessary for the Messer Group's business. Purchase prices of some important bought-in products, such as helium, fluctuate considerably. Although Messer is often able to pass on cost increases partially to its customers via price escalation clauses or reduce the risk by entering into long-term purchase agreements, it is possible that price increases for energy and bought-in items could adversely affect the profitability of the Messer Group.

However, it should be pointed out that our contracts contain clauses to the effect that electricity price rises can be passed on to our customers.

### **Selling price risks**

The industrial gases business is subject to intense competition, the degree of which is increasing in conjunction with the process of globalization. Increased competition may result in disproportionate downward price trends in certain countries which could have a negative impact on future sales and earnings. The integration of new Member States into the EU entails risk in that many previously State-run businesses will need to be privatized and restructured in accordance with EU and International Monetary Fund requirements. The number and scale of State grants could be drastically reduced, culminating in numerous closures and mergers in these countries, and an adverse impact on the Group's sales. In these circumstances, the downward pressure on selling prices would probably increase.

### **Operational risks**

An operational interruption at one of our production facilities can result in loss of supplies to customers. We endeavor to avoid this situation by regularly maintaining and monitoring our equipment. In the event of breakdowns or defects, emergency plans and instruments are in place to reduce the financial consequences of a business interruption at one of our customers. The Messer Group is currently expanding its supply structure and maximizing flexibility in order to ensure that supplies to customers are safeguarded even in emergency situations. The range and quality of our products depend on the availability of bought-in hardware and on the production equipment used (e.g. cylinders, tanks) on the one hand and on the quality of service/products of our suppliers and business partners on the other.

### **Acquisition risks**

The Messer Group is continually developing new strategies. As well as expanding and strengthening our existing business and continually optimizing our sourcing and logistics processes, we are intent on achieving growth both organically and through other means such as acquisitions and joint ventures. Our aim is to consolidate operations on existing markets and to divest non-core business operations. The sale of entities or business activities can, however, result in retrospective risks for the Group. Whenever a risk is probable, appropriate provision is recognized in the consolidated financial statements. When deciding to make acquisitions or entering into new partnerships, there is always a risk that future market potential and the feasibility of projects being put into action may have been wrongly predicted. The Messer Group therefore has internal committees which highlight the development potential of a project prior to its approval and analyze any information which has a bearing on decisions which need to be made. In order to be as certain as possible that M&A projects have future development potential, due diligence investigations are carried out by experienced staff in specialist departments before any acquisitions are made in connection with M&A projects. Risk is also reduced by including relevant terms of agreement in sales contracts.

### **IT risks**

The use of state-of-the-art information technology plays a decisive role in handling and securing business processes within the Messer Group. Our IT center in Germany provides the scope to create a modern and efficient infrastructure and to improve our business processes where necessary. This concentration does, however, mean that there is a greater risk of business interruption, cyber criminality and willfulness, caused by natural hazards or human error. In order to avoid this risk, our IT center applies its own IT risk management system, including ongoing testing of the system architecture. Particular attention is paid to the provision of IT infrastructure and services and especially to guaranteeing fail-safe and interference-free operations. The integrity and reliability of the data and important information are ensured by means of appropriate measures, services and systems. Most of the business processes of the Messer Group are provided by internal or external IT services. The security and compliance of the information systems are set out in the IT strategy objectives, on the basis of which the Messer Group designs, implements and reviews measures to ensure protection of data, applications, systems and networks on an ongoing basis. Both preventive and corrective measures are considered in this process.

### **Financing risks**

We require funding to finance our growth and ambitious capital expenditure program. We are therefore dependent on the financial sector remaining stable and liquid. Messer is reliant on cash flows from operating activities to repay debt. This is dependent to a large extent on the ability to generate positive cash flows from operating activities.

The Group has recognized goodwill in the consolidated balance sheet. The application of IAS 36 (i.e. the performance of impairment tests) could result in the requirement to recognize impairment losses on

goodwill, if the business and market prospects of a group subsidiary or cash-generating unit deteriorate compared to the original date of measurement. Impairment losses could have a significant adverse impact on earnings and on balance sheet/performance ratios. The shares of the largest customer of our Serbian subsidiary, Messer Tehnogas AD, were taken over by the Serbian State in January 2012. The customer operates a steel manufacturing plant at the Smederevo site in Serbia, on the same site where we operate air separation plants for the steelworks and for the Serbian market. For the purposes of the impairment test performed for the Serbian unit we assumed – in line with our overall outlook for the business and on the basis of assertions made by the Serbian State – that the operations of the steelworks will not be discontinued. A payment of 16.5 million received at the end of 2014 for outstanding receivables provides further grounds for this assumption.

There is always a risk that financial and debt crises could result in global economic downturns or slow-downs. The Messer Group will continue to observe developments very closely. Cost reduction measures and capital expenditure programs initiated and implemented in recent years have helped to counter the negative impact of previous financial and economic crises. Many of these programs remain in place. The potential future deterioration in the creditworthiness of our customers increases the risk of bad debts and delay of joint projects. The structure of the Messer Group's receivables is disclosed in the notes to the consolidated financial statements.

It is essential that we ensure compliance with the covenants attached to the USPP I, II and III and to the RFA financing arrangements. One point worthy of mention is that the net debt (i.e. gross debt less liquid funds)/EBITDA covenants has now been expanded to include a computation for the Messer Group excluding China. Financial risks can also arise for the Messer Group from changes in exchange and interest rates. The management of interest rate, currency and liquidity risks is carried out by Group Treasury based on guidelines laid down by management. Group Treasury identifies, measures, and hedges these financial risks. The Messer Group currently employs marketable forward currency contracts, interest rate swaps and cross-currency interest rate swaps as hedging instruments. Treasury guidelines contain general risk management principles and specific rules for defined areas such as the exchange rate risk, interest rate risk, the use of derivative financial instruments and the investment of surplus cash. The related risks are observed continuously and the scope of hedging adjusted where considered necessary.

We have entered into talks with the banks concerning the imminent refinancing in August 2015. There are no indications that the refinancing will not be carried out successfully.

### **Currency risks**

Transaction risks which may arise from the export of products are generally hedged on receipt of the order. At an operating level, for the most part the individual Group entities transact their business locally in their functional currency. For this reason, the currency risk element of transaction risks is generally considered to be low. However, some Group entities are exposed to foreign currency risks from operating transactions in a currency other than their functional currency. These transactions relate mainly to

payments for imported products or services and are hedged as far as possible. Like any other market participant, we may be confronted with the unexpected appreciation of a functional currency which weakens the international competitiveness of the country concerned and hence the ability of our local business to export its products. Translation risks which may arise when converting foreign currency exposures into euro are classified as customary for the business.

In January 2015, the Swiss National Bank ("SNB") discontinued the exchange rate peg of the Swiss franc to the euro. In order to restrict appreciation of the Swiss franc, the SNB had purchased euros on the foreign exchange markets regularly since 2011 with the aim of ensuring an exchange rate of at least CHF1.20 to the euro. The SNB has now ended this intervention, thus allowing the exchange rate to float. A minimum rate is no longer guaranteed, with the outcome that, since December 31, 2014, the average CHF exchange rate has risen by 9 % and the closing rate by as much 13 %.

### **Legal and contractual risks**

Enterprises are confronted from time to time with allegations that they have infringed industrial rights or legal obligations, that defective products have been supplied or that environmental protection laws have not been adhered to. Regardless of their prospects of success, this type of claim can result in very high defense costs. In cases like these, the Messer Group defends itself energetically with the support of both in-house and external experts.

Our international operations are subject to a wide range of country-specific environmental legislation and regulations in areas such as gas emissions, groundwater pollution, the use and treatment of dangerous substances as well as ground surveys and decontamination. This can give rise to liability risks in conjunction with either past or current operations. New environmental requirements, partially resulting from the adoption of EU directives in the new EU Member States, necessitate that our existing environmental standards (which are already at a very high level) are brought into line with the new requirements. This may result in higher production costs and modifications to the production process. The financial year 2014 shows, however, that the implementation of stricter environmental regulations often results in a more efficient production process and a higher quality product.

### **Overall statement by management**

The above-mentioned opportunities show that both internal and external potential are involved. We endeavor to develop in-house potential on a targeted basis and will put external potential to good use whenever the opportunity arises. The risks presented above are not the only ones to which the Messer Group is exposed. Some risks, which have not yet been identified or which are not considered to be significant from today's perspective could have an adverse impact on the Messer Group if general business or economic conditions were to change. However, no risks were identified in 2014, either individually or in aggregate, which could have a material adverse impact on the going-concern status of the Messer Group. From today's perspective, no such risks are pending in the foreseeable future. The principal risks

during the period under report encompassed market developments and production processes. Organizational measures are in place to identify potential risks at an early stage. Our vigil risk management system (described below) and pro-active management of risks enable us to reduce risk.

## Risk management

The principles that dictate our approach to risk management are stipulated by the Executive Management. Risk management is directed at safeguarding the going-concern status of group entities and increasing the value of the business; for this reason it plays a crucial role in all decision-making and business processes. The existing management structure and the reporting processes which are in place ensure that not only developments that could jeopardize its going-concern status are reported regularly and in good time to the relevant levels, but also that other developments which pose a threat to the achievement of short-term performance targets (such as EBITDA or cash flow) are reported. This allows management to initiate measures at an early stage to mitigate any business and/or financial risks. Risk managers have been designated at each of the subsidiaries with responsibility for ensuring the proper functioning of local reporting systems. Working together with local risk managers, the group risk manager prepares a risk report for the Messer Group as a whole at the start of each year which is discussed by the Executive Management and communicated to the Supervisory Board of the Messer Group in good time. The risks recorded in the risk report are categorized by nature and classified by probability of occurrence. Risk perception in the current selling environment has exacerbated the risk profile of Messer Group entities in the financial year 2014 compared to the previous year.

Messer is adequately insured against potential claims or liability risks, to which it is exposed; these policies ensure that the financial impact can be kept within defined limits or completely avoided. The scale of insurance coverage is continuously optimized in response to the specific situation of group companies.

The Messer Group GmbH's internal audit department carried out eleven status audits (eight follow-up audits/three first-time audits) at European Messer Group companies during 2014. In addition, a follow-up audit to the 2013 process audit of the Vietnamese operations was carried out. In China, the local central organization carried out internal audits during the year (most of them relating to tax matters) and some status audits. The regular follow-up audits, which check at appropriate intervals that the previous findings and recommendations have been implemented effectively, are still considered to be a core aspect of the internal audit department's activities. The audits by the internal audit department at the same time include advisory activities in the sense that information on best practice is passed on and cross-border assistance is organized; this takes account of the respective current standards of the entities in the various countries. In addition, a regular exchange of information takes place with the external auditors in order to make the best use of available know-how, on a results-oriented basis, during the respective audits. Where necessary, other central functions are also called upon in an advisory capacity (including SHEQ

and Corporate Logistics). Compliance with corporate guidelines is tested and sample testing of voucher/document controls performed within the various business processes, in order to check the effectiveness and commercial sense of processes as well as the accuracy and reliability of financial reporting. Findings were clarified and recommendations made to improve the transparency of business processes.

The Group's Safety, Health, Environment, Quality (SHEQ) department continues to carry out audits and risk analyses in order to reduce the accident ratio even further.

State-of-the-art technologies are employed in the IT area in order to keep the risk from electronic data processing to a minimum. Unauthorized access to data and systems and a significant loss of data are ruled out to the greatest extent possible. The efficiency, operational availability and reliability of systems are constantly being monitored and improved. Messer's security concept also includes a detailed emergency plan. In order to minimize risks, the various technologies employed by the Messer Group are regularly tested to ensure that IT-based business processes are safe.

Tax laws and competition regulations can also give rise to business risks. For this reason, the Group obtains a full range of advisory services from in-house and external experts.

Income and operating cash flows are, to a large extent, unrelated to market interest rates, since the Group does not hold any significant interest-bearing assets. Loans or credits subject to variable interest rates are hedged partly with the aid of interest rate swaps (cash flow hedges of future interest payments). Under these arrangements, loans with variable interest rates are converted in substance to ones with fixed or maximum rates. In conjunction with the interest rate swaps, the difference between fixed contractual interest rates and variable interest rates is settled at specified intervals (computed by reference to an agreed amount). At the balance sheet date, derivative financial instruments had only been entered into with renowned international financial institutions.

Corporate Governance within the Messer Group includes a whole range of in-house rules and measures aimed at preventing the occurrence of risks. The first stage of the risk management system is to assess risks throughout the organization. This risk assessment is conducted by the Group's corporate departments for the respective areas of responsibility and by each consolidated subsidiary for its own business. The assessment of risks is updated each year. All information relating to risks is collated centrally by the Corporate Compliance Officer (CCO). Training is organized and carried out as appropriate to cover identified risk areas and to highlight best practice for avoiding the occurrence of a risk as far as possible. Mandatory compliance guidelines are in place for all Messer Group entities, including in particular the "Code of Conduct" and "Group Guidelines". All first and second-tier managers of the Messer Group and its consolidated subsidiaries have confirmed that they have received these guidelines, examined their content and comply with the regulations contained therein. Furthermore, all employees have been informed of the content of compliance guidelines of relevance to them and have also confirmed compliance with them. Management and staff are regularly informed about, and receive training on, the content of these guidelines, other policies and code of conduct rules.

On the basis of a matrix structure, the Compliance department cooperates closely with SHEQ, Medical, IT, Audit, Legal and Insurance departments. Internal audits are carried out to check that compliance guidelines – in particular the Group Guidelines – have been appropriately implemented, thus ensuring good risk management procedures throughout the organization, including conduct and reporting rules, the requirement for approval at the appropriate level as well as application of the dual control principle for legally binding agreements with third parties. Incidences of non-compliance are followed up and the appropriate actions taken where necessary. At the same time, any such incidences are used to reflect on how additional preventive measures could reduce the risk of non-compliance in the future.

Bad Soden am Taunus, March 13, 2015

Messer Group GmbH

## Consolidated Balance Sheet

of Messer Group GmbH, Sulzbach/Taunus, as at December 31, 2014 (in K €)

in K €		Dec. 31, 2014	Dec. 31, 2013
<b>Assets</b>	Intangible assets	415,776	415,486
	Property, plant and equipment	1,105,337	1,023,747
	Investments accounted for using the equity method	54,253	58,450
	Investments in other companies and financial investments	5,595	9,401
	Deferred tax assets	17,659	14,624
	Other non-current receivables and assets	137,880	134,535
	<b>Non-current assets</b>	<b>1,736,500</b>	<b>1,656,243</b>
	Inventories	77,293	57,173
	Trade receivables	172,849	164,906
	Income tax assets	2,507	1,138
	Other receivables and other assets	57,676	51,094
	Cash and cash equivalents	155,900	102,426
	<b>Current assets</b>	<b>466,225</b>	<b>376,737</b>
	Non-current assets held for sale	13,496	27,311
	<b>Total assets</b>	<b>2,216,221</b>	<b>2,060,291</b>
<b>Equity and Liabilities</b>	Share capital	100,000	100,000
	Reserves	883,547	847,816
	Profit after income tax	63,392	45,980
	Other comprehensive income	28,103	(79)
	<b>Equity attributable to shareholders of the parent company</b>	<b>1,075,042</b>	<b>993,717</b>
	<b>Non-controlling interests</b>	<b>172,712</b>	<b>151,803</b>
	<b>Equity</b>	<b>1,247,754</b>	<b>1,145,520</b>
	Provisions for employee benefits	51,505	38,681
	Other provisions	8,529	9,620
	Non-current financial debt	405,613	511,988
	Deferred tax liabilities	32,880	35,253
	Other non-current liabilities	6,994	6,014
	<b>Non-current liabilities</b>	<b>505,521</b>	<b>601,556</b>
	Other provisions	30,027	27,346
	Current financial debt	192,133	31,589
	Trade payables	148,634	137,797
	Income tax liabilities	6,165	6,916
	Other current liabilities	84,534	101,358
	<b>Current liabilities</b>	<b>461,493</b>	<b>305,006</b>
	Non-current liabilities held for sale	1,453	8,209
	<b>Total equity and liabilities</b>	<b>2,216,221</b>	<b>2,060,291</b>

## Consolidated Income Statement

of Messer Group GmbH, Sulzbach/Taunus, for the Year Ended December 31, 2014 (in K €)

in K €	Jan. 1 – Dec. 31, 2014	Jan. 1 – Dec. 31, 2013
Net sales	1,047,127	1,026,622
Cost of sales	(584,922)	(568,850)
<b>Gross profit</b>	<b>462,205</b>	<b>457,772</b>
Distribution and selling costs	(281,357)	(278,245)
General and administrative costs	(92,556)	(91,317)
Other operating income	38,978	24,449
Other operating expenses	(7,045)	(4,757)
Impairment losses on goodwill	(2,819)	(4,000)
<b>Operating profit</b>	<b>117,406</b>	<b>103,902</b>
Income from investments accounted for using the equity method	2,418	3,489
Other investment results, net	415	9
Interest income	1,427	1,919
Interest expense	(25,692)	(25,408)
Other financial result, net	(2,208)	2,547
<b>Financial result, net</b>	<b>(23,640)</b>	<b>(17,444)</b>
<b>Group profit before income taxes</b>	<b>93,766</b>	<b>86,458</b>
Income taxes	(15,596)	(20,559)
<b>Group net profit for the year</b>	<b>78,170</b>	<b>65,899</b>
Of which attributable to:		
shareholders of the parent company	63,392	45,980
minority interests	14,778	19,919

## Consolidated Cash Flow Statement

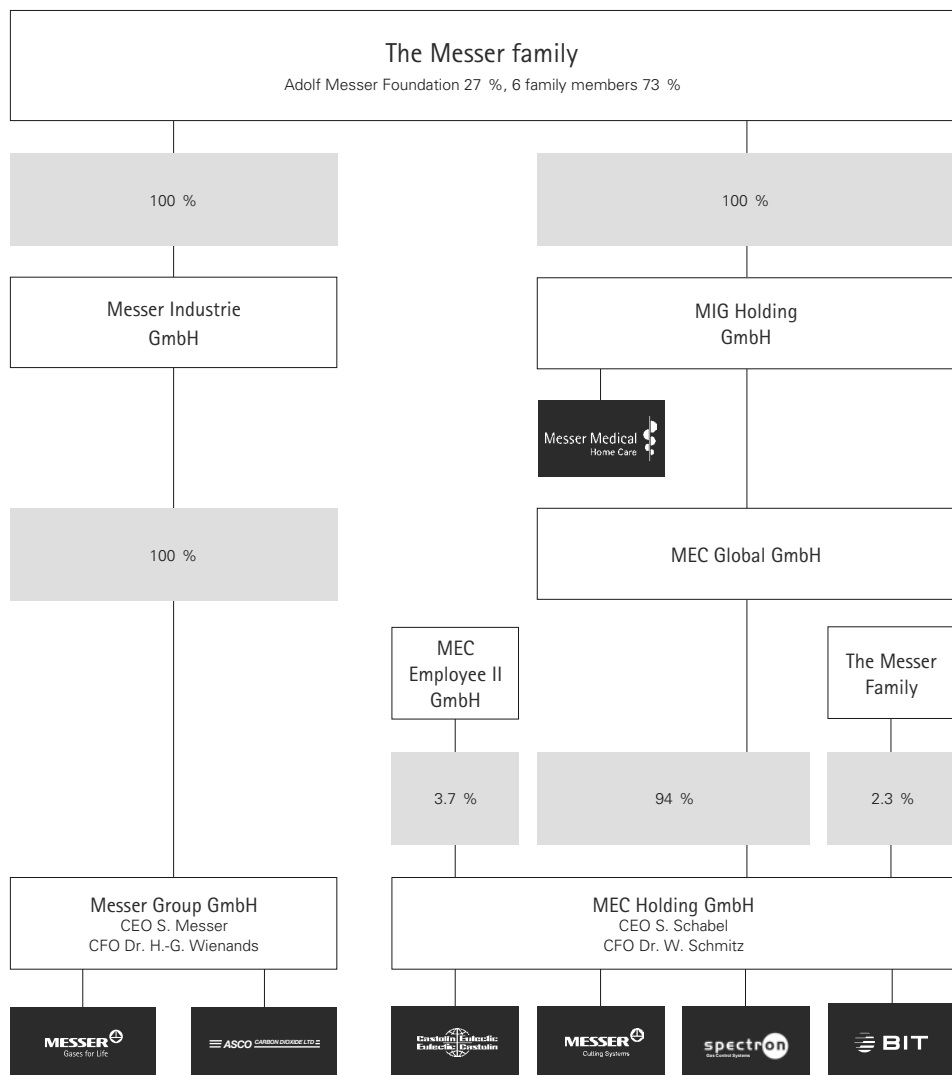
of Messer Group GmbH, Sulzbach/Taunus, for the Financial Year 2014 (in K €)

in K €	Jan. 1 - Dec. 31. 2014	Jan. 1 - Dec. 31. 2013
<b>Group profit before tax</b>	<b>93,766</b>	<b>86,458</b>
Income taxes paid	(21,760)	(19,592)
Depreciation and amortization of property, plant and equipment and intangible assets	122,435	127,203
Gains arising on change in group reporting entity	(18,224)	(2,270)
Loss / (gains) on disposals of fixed assets	(561)	(2,634)
Changes in investments in associated companies	(2,418)	(3,489)
Interest result, net	24,265	23,489
Other non-cash financial result	2,229	(2,547)
Changes in assets resulting from finance lease arrangements (IFRIC 4)	(21,978)	997
Changes in inventories	2,287	2,560
Changes in receivables and other assets	22,189	(16,610)
Changes in provisions	4,189	6,054
Changes in trade payables and other liabilities	4,199	18,152
<b>Cash flow from operating activities</b>	<b>210,618</b>	<b>217,771</b>
Purchase of property, plant and equipment and intangible assets	(135,362)	(185,948)
Purchase of investments and other non-current assets	(50,272)	(1,854)
Acquisition of shares of minority shareholders	2,666	(773)
Proceeds from disposals of property, plant and equipment and intangible assets	2,010	5,079
Proceeds from disposals of investments and loans	41,745	(19)
Interest and similar income	1,463	1,888
<b>Cash flow from investing activities</b>	<b>(137,750)</b>	<b>(181,627)</b>
Changes in capital by shareholders of Messer Group GmbH	-	(9,960)
Proceeds from non-current financial debt	19,364	17,533
Proceeds from current financial debt	11,869	26,952
Repayments of non-current financial debt	(3)	(15,838)
Repayments of current financial debt	(14,551)	(34,375)
Dividends paid to minority shareholders	(11,999)	(15,313)
Contributions by minority shareholders	511	2,012
Capital reductions at the level of associated companies	5,287	6,088
Interest and similar expenses paid	(23,969)	(23,878)
Other financial result, net	(1,582)	1,284
<b>Cash flow from financing activities</b>	<b>(15,073)</b>	<b>(45,495)</b>
<b>Changes in cash and cash equivalents</b>	<b>57,795</b>	<b>(9,351)</b>
<b>Cash and cash equivalents</b>		
<b>at the beginning of the period</b>	<b>102,426</b>	<b>115,027</b>
Exchange rate impact on cash and cash equivalents	(4,171)	(2,555)
Cash relating to changes in group reporting entity	83	(21)
Cash funds classified as held for sale	(233)	(674)
<b>at the end of the period</b>	<b>155,900</b>	<b>102,426</b>

# Messer World

Along with Messer Group and ASCO Carbon Dioxide, “Part of the Messer World” also includes the business areas of the sister companies Messer Cutting Systems, Castolin Eutectic, BIT and Spectron Gas Control Systems – and Messer Medical Home Care, which has been independent since 2011. They all offer application-specific expertise and products which help optimise manufacturing processes, extend the life of production equipment and materials, or significantly enhance quality.

## Organisational structure



## ASCO Carbon Dioxide

### Technology focus

The year 2014 was marked by new combined technological know-how due to the fact that the German firm BUSE Gastek GmbH & Co. KG, headquartered in Bad Hönningen, merged its business divisions for CO<sub>2</sub> production and recovery plant construction and dry ice technology with ASCO. The merger now allows these two traditional plant builders with over 90 and 120 years of experience respectively in CO<sub>2</sub> and dry ice technology to pool and significantly expand the expertise and product portfolios of both companies. This applies in particular to the complex field of CO<sub>2</sub> recovery.

Therefore, the Swiss ASCO houses the departments for engineering and the construction of CO<sub>2</sub> production and recovery plants in its new foreign production facility on the Buse Gastek location in Bad Hönningen, Germany.

The joint venture operates under the name ASCO CARBON DIOXIDE LTD.



### Restructuring

The restructuring and expansion of the individual business units, combined with the efficient use of newly formed synergy as well as a continuously optimised product portfolio, let us believe in a sustainable growth for years to come.



### Broad product portfolio

ASCO is a provider of customised and complete CO<sub>2</sub> solutions. Our product portfolio includes automatic dry ice production machinery, CO<sub>2</sub> production plants and recovery systems, dry ice blasting equipment, CO<sub>2</sub> storage tanks, CO<sub>2</sub> cylinder filling plants, CO<sub>2</sub> vaporisers and other CO<sub>2</sub> accessories. Product development and service are built on two solid foundations: the first is our more than 90 years of practical experience in everything pertaining to CO<sub>2</sub> and dry ice, and the second is our highly qualified and dedicated workforce. This unique combination of extensive expertise and broad product portfolio provides our customers with complete and customised solutions from a single source.

The entire Messer Group relies on ASCO as its competence centre for CO<sub>2</sub> and dry ice.

[www.ascoco2.com](http://www.ascoco2.com)

## Messer Eutectic Castolin Group

For the MEC-Group, 2014 was marked by heterogeneous economic trends in the markets that are of relevance to us. While we can look back on good business growth in North America, India, China and Japan, we saw a drop in sales and earnings in our traditional markets in Europe as a result of economic as well as geopolitical factors. In particular, the unresolved conflict between Russia and Ukraine and the resulting sanctions led to a not inconsiderable loss of earnings. In 2014, we achieved total sales of 521 million euros in the MEC-Group, an increase of 2.3 per cent on the previous year. Thanks to continuous efforts to boost profitability and reduce costs, we once again generated a profit after tax and interest.

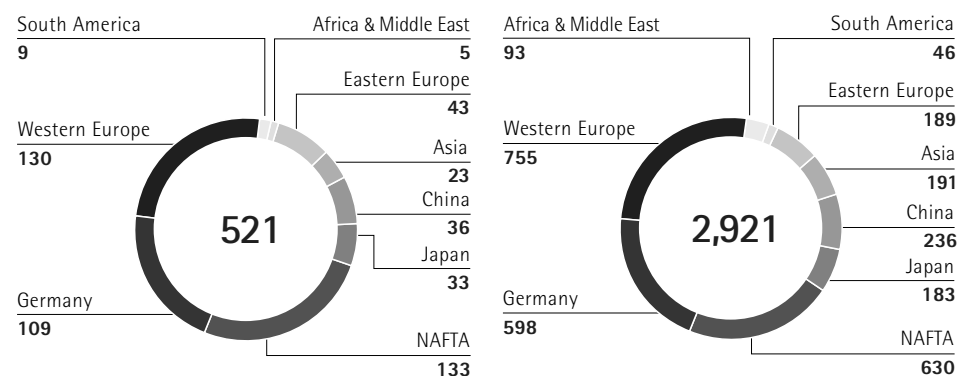
We implemented an extensive, growth-oriented investment programme in 2014 and successfully completed numerous projects. In addition to prospects arising from geographical expansion into new growth markets, we also stepped up our investment, targeting new technologies, the intensification of our sales structures and staff recruitment and development. We are pursuing our core strategies across many projects and with further investment, supported by the implementation of new initiatives which are key to the future profitable growth of our group of companies. We are well placed across the MEC-Group, to be able to benefit from the opportunities offered by the improving economic situation as well as the potential resolution of political conflicts.

### Key figures 2014

Sales of MEC-Group by region in million of euros

Number of MEC-Group employees by region

As of 31.12.2014



## Castolin Eutectic

### Sales and earnings trend

The 2014 financial year saw a 1.5 per cent increase on the previous year's high level of sales. Once again, we were able to achieve a positive EBITDA at the previous year's level. Our service activities remain an important element of our core strategy. Compared with the previous year, we were able to increase this service segment as a percentage of total business worldwide from 23.3 per cent in 2013 to 27.6 per cent in 2014.



### Growth through service strategy

As in previous years, we also made significant investments in this area in 2014, expanding our position as a technology leader in thermal spraying applications through the acquisition of the Whertec Group, which is established in North America. We regard our strategic acquisitions as well as our development activities in complex technical applications as a way of strengthening the service segment and laying the foundation for further growth in our key strategic sectors such as oil and gas, steel, energy generation and cement.



In 2014, we started and largely implemented further new projects, such as the construction and expansion of new locations in Yokohama/Japan, Gliwice/Poland, Dalian/China, Moscow/Russia and Singapore. We see the setting up of companies in Thailand and Nigeria as providing a good basis for integrating the positive growth and earnings potential of these emerging markets into our business strategy. Also key to our future growth are further investment and development in laser coating technology and in new technologies for the manufacture of coated protective plates, along with the expansion of our production capacities for coating powders and the launch of a new range of welding equipment for a wide variety of applications.

### Extensive Castolin Eutectic product range

The Castolin Eutectic business unit is one of the world's leading suppliers of products and services in maintenance, repair and wear protection for industrial facilities and factory equipment. Our product range includes consumables and equipment for technologically sophisticated applications in the areas of welding, coating and brazing. In addition, we offer our industrial customers specially developed product packages for complex applications in their industry.

Our products and services are available via our subsidiaries in over 35 countries as well as through a worldwide dealer network. Castolin Eutectic employs 1,614 people worldwide with field staff comprising more than 550 highly qualified engineers and international application specialists.

[www.castolin.com](http://www.castolin.com), [www.eutectic.com](http://www.eutectic.com)

## Messer Cutting Systems

### World of Excellence



In 2014, the previous year's high level of sales could not quite be matched. This was due to the difficult economic development in the markets relevant to us. We experienced a not inconsiderable drop in sales, in particular as a result of the conflict between Russia and Ukraine and the sanctions that followed. Weak demand in our traditional Western and Southern European markets also meant that there was no significant upturn in sales in the past financial year. By contrast, we achieved stable growth in Scandinavia, Britain and the NAFTA area. We also managed to generate profitable growth in India once again. Important groundwork for this was laid by the completion of the new production facility in the second half of 2013, as well as by the development of a dedicated sales organisation, which was also launched in 2013.

In China and in Korea, we were largely able to maintain the previous year's level of sales and to achieve a profit once again. In 2014, we began expanding our production capacity in Kunshan, China, with the addition of another laser technology plant. We expect to be able to manufacture the first laser cutting systems at the new production facilities from August 2015 onwards.

With our continuous efforts to boost profitability, through new innovative products as well as high service quality, we were able to achieve satisfactory profit for 2014.

In our estimation, 2015 is unlikely to bring any fundamental changes with regard to the rather limited economic growth of eurozone member states that are important to us and the lack of any clear resolution of the political crisis between Russia and Ukraine. We are also rather cautious in our assessment of the difficult economic development in Latin America. With regard to our markets in Asia and the NAFTA area, we anticipate continued stable sales growth.

By focusing our entire organisation on complex and technologically advanced cutting systems, by offering a broad product portfolio for different cutting requirements and applications, and by providing a sales and service organisation geared to customer requirements, we will continue to serve what is a technologically demanding customer segment in the future.

### Partner for cutting systems

Messer Cutting Systems is a global supplier of products and services for the metalworking industry. As a leader in the sector, we supply complete solutions and concentrate on advising our customers as well as developing customer-focused innovations. Messer Cutting Systems employs approximately 900 people at five main production centres and is represented in over 50 countries with sales companies and service partners. The product portfolio includes oxyfuel, plasma and laser cutting systems ranging from manually operated machines to special machines for shipbuilding. Our portfolio is rounded off by spare parts, a repair service, modernisation of older systems, maintenance and customer service, including all

the environmental technology requirements. Software solutions from MesserSoft optimize production and business processes. We focus on intensive dialogue with our customers. This commitment is clearly expressed in our state-of-the-art training centre, the Messer Cutting Systems Academy.

[www.messer-cs.com](http://www.messer-cs.com)

## Spectron Gas Control Systems

### Sales and earnings

Due to the operational focus of the Messer Group, Spectron is run as an independently operating business unit. In addition to the headquarters in Frankfurt am Main, Spectron also operates production and distribution centres in Coventry/UK and Shanghai/China. Our activities once again developed well in the 2014 financial year. We increased the previous year's high level of sales by 6.5 per cent and also once more significantly increased our profit from the previous year.

### Broad spectrum of products

Spectron Gas Control Systems is the gas supply system specialist. Our product family comprises the appropriate fittings and instruments for a broad spectrum of gases. They cover the full range of applications from simple valves through to gas cylinder cabinets for semiconductor gases. Spectron also supplies alarm and control systems for gas applications as well as purification systems for ensuring the purity of gases. Our goal is to provide our customers with the highest levels of service, quality, reliability and technological expertise. With an additional production centre in the UK and a worldwide network of sales and distribution partners, Spectron is well positioned globally and always close to its customers. Spectron thus continues to be a leading and innovative international manufacturer and supplier of fittings and systems for the efficient and safe use of gases across a wide range of applications.

In addition to the headquarters in Frankfurt am Main, Spectron also operates production and distribution centres in Coventry/UK and Shanghai/China.

[www.spectron.de](http://www.spectron.de)



## BIT Companies

### Sales performance and profitability



For the BIT Group, 2014 was an outstanding year in the company's history. The acquisition of several in-vitro diagnostics companies in recent years enabled us to position the Group as a partner with global operations in this market segment. The merger in 2013 of the two US companies Source Scientific and California MedTech into BIT USA further strengthened our market presence in the financial year under review. BIT USA has production facilities in San Diego/California as well as a modern research and development centre in Irvine, near Los Angeles. Our development facilities in France and Germany also made another significant technological contribution towards the expansion of our platform strategy, particularly in the field of haematology (blood cell analysis). In 2014, we were able to place further analysis instruments based on this platform strategy on the market, increasing the BIT Group's volume of sales by 22 per cent compared with the previous year. In future, the BIT Group will continue to focus on sustainable, profitable growth through technological developments in the area of in-vitro diagnostics and on the expansion of customer service.

### Comprehensive services

The BIT Group offers OEMs contract product development, contract manufacturing and after-sales service for life science, medical and IVD devices. The quality standards offered include GMP, FDA registration, ISO 13485 & 9001, QSR, Class I, II, and III. BIT's global locations in the USA, Germany, France, China and Japan supply precise system solutions that have been developed cost-effectively. As pre-developed platform technology, BIT SMARTSOLUTIONS™ reduces development costs and time to market; lean manufacturing centres and a global supply chain facilitate competitive product costs.

At the end of December 2014, BIT had a total of 337 employees, around a third of whom are engaged in development work.

[www.bit-companies.com](http://www.bit-companies.com)

## Messer Medical Home Care

### **Broad portfolio for the home care sector**

Messer Medical Home Care Holding (MMHCH) has been developing product offerings and services designed for the treatment of patients at home across several European countries. These product and service offerings allow oxygen therapy at home, therapy for sleep apnea, monitoring for sudden death syndrome with small children, ventilation support and all training measures connected to these therapies.

Treating patients at home is key to health care systems across the world. It alleviates the strain on resources deployed in hospitals. Therefore home care is a solution for health care payers to manage cost and resources in a world whose population is ageing.

### **Focus on home care**

Within the Messer World, MMHCH concentrates solely on the home care area. In the past, these activities were integrated separately in the Messer Group, which made it difficult to focus and align them clearly.

We will continue to develop and market innovative solutions for patients, doctors and health authorities. We expect this to give us a sustainable and leading position across the entire healthsector. MMHCH currently has around 100 employees working day in day out dedicated to this mission.

[www.messer-medical.at](http://www.messer-medical.at)



# The Messer Group worldwide

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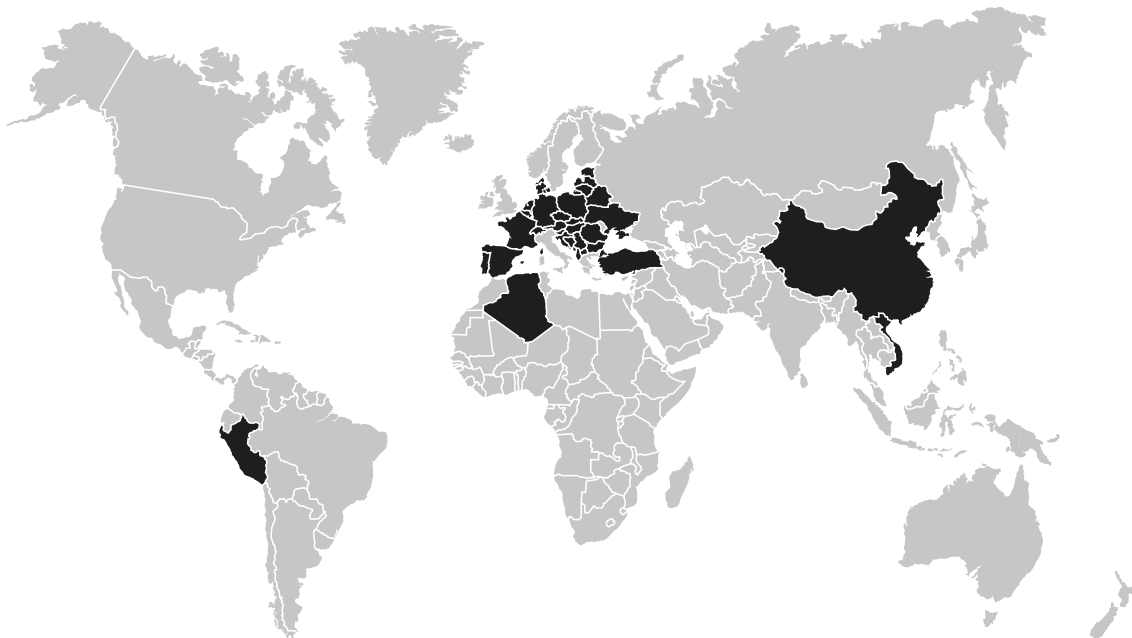
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