

# Gases for Life

### Messer - Gases for Life

Messer Group GmbH, with its headquarters in Bad Soden/Taunus near Frankfurt am Main, acts as a management holding company for the Messer Group. Products, services and technologies are sold under the trade-mark protected names "Messer" and "ASCO", irrespective of protected trade marks for gases and applications.

From acetylene to xenon, the Messer Group has one of the most diverse product portfolios on the market – it produces industrial gases such as oxygen, nitrogen, argon, carbon dioxide, hydrogen, helium, shielding gases for welding, specialty gases, medical gases and many different gas mixtures.

The "Gases for Life" message has been part and parcel of our corporate brand since 2011. "Gases for Life" appears alongside our brand name, is the title of our industrial gases magazine and lies at the heart of our current image campaign.

"Gases for Life" is the result of some very simple questions: "Who benefits from our products?", "What are people at Messer working to achieve?", "What makes us different from other industrial gases companies?". While the answers to these questions are varied, they do have one thing in common and that is the focus on people and their lives, which "Gases for Life" make safer, easier or more pleasant.

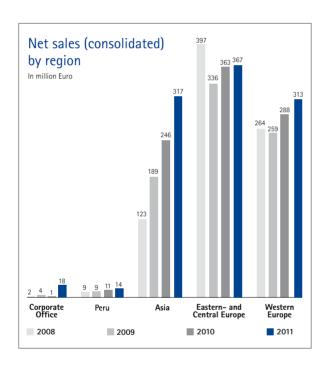
"Gases for Life" is a message that Messer communicates both externally and internally. It is aimed at our employees, whom we see as individuals rather than as job holders performing specific functions. Our work together is based on reliability, sincerity, transparency and open communication – living values, which in 2011 have once again helped secure Messer's economic success.

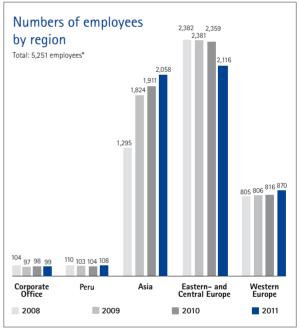
# Messer Group Key figures at a glance

As of 31.12.2011

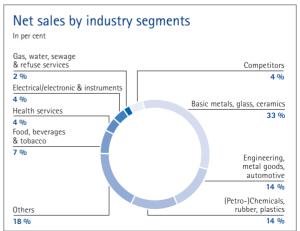
|               |                   | 2008  | 2009  | 2010  | 2011  |
|---------------|-------------------|-------|-------|-------|-------|
| Net sales     | in million Euro   | 795   | 797   | 909   | 1,029 |
| EBITDA        | in million Euro   | 172   | 175   | 207   | 241   |
| EBITDA margin | in per cent       | 22    | 22    | 23    | 23    |
| Investments   | in million Euro** | 194   | 202   | 168   | 191   |
| Employees*    |                   | 4,696 | 5,211 | 5,288 | 5,251 |

<sup>\*</sup> contractual employments \*\* incl. IFRIC4









# Content

| Messer – Gases for Life              | 3  |
|--------------------------------------|----|
| Messer Group Key figures at a glance | 4  |
| are everywhere: Gases for Life       | 6  |
| Foreword Stefan Messer               | 8  |
| Supervisory Board Report             | 12 |
|                                      |    |
| Company                              |    |
| The Messer Brand                     | 13 |
| Mission Statement                    | 14 |
| Corporate Culture                    | 18 |
| Capital expenditure                  | 30 |
| Gas Sales and Technology Management  | 32 |
| Information Technology               | 37 |
| Messer World                         | 40 |
|                                      |    |
| Financial year                       |    |
| Review of economic development       | 49 |
| Risk and opportunities management    | 56 |
| Outlook                              | 61 |
| Consolidated Balance Sheet           | 63 |
| Consolidated Income Statement        | 64 |
| Consolidated Cash Flow Statement     | 65 |
| The Messer Group worldwide           | 66 |
| Imprint                              | 67 |

# Gases for Life

There are only a few products that are not produced, processed or optimised with "Gases for Life". This graphic shows a number of examples of how industrial gases are produced, stored and transported before they are used in a range of processes to make products that benefit us in our daily lives.



Delivery by tanker is one of several demandoriented means of supply. Other forms of supply include gas cylinders or cylinder bundles. In some industrial areas, it is possible to supply gas via a pipeline. As industrial gases are often needed in large quantities, they can be stored in stationary tanks that are located on the customer's site. The size and number of tanks are geared to the customer's individual requirements.

# Oxygen, e.g. for easy forming and





Krypton, e.g. for the production of modern insulating glass windows















**Application** 

Nitrogen, e.g. for the Crustfreezing of white bread to ensure better slicing



Carbon dioxide, e.g. for the carbonisation of beverages



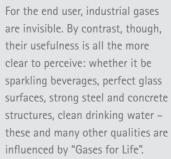




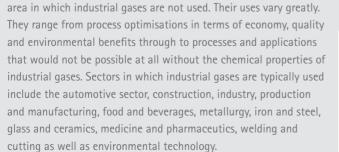
Hydrogen, e.g. to prevent chrome alloys from oxidation











From A for automotive industry to Z for Zeppelins, there is hardly an



Gases from the air



Noble gases from the air



Gases from other sources



#### Dear Readers.

Our global economy is in transition: Asia is developing into our planet's largest and most dynamic economic region. Europe and the USA have increasingly lost their role as pioneers and are facing major challenges that will affect generations to come. Furthermore, the increasing scarcity of raw materials is resulting in greater competition for access to the remaining resources. This is forcing us to change our thinking with regard to energy production and mobility – a thoroughly positive effect.

Germany is currently still well placed as a location for industry and business. Compared to other Western centres of economic activity, we benefit from a broad industrial base with numerous 'hidden champions'. Frequently, these are family enterprises with a rich tradition, a sound culture of values and technically superior products. The drivers of the German economy, such as the automotive and engineering sectors, are also enjoying sustained global demand thanks to their innovative products. While the 'Made in Germany' label may have lost some of its former lustre, the designation "Developed in Germany" has an extremely good image.

We must defend this leading position vigorously in the future. We can do so successfully with the aid of reliable economic policies and wide-ranging support for forward-looking projects, and above all through our individual potential, that is to say our intelligence, experience and effectiveness.

At Messer we have successfully responded to economic changes in a targeted way. We invested early in growth regions and future markets. But our successful return to the German gases market was also an important and appropriate step: here we can play a leading role in supporting the development of new products and processes in which our gas applications play vital roles in terms of quality, efficiency, profitability and environmental friendliness.

In this time of upheaval and uncertainty, we have once again succeeded in achieving a good result, with all parts of the Messer World making a positive contribution in 2011.

The Messer Group's sales have topped the billion mark for the first time; following the sharp downturn of 2009, the MEC Group has generated sales of well over 500 million euros in the past year. We have continued a rigorous programme of expansion in our core gas markets by investing over 190 million euros.

These investments include a new bioethanol-based CO<sub>2</sub> facility that is being built in the southwest of France, the reactivation of our existing acetylene plant in the Dutch town of Moerdijk, and our completely new facility in Zwijndrecht in Belgium.

We will be building a nitrogen generator for our Slovakian partner Slovnaft. A new air separation unit is under construction at our site in Gumpoldskirchen, Austria. In Poland, we have significantly expanded our existing CO<sub>2</sub> production capacity. A plant construction project in Ukraine is also nearing completion. In Albania, meanwhile, we have been able to establish ourselves as the market leader by acquiring shares in Sofigaz (SAPIO), and in Hungary two new nitrogen generators have been put into operation. We have

expanded our existing CO<sub>2</sub> and air gas capacities in Croatia while also signing several large bulk supply contracts in Turkey.

China remained our main focus of investment in 2011. New plants have been completed in Yangjiang, Foshan, Xichang and Caopu. Numerous other plants are under construction. In Vietnam, local business has also developed very well with the commissioning of a new air separation unit there. In the south of the country, a CO<sub>2</sub> facility will go into operation towards the end of spring 2012. In October 2011, I travelled to Vietnam as part of German Chancellor Angela Merkel's delegation. Messer was able to present itself as a very reliable partner.

In Peru, following difficult negotiations, the supply contract with our on-site customer Sider Peru has been extended until 2019. The rest of our business activities in the Peruvian market have been going very well.

The MEC Group saw an excellent recovery in its business in 2011, which means that we will probably reach the 2008 boom-year levels again as early as 2012. The European Castolin organisation has been streamlined and placed under new management. We have expanded the Castolab business considerably in Asia and North America. And excellent sales growth has been achieved in Japan in spite of the tsunami disaster.

Messer's cutting machine business, which is very dependent on the economic situation, has also recovered extremely well. The gas instruments division, which was hived off in 2011 to form Spectron Gas Control Systems, has fulfilled our expectations. We intend to further strengthen this development through broader internationalisation of the sales organisation.

BIT Analytical Instruments has excellent future prospects. At the beginning of 2011, we took over the French company C2 Diagnostics in Montpellier, followed several months later by the acquisition of California MedTech in San Diego. In 2011, the sales office in Tokyo succeeded in winning the largest IVD development and manufacturing contract to date. These acquisitions, coupled with a generally successful development of the business, facilitated a near doubling of sales compared to 2010, thereby creating a significantly strengthened basis for the future growth of the business.

The move to our new company headquarters in Bad Soden has been a particular highlight of the past year. Besides our administration building, which now houses the central divisions of the Messer World under one roof, there is also the neighbouring Adolf-Messer-Forum, which is home to our new company museum. The official opening of our new building complex took place in September. We marked the occasion by organising an open-air concert for the townspeople of Bad Soden, featuring the German soul singer Cassandra Steen. I believe that we have now become an integral part of the town of Bad Soden and that our employees feel at home in their new surroundings.

We have implemented our new slogan – "Gases for Life" – in order to communicate even more widely to the public what Messer stands for. Our aim is to make our products more visible to the outside world. Our industrial gases are products for people, that is to say for processes and applications that make our lives better, safer and more environmentally friendly. For example, when you drink a glass of wine or mineral water, when you have something nice to eat or when you make yourself comfortable on the

couch with your laptop – industrial gases are everywhere. For there is practically no product area or area of life that does not require industrial gases, even if they are invisible.

I would therefore like to thank you for your loyalty, trust and support as we continue to grow as a company and further develop our invisible – but all the more important – "Gases for Life". I look forward to being able to experience and shape our Messer World with you in the future.

Yours

Stefan Messer

# Supervisory Board Report

During the reporting period, the supervisory board has performed the tasks incumbent on it in accordance with the statutory provisions and the articles of association by providing support and advice to the management. The management has 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 19, 2011 and November 22, 2011. 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 has 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, 2011, as well as the management report from Messer Group GmbH and the Messer Group have been audited and certified by the auditing company KPMG AG Wirtschaftsprüfungsgesellschaft, Essen. The audit reports were discussed at the board meeting on April 27, 2012 with the assistance of the auditors. The supervisory board had no objections and is in 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 2011 financial year.

Bad Soden, April 27, 2012 Supervisory Board

Dr. Jürgen Heraeus, Chairman











Supervisory Board of the Messer Group (from left): Dr. Jürgen Heraeus, Vorsitzender Dr. Karl-Gerhard Seifert Dr. Werner Breuers Peter Wilhelm Storm van's Gravesande Dr. Bodo Lüttge

# Company

#### The Messer Brand

The Messer brand was repositioned during the financial year 2011 with the new corporate slogan "Gases for Life" and with a concept of Employer Branding.

The company slogan is an integral part of the Messer logo that is used uniformly by all Messer industrial gases companies worldwide. It consists of three elements that form a visual whole: the company name Messer, the "little boat" and the slogan "Gases for Life".

"Gases for Life" expresses the importance and orientation of the gases produced and used by Messer for everyday life: from A for automobile to Z for zirconium, there is hardly a product that does not benefit directly or indirectly from industrial gases and their applications.

Part of the employer branding process launched in 2010 has been completed. The "positioning statement", "cultural fit" and "unique employment proposition" elements have been defined. Now the communication work begins. The employer branding campaign's concept will be linked to the Gases for Life campaign, with implementation taking place transnationally.

The objective of the Employer Branding project is specify the requirements placed by the employer on its employees, whilst strengthening the sense of identification with the company and making the Messer Group's corporate culture easy to understand for new and potential employees.

Gases for Life

#### 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.

#### Exzellence

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.









The official opening of the new company headquarters was celebrated with a spectacular illumination of the façade. A large number of guests, including the supervisory board of the Messer Group, enjoyed a varied programme with panel discussions and music.















In September 2011, Messer officially opened its new company headquarters in Bad Soden, near Frankfurt am Main. All the companies of the Messer Group have now been brought together under one roof for the first time. The new head office is located in the centre of Bad Soden, which underlines the company's close relationship with the region and its people.

The opening itself was celebrated over two days with customers, partners and suppliers of the Messer Group, as well as its employees and the population of Bad Soden. The highlight was a concert featuring the German pop and R&B singer Cassandra Steen, which was held in the Kurpark, a short distance from the new company head-quarters. Some 4,500 townspeople took advantage of the opportunity to spend an entertaining evening with their "new neighbours".

































# Corporate Culture

#### Social responsibility and commitment

The name Messer has stood for generations for corporate social responsibility. In Germany, this commitment is also demonstrated by the foundations set up by the Messer family. The Adolf Messer Foundation provides support for education and science. The Dr. Hans Messer Social Foundation gives donations worldwide to people who are in need or sick. These foundations derive their income from their capital endowments and from donations from employees on the occasion of such events as company anniversaries and "round" birthdays.

We at Messer are aware of our social responsibility and commitment. For us, entrepreneurial thinking and action include social responsibility and commitment. These are integral parts of our values and together with our vision and mission are firmly embedded in our corporate philosophy. Our values, such as employee orientation, corporate responsibility, responsible actions as well as trust and respect, build the basis of our company. They have a long tradition and can be traced back to the ideas and beliefs of our founder, Adolf Messer.

Many entities throughout the Messer world have become involved in social and ecological projects, whether in the form of cash- or non-cash donations to social institutions, schools or hospitals, participation in action days or sponsoring activities. The range of projects is wide and tailored to the needs of each country.

#### China: Help for autistic children

For the younger employees of Hunan Xianggang Messer Gas Products, every Friday is a special day, because that is when they meet three to five-year-old children with autism from Qingyuan Peizhi School, a rehabilitation centre in the southern Chinese city of Xiangtan (Hunan province). Messer and the school have been working together since August 2011. Each Friday afternoon, around eight volunteers take turns to visit the school in order to talk, draw, dance and do sport with the 24 autistic pupils. They are helped in this task by a database that provides them with information about the children's likes and dislikes as well as their particular abilities and limitations – and which also contains comments from the voluntary helpers. The project is not only an example of meaningful social commitment in the vicinity of the company headquarters in Xiangtan, but also a good opportunity to foster the young employees' sense of responsibility. In the future, other colleagues are expected to join the project and undertake additional tasks, including looking after the children during excursions or swimming courses.

#### Italy: Commitment to civil protection

Messer Italia has donated a decommissioned tarpaulin trailer to the civil defence force of the municipality of Terrassa Padovana (province of Padua) for the transportation of relief supplies. In April, the civil defence force used it for the first time during the papal visit to Venice. The civil defence force, one of the tasks of which is to protect people caught up in natural disasters, also relies on the assistance of volunteers. One of them is an employee of Messer Italia. He was involved in the rescue efforts following the devastating 2009 earthquake in Abruzzo.

#### Spain: Exhibition to mark the International Year of Chemistry 2011

How will it be possible to provide food for nine billion people in 2050? This and other interesting questions were addressed by the "Chemistry – our life, our future" exhibition held in the Spanish city of Tarragona in June 2011. Messer Ibérica de Gases carried out various experiments with cryogenic nitrogen, helium and oxygen at the event. The company thus gave visitors to the exhibition a practical insight into how the properties of different materials can be altered and how controlled atmospheres can be created. Messer's varied and informative demonstrations also supported the aim of the event, namely to present to the public the diverse applications of chemical products, such as industrial gases, in everyday life, and to highlight the resulting innovations. The exhibition was organised by the chemical group and the university in Tarragona to mark the International Year of Chemistry, as 2011 was declared by the United Nations.

Company Corporate Culture

#### Hungary: Experiments on the 'Bridge of Science'

The oldest and most famous of the nine Budapest bridges, the Chain Bridge, was transformed into the "Bridge of Science" for a day on 17 September 2011. The bridge played host to Hungarian research and development companies and institutions who showcased their greatest innovations and numerous spectacular experiments. For example, the Technical University of Budapest presented a special superconductor machine (Human Levitator). Its fixed permanent magnets allowed children and grown-ups to experience levitation. The low temperature of minus 140 degrees Celsius that is required for the superconductivity was achieved with nitrogen from Messer. Messer gases also ensured that other chemical and physical experiments such as smoking foam or high-pressure extraction could be demonstrated. The aim of the event was to make the natural sciences more accessible to young people in particular.

#### Germany: Attracting new trainees

On 16 and 17 June 2011, practical workshops were held at Messer Group in Bad Soden and at Messer Cutting Systems in Groß-Umstadt under the auspices of the German Welding Society (DVS). Around 25 engineering students took part. Together with its member companies, including Messer Group and Messer Cutting Systems, DVS organises events like this with the aim of attracting young labour market entrants to welding and cutting – and thus combating the long-term shortage of skilled labour in Germany. Messer Group used the event to present its wide variety of welding and cutting processes, particularly the new developments in shielded arc welding. The permanent exhibition in the Adolf-Messer-Forum about the companies of the Messer World offered the students the opportunity to learn more about the processes and products of Messer and MEC. The following day, the participants were invited to Messer Cutting Systems in Groß-Umstadt, where they gained insights into the development, production and workings of nozzles, burners and systems with the aid of live demonstrations.

#### Bosnia-Herzegovina: Effective support for young employees

Youth unemployment is just as big an issue in Bosnia-Herzegovina as it is in many other European countries. Messer Tehnoplin works closely with local authorities to help school-leavers, graduates and those who have completed their training to get their career started and prepare them for the job market. This cooperation has proved successful: in 2011, as part of the Youth Employment Project (YEP), the company had four new employees on one-year internships that are specially tailored to their educational qualifications. The interns will be able to put the knowledge and skills they have gained at Messer to very good use in their future careers.

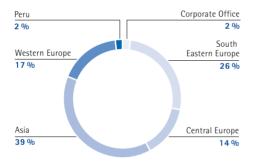


#### **Employees**

The Messer Group had an average worldwide workforce in 2011 of 5,214 employees, each contributing to the success of the business with his or her extensive knowledge, ideas, know-how, motivation, active commitment and in many cases longstanding experience. In 2010, the Group had an average worldwide workforce of 5,239 employees. Whereas new jobs were created in the growth market China, the reduction in the average workforce was primarily due to the sale of the two Home Care entities in Belgium and Austria and the change in the group reporting entity with respect to the Group's Baltic operations (including Ukraine). We make full use of our employees' experience, always endeavouring to promote greater professionalism. Indirectly, this also contributes to making young people enthusiastic about our business and helps us to acquire well-trained staff for the future. Amongst other methods employed, we endeavour to promote the necessary willingness of our employees with the aid of performance and results-related income components and remuneration systems, internal/external training measures and company pension opportunities.

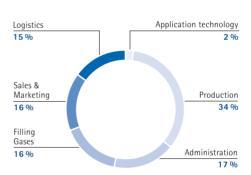
#### Number of employees by regions

In per cent



#### Number of employees by activities

In per cent



We are fully aware that the success of the business is founded on the commitment and expertise of our employees. Since it is considered to be a crucial aspect of business to develop employee skills from an early stage, the Messer Group particularly focuses on the training of young people. Investing in the education and training of the younger generation are considered key aspects of maintaining the underlying the strength of the business and ensuring a future for Germany as a business location. We train committed school and college leavers in the areas of industrial business studies, mechatronics, IT data processing and IT support.

As at December 31, 2011 approximately 90 per cent of our employees were working in non-German speaking countries. A good communication network is particularly important in an organization with international operations. All newly appointed executives and managers are prepared for their future tasks during an initial induction phase over a period of weeks during which they get to know group entities

and segments at close quarters. As well as providing a good insight into the activities of the Group, this process also helps to strengthen international networking and intercultural competence. The Group apprentices are also employed at various locations, some of them outside Germany.

A Compliance Code is in place that is valid for all Messer Group employees. The Compliance Code comprises three parts: the Code of Conduct, Group Guidelines and the Compliance Guideline. The Compliance Guideline has been expanded, amongst other things, by a list of local compliance officers and a description of reporting procedures in the event of violations of the Compliance Code. Messer Group employees now have the opportunity to make contact with the relevant responsible person in the local national company or directly with the Corporate Compliance Officer (CCO) of the Messer Group on any issues relating to the Compliance Code. Managers are responsible for ensuring that the Compliance Code is known to all employees in their area and is complied with by them.

#### Staff Events and Motivation

#### Germany: New company headquarters opened

The ceremony on 16 September 2011 marked the start of the festivities in connection with the opening of our new company headquarters in Bad Soden. More than 230 of Messer's customers, partners, friends, employees and family members took part. The highlights of the evening were the panel discussions with companions of Stefan Messer as well as with long-standing employees and partners, among others, and the spectacular illumination of the administration building.

The subsequent family day offered Messer and MEC staff and their families the chance to get to know each other following the move into the new, shared administration building. The Messer-sponsored concert by German singer Cassandra Steen, which took place in the evening in the Kurpark opposite, was enthusiastically received by the staff and over 4,500 inhabitants of the town of Bad Soden, who had also been invited. The Messer T-shirts with the slogan "Open Air – Music for You – Gases for Life", which were given away at the concert, proved particularly popular.

#### First dragon boat race in Belgium

In September 2011, Messer Benelux took part in its first dragon boat race in Antwerp, Belgium. The Messer team, consisting of 17 employees from Belgium and the Netherlands, secured twelfth place out of the 44 teams that started.

1 A "pádel" league (a cross between tennis and squash) provides a novel opportunity for physical activity at Messer Ibérica in Spain.

2 Staff from "Medical Gases" during GMP (Good Manufacturing Practice) auditor training in Tarragona, Spain 3 Staff from "Medical Gases" devel-

oping a paperless approval system
4 Legal network meeting in Bad
Soden, Germany











- 5 The annual company conference took place in Bad Soden, Germany, in 2011.
- 6 Messer Group communications managers from over 20 countries met in Rendsburg, Germany.



#### We are family

Whether it be the company conference, a seminar, a sporting event or choral singing – the people at Messer are team players. This is true in professional terms as well as in other areas, which says more about the working atmosphere than any statistic. Reliability, sincerity, transparency and open communication are a core part of Messer's values.



7 The specialists from the "Food" department held their network meeting in Prague, Czech Republic.







8 In June, 30 employees from 20 countries took part in a Specialty Gases workshop in Bad Soden, Germany.
9 The Benelux staff developed strategic company objectives at a meeting in Zwijndrecht, Belgium.
10 The Metallurgy specialists met in Gumpoldskirchen, Austria.





 11 Messer in France held its first-ever meeting for all French staff.
 12 The entire staff of the new company headquarters in Bad Soden, Germany

#### Worldwide: Football unites

In September 2011, the management team of Messer in Vietnam invited their Messer Haiphong employees on a company trip to Cát Bà Island. The aim of the event was to celebrate the successes achieved together in 2011 and prepare everyone for the strategic business objectives for 2012. The Messer Vietnam Football Cup 2011 was also held as part of this tour to strengthen the team as a whole.

Messer Schweiz also relies on team spirit when it comes to achieving success: for the third time in a row, the Swiss Messer subsidiary entered its Messer United I and Messer United II football teams in the SWL Fußballcup, an inter-company tournament run by FC Lenzburg. Both teams played some great football and finished third and fourth out of 16 teams.

Messer Tehnogas in Serbia organises a staff sports day every year. The aim is to generate enthusiasm for sport among the staff and strengthen cohesion and team spirit. The event with the greatest potential for fun in 2011 was a football match in which the female employees of Messer Tehnogas lined up against each other.

#### Serbia: Anti-smoking campaign

On 28 January 2011, Serbia's "No Smoking Day", the country's health ministry presented Messer Tehnogas with an award for its efforts in the fight against smoking. The company had supported the no smoking campaign of the "Dr. Milan Jovanović Batut" Institute for Public Health in Belgrade with a donation of helium for special balloon releases. The campaign was effective, including at Messer Tehnogas, where more and more employees are giving up nicotine. Serbia introduced an anti-smoking law in November 2010, which bans smoking in the workplace and in public spaces.

#### France: I love my company

In October 2011, Messer France took part in the "J'aime ma boîte" ("I love my company") project organised by the French organisation "Ethic". The aim of this annual campaign is to strengthen the sense of belonging and team spirit among employees and create an informal work atmosphere. To this end, Messer France organised a special staff breakfast at all its locations. Furthermore, a competition was organised in which staff at every location had the opportunity to express their affection for the company. Messer awarded prizes for the most imaginative "declarations of love", including self-composed songs, amusing stories and funny group photos. By the way, in France, the wellbeing of employees and the opportunity for personal and professional development in the workplace are regarded as the strongest drivers of a company's success.

#### Idea Management

Uniform guidelines relating to "ideas management" are in place throughout the Messer Group. One of the core objectives of these guidelines is to ensure that suggestions for improvement are implemented throughout the whole of the Group. All employees are encouraged to apply their experience and knowledge in order to make suggestions for improvement in areas outside their immediate area of responsibility. The clear intention is to promote the search for new opportunities in our business and the way that those opportunities are taken. An ideas management team was set up to investigate whether suggestions from the various group companies can be applied in other countries. Employees submitting suggestions can receive interesting rewards for their ideas.

# Idea management in figures

#### Evaluation of suggestions 2007 to 2011

| Suggestions Number                                       |                 | iber                   | Prizes  | Average prize |
|--|-----------------|------------------------|---------|---------------|
| Total number of suggestions                              | 64              |                        |         |               |
| – of these, number from Germany (Group and MIGG)         | 46              | (= 72 %)               |         |               |
| – of these, number from abroad (incl. CO-Associates)     | 18              | (= 28 %)               |         |               |
| Implementation recommended                               | 17 <sup>1</sup> | (= 27 %)               |         |               |
| Suggestion rejected                                      | 46              | (= 73 %)               |         |               |
| Total numbers of suggestions award prizes                |                 | )                      |         |               |
| - of these, number of recommended suggestions            | 17              |                        |         |               |
| - of these, number of rejected suggestions (recognition) | 31              | (= 67 %) <sup>3)</sup> |         |               |
| Total prize money  |                 |                        | 9,700 € | 200 €         |
| - for recommended suggestions                            |                 |                        | 4,700 € | 275 €         |
| - for rejected suggestions (recognition)                 |                 |                        | 5,000 € | 160 €         |

One evaluation still outstanding
Two awards still outstanding

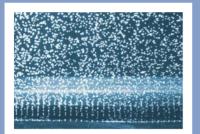
(As at: January 2012)

#### Period: Years to 2011

| Subsidiary                   | Country                    | Number of suggestions |     | Accepted  | Period    |
|------------------------------|----------------------------|-----------------------|-----|-----------|-----------|
| Messer Romania Gaz           | Romania                    | 23                    | 14  | (= 61 %)  | 2008-2011 |
| Messer Austria               | Austria                    | 23                    | 16  | (= 70 %)  | 2010-2011 |
| Messer Tatragas              | Slovakia                   | 1                     | 1   | (= 100 %) | 2010-2011 |
| Messer Tehnogas              | Serbia                     | 115                   | 39  | (= 34 %)  | 2010-2011 |
| Messer China                 | People's Republic of China | 439                   | 235 | (= 54 %)  | 2009-2011 |
| Messer Tehnoplin             | Bosnia-Herzegovina         | 3                     | _   | (= 0 %)   |           |
| Messer Odra Gas              | Czech Republic             | 3                     | 1   | (= 33 %)  | 2010-2011 |
| Messer Croatia Plin          | Croatia                    | 10                    | 7   | (= 70 %)  | 2010-2011 |
| Messer Aligaz Sanayi Gazları | Turkey                     | 1                     | 1   | (= 100 %) |           |
| Messer Polska                | Poland                     | 14                    | 12  | (= 86 %)  | 2008-2011 |
| Messer Slovenija             | Slovenia                   | 200                   | 154 | (= 77 %)  | 2006-2011 |
| Messer Italia                | Italy                      | 15                    | 13  | (= 87 %)  | 2011      |
| Messer France                | France                     | 32                    | 29  | (= 91%)   | 2010-2011 |

<sup>3)</sup> Of total of 46 rejections





#### Treatment plants step on the gas

Many wastewater treatment plants need to boost their capacity in order to cope with increased pollution, load fluctuations and strict limits. Partial oxygenation (PO), developed by Messer, represents a cost-effective alternative to structural extensions, which are time-consuming and expensive. The process involves injecting pure oxygen instead of normal air into the activated sludge basins. This has the effect of boosting aerobic bacterial activity, resulting in a much faster biodegradation process.



You can find out more about this gas application by scanning the QR code with your smart phone or by going to



#### Responsibility

Safety, environmental protection and quality are firmly embedded in Messer's guiding principles, as a family-owned company, and have a very high priority. Messer is committed to the protection of its employees, customers and other stakeholders. The primary focus therefore is on the safe production, use and handling of our products. The working standards employed are designed to ensure the health and well-being of each individual. The environment must be protected at all times and in all places. Safety standards are continually being improved in order to avoid dangers as far as possible for people or the environment. It will only be possible for us to achieve all of our work safety objectives in the future if we maintain a safe and healthy business environment, aimed at meeting the needs and requirements of our customers and employees and complying with all existing legislation.

Our endeavours are reflected in the accident statistics for the financial year 2011. The accident rate of working accidents per million hours worked was reduced for example from 2.9 in 2010 to 1.9 in 2011. The number of days lost through accidents, at 461 days, was also below the previous year's level of 480 lost days. The severity of accidents, at 44.5 days lost per million hours worked, was also lower than the previous year's figure of 47.5.

At both the summer and the winter sessions of the European Industrial Gases Association (EIGA) in 2011, the Messer Group was presented, as in previous years, with various safety awards for exemplary work safety. Messer Tatragas spol. s.r.o., Slovakia, won a gold safety award for two locations in recognition of fifteen years of accident-free operations. Messer Energo Gaz S.R.L., Romania, won a Silver Award for one of its sites. Bronze Awards went to Messer Albagaz SH.P.K., Albania, and Messer B.V., Netherlands. During the financial year 2011, eight internal SHEQ-Audits were conducted in three countries and two risk analyses carried out. 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. Activities to improve safety on roads have become a part of our corporate philosophy.

The Messer Group attaches great importance to using resources efficiently and in an environmental friendly way. Our products and systems help customers to increase the energy efficiency of their own products and systems. The new air separation units are constructed very much with energy efficiency in mind. We are working permanently on reducing the average energy consumption of such plants, helping us to protect the environment as much as possible on the one hand and improve the Group's efficiency on the other. Messer's commitment to the environment is also evident in the fact that its management systems are certified to ISO 9001 and ISO 14001 standard. These systems serve as important tools for developing and intensifying relationships with customers and employees and for protecting the environment.

Further SHEQ audits, risk analyses at subsidiaries, cooperation projects with other corporate departments (such as safety training) and the preparation of documentation are planned for 2012. The depth of our commitment in this area reflects our understanding of the fact that safety and environmental care will continue to represent a focal point of industrial activities in the coming years.

# 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.

Capital expenditure in property, plant and equipment worldwide totalled  $\in$  149.1 million in 2011, and thus represented 14.5 per cent of revenue. Also worthy of mention is an amount of  $\in$  41.4 million invested in production facilities for customer supplies which are required to be reported as a finance lease arrangement in accordance with IAS 17 (in conjunction with IFRIC 4). A large proportion of capital expenditure in 2011 related, as in the previous year, to investments in construction of air separation and  $CO_2$  production plants.

In recent years our focus in Europe was on constructing new production facilities and expanding existing ones in order to eliminate supply bottlenecks and hence reduce the high ratio of bought-in products; the focus in 2011 turned towards investment in distribution channels and selected growth projects. We invested in a new cylinder-filling plant at our new site in Zwijndrecht, Belgium. Following capacity expansion, operations were started at the CO<sub>2</sub> production plants in Macedonia and Poland, making CO<sub>2</sub> more easily available, particularly in the summer months. Messer France also strengthened its CO<sub>2</sub> business by investing in a new 70,000 tpa CO<sub>2</sub>-production plant, helping it to consolidate its strategic position as number two on the French CO<sub>2</sub> market. Modernization of the air separation unit and the resulting expansion of capacities in Austria, as well as the installation of a nitrogen generator for an existing customer in Slovakia are progressing in line with plan. Modification and modernization work on the cylinder filling plant in Hungary began in summer 2011. The plant, which was built in 1952 and modernized in 1992, will be brought up to the latest technical standards, including a 300-bar cylinder filling facility.

Messer China has a whole range of capital expenditure projects currently under progress, mainly in the Sichuan and Yunnan provinces, aimed primarily at complementing the expansion plans of our on-site customers. Our joint venture partner Pangang will open up a new steel works in Xichang, south of the city of Chengdu in Sichuan province, and Messer will operate two new air separators there. A new air separation unit with a capacity of 40,000 Nm<sup>3</sup>/h is nearing completion at Pangang's main site in Panzhihua and a further air separation unit with the same capacity will enter into service in 2013. A third air separation unit is being constructed for our on-site customer in Yuxi. As well as supplying products for the growing Chinese steel industry, Messer is also focussing on the medium-term expansion of bulk business in China. Construction work on new plants for the bulk gases market is being carried out at several suitable sites; for example, the new joint venture Foshan Shunde MS Messer Gas Co., Ltd. is currently erecting an air separation unit in the Shunde industrial area in Guangdong province. This additional product source will provide an opportunity to develop existing business relations with major customers and to increase our market share in Guangdong province. The new air separation unit, with a capacity of 520 tons per day, is due to start operations in the first half of 2013. We are also diversifying our operations in China to an increasing degree by our involvement in new projects relating to the chemical, electronics and glass industries.

Messer Binh Phuoc Industrial Gases Co., Ltd. was founded in Vietnam during the financial year 2011 and is investing in a CO<sub>2</sub> plant. A Vietnamese/Japanese joint-venture company is building a bio-ethanol plant in South Vietnam; Messer's role there will be to extract, purify and then liquefy the carbon dioxide by-product. The Messer plant in Vietnam will be the first to provide CO<sub>2</sub> that meets the quality standard of the International Society of Beverage Technologists and is suitable for use in foodstuffs. A second CO<sub>2</sub> plant is planned to be built in the south of Vietnam to strengthen Messer's position on the CO<sub>2</sub> market.

In addition to investing in distribution systems and supply facilities, measures taken to expand our core business have included the acquisition of shares in newly founded entities.

On June 1, 2011, ASCO Carbon Dioxide Ltd acquired Remco AG, which is based in Eschlikon, Switzerland. Remco manufactures dry ice pelletizers and ASCOJET dry-ice blasting machines for ASCO. The acquisition of Remco enables the manufacture and development of dry-ice production plant technology to be more closely integrated into the ASCO Group's business structure and strengthened in the long-term as a core line of business.

With effect from January 31, 2011, Messer Albagaz SH.P.K, Albania, acquired the fixed assets and inventories of Sofigaz SH.P.K., Albania by means of an asset deal.

Eloros Sp. z o.o., Poland, ("Eloros") is a joint venture between Messer Polska Sp z o.o., Poland, ("Messer Polska") and Cryogenic Engineering GmbH ("CEG"), in which the Messer Group GmbH holds 49 per cent of the shares. Messer Industrie had a call option to acquire all Eloros shares held by CEG. Messer Polska acquired this call option from Messer Industrie with effect from January 1, 2011. The obligation under the put option held by CEG entitling it to sell its shares in Eloros to Messer Industrie was thus also transferred to Messer Polska with effect from January 1, 2011. Eloros has therefore been fully consolidated with effect from January 1, 2011.

At December 31, 2010, Messer Group GmbH owned 67 per cent of the shares of Messer Haiphong Industrial Gases Co. Ltd., Vietnam. In accordance with a contract dated May 17, 2010, which contains conditions precedent which were not met until January 2011, Messer Group GmbH – acting as a trustee for Stefan Messer and two other Messer Industrie shareholders – acquired the remaining shares (33 per cent). On January 20, 2011, Messer Group GmbH carried out a unilateral share capital increase for the purpose of refinancing and recapitalizing Messer Haiphong Industrial Gas Products Co. Ltd. On October 6, 2011, the existing trust contracts were cancelled and Messer Group GmbH acquired the remaining shares (12.31 per cent) from the three trustors. Following this transaction, Messer Group GmbH owns 100 per cent of shares in Messer Haiphong Industrial Gases Co. Ltd., Vietnam.

The Messer Group's new headquarters in Bad Soden am Taunus opened officially in September 2011 and capital expenditure on equipment and furnishings recorded at the level of Messer Group GmbH (as long-term tenant). The complex includes a modern office building and a permanent exhibition where customers, visitors and employees can gain an insight into various issues relevant to Messer.

# Gas Sales and Technology Management

In Germany, Messer employs teams of experts that specialize in gas technologies, gas production and distribution. One highly specialized 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 Mitry Mory, France specializes in the development of processes used in the food-processing, pharmaceutical and biotechnology sectors.

Last year, the development of our application technologies was influenced by rising energy prices and the need for efficiency improvements in industrial processes.

In metallurgy and in the glass industry, we were able to help make further improvements in the energy efficiency of our customers' melting processes through the oxyfuel process. This focused on reducing specific primary energy consumption through the use of oxygen. We carried out further work on the technology of our oxyfuel burners in order to meet these increasing requirements. We managed to secure a further three years of funding until 2014 from the Austrian Research Promotion Agency. The main areas of current development are burners for non-ferrous melting processes as well as the use of low-calorific fuels, where the use of oxygen means that natural gas can be largely or entirely dispensed with as a supporting fuel. A test furnace has been set up in the technical centre in Gumpoldskirchen to enable the oxyfuel process to be adapted for reheating processes. This allows the special conditions of reheating furnaces to be simulated.

Oxygen is increasingly being used in combustion processes, including in areas other than metallurgy, both to boost efficiency and to obtain the waste  $\mathrm{CO}_2$  in capture-ready form. The tests on the use of oxygen in fluidised bed combustion systems have now been completed to the extent that we can make a start on marketing. Initial trials with customer systems took place last year and delivered the expected results.

In the food segment, we expanded our portfolio of transport refrigeration applications last year. Besides our Siber technology for container cooling with dry ice, with which we have been successfully equipping refrigerated logistics companies for more than ten years, we are currently developing a new vehicle cooling system. We have developed an innovative filling system for filling up distribution vehicles cooled with liquid nitrogen. We are supplying the system in partnership with a leading vehicle outfitter.

The work on optimising the efficiency of industrial cooling processes was continued last year. The aim is to optimise consumption in terms of coolant use as well as to improve the adjustability and reproducibility of the cooling process. We were able to develop a subcooler for dry ice applications, which improves the specific CO<sub>2</sub> consumption of dry ice pelletisers by ten to 20 per cent, depending on the design. We also developed a subcooler for cooling processes with liquid nitrogen, which can be used to reduce the coolant requirement and increase productivity during cold grinding and rubber deflashing.



In the area of welding applications, further progress was made with the introduction of our new ternary shielding gas mixtures. This focused on the optimisation of TIG welding with the Inoxline He3H1 mixture. Plasma-powder deposition welding with argon/helium and argon/hydrogen mixtures was investigated as part of a publicly funded joint project.

#### **Specialty Gases**

At Messer, the area of specialty gases covers a broad product range of high-quality pure gases, standard and individual gas mixtures, liquid helium, noble gases and laboratory gases, along with the fittings and gas supply systems needed for the use of the gases. Driven by the growing market, this area of the business developed very positively in Europe in 2011, with sales up by more than ten per cent on the previous year.

Accordingly, we are continuing to push ahead with the expansion of our specialty gases plants. For example, a new production facility for the noble gases krypton and xenon was put into operation at one of our major on-site locations in China last year.

The trend towards ever-increasing requirements regarding the quality of our products continues unabated. Thus, for example, there is demand for high-purity process and calibration gases for analytical process control, quality assurance and emission or air quality monitoring. At the same time, the requirements regarding the accuracy and reliability of the calibration gas mixtures used are continuing to increase. Messer already has several locations with ISO 17025 accreditation, which is proof of the high level of expertise needed to produce calibration gas mixtures. Last year, our plant in Switzerland also attained the new ISO Guide 34 accreditation, making it one of the few industrial suppliers to be able to produce certified reference materials.

Specialty gases are products that require explanation. We therefore attach particular importance to providing our customers with comprehensive advice. As part of our service concept, a new specialty gases website was launched last year (http://specialtygases.messergroup.com). This site describes our range of gases and fittings and also features extensive information on every aspect of the gases.

#### Medical and pharmaceutical Gases

The developments of 2011 signal the continued expansion of the Medical & Pharma Gases divisions. Quality and internationality were the key watchwords.

The beginning of the year saw the start of an international drug approval procedure for medical gases, whilst another international approval for a gas as a medicinal product is in the planning stage. No less international is the introduction of a Group-wide system for submitting and managing drug approval dossiers. International working groups form a central point here, ensuring transnational exchange and compliance with international guidelines and laws, as well as the Messer quality standards. One of the

results of this collaboration in 2011 is a new database system for the Medical division. The introduction of this validated database system will improve the quality management systems, and it will facilitate even greater international cooperation between the Messer companies.

New projects in the Pharma Gases division mean that this area, too, has to comply with new international quality standards which will enable fully traceable products to be offered to the pharmaceutical industry across the Group. We ensure quality through our internal GMP audit programme. We have a qualified team of 17 auditors which can carry out audits in eleven languages. Eleven internal audits were carried out in 2011.

35



# Information Technology

All IT support work for the Messer Group is handled by Messer Information Services GmbH ("MIS"), a joint venture set up together with the Messer Eutectic Castolin ("MEC") Group which is based in Groß-Umstadt. This IT company covers the complete range of requirements of both groups. Running and further developing the IT infrastructure for the Messer Group and the MEC Group are central to MIS's daily operations.

As part of the strategic IT project "Server Based Computing Rollout", further group entities have been integrated into the MIS's global infrastructure which covers the various national companies of the Messer Group and the MEC Group. The consolidation of databases and tools and the use of a standardized office landscape for the Citrix technologies used by Messer entities help to save costs whilst at the same time optimising the IT security and infrastructure of the whole Group. In the period since the start of the project in 2005, more than 2,500 employees in both groups use their IT applications via the Citrix infrastructure.

A further focus is on the harmonization of SAP applications used throughout the Messer Group. During the year 2011 four further companies were taken into the newly harmonized SAP system, bringing the number of users working on this platform to approximately 1,200 people by the end of 2011.

The harmonized Customer Relationship Management (CRM) program was rolled out successfully to Belgium, Italy and the Czech Republic in 2011. By the end of 2011 more than 320 users from nine entities are utilizing the CRM programme provided centrally by MIS. Using this new, web-based tool, all specific business processes can be made available centrally via Messer Information Services' IT centre, including business processes for sales and marketing. This enables comprehensive management of all sales processes – including customer acquisition, optimum customer care and the provision of an improved range of services.

#### Sending out invoices by e-mail

Some 9,000 of Messer's customers in Europe now receive their monthly invoices in electronic form. This saves considerable quantities of paper as there is no longer any need for the invoices – usually multiple pages – to be sent in hard copy, therefore also obviating the need for envelopes.

In addition to this, Messer offers its customers online access to a range of services. These include an overview of invoices with the option to access old invoices, a table listing gas cylinder movements, the option to re-order products and a wealth of product information.

The system is currently in use in 13 European countries and is being expanded further. It is part of a series of measures to facilitate paperless work processes. This also includes internal authorisations for auditing and quotation calculations, the intranet-based CRM system, the electronic archiving of business documents and much more.



















# Vivid presentation of the Messer world

At the heart of the new Messer headquarters in Bad Soden is a unique permanent exhibition that gives customers and visitors the opportunity to learn all about the Messer world's wide range of activities. The exhibition presents the various brands, diverse products and different areas of application as well as the company history. The aim of the exhibition's communicative concept is to transfer the magic of engineering power into the world of communication. Thus, even complex topics are made clear and comprehensible for visitors.



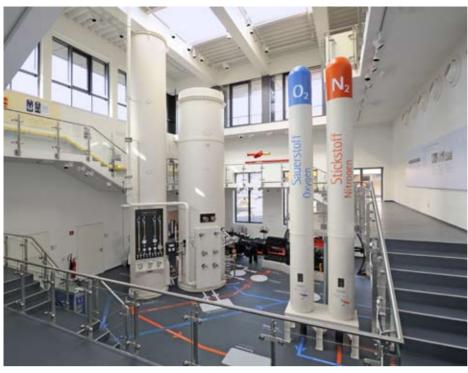




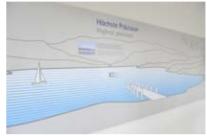




Many objects in the exhibition are interactive in nature in order to facilitate a better understanding of a product or process. Other exhibits simulate typical gas applications in a way that is exciting and easy to understand.

























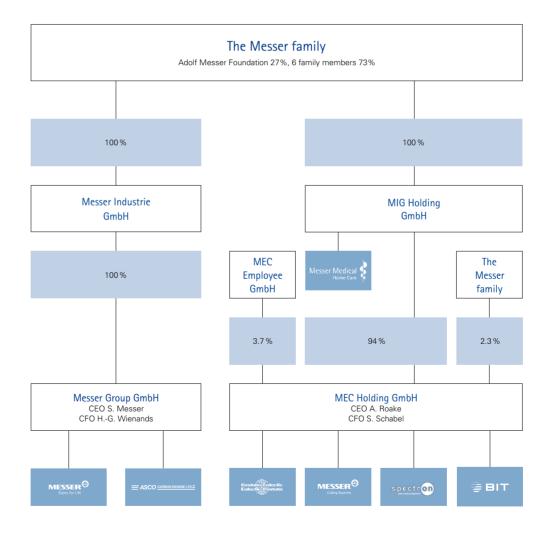


The main part of the exhibition comprises several spatial levels in which the companies of the Messer world are presented. Numerous references to and connections with everyday life and experiences can be found. Visitors are not simply passive observers but active discoverers.

# Messer World

Besides Messer and ASCO Carbon Dioxide, the sister companies Messer Cutting Systems, Castolin Eutectic, BIT Companies, Spectron Gas Control Systems and Messer Medical Home Care, which has been independent since 2011, are all "Part of the Messer World". They all offer application-specific know-how and products which help to optimise production processes, extend the operational life of the means of production or significantly improve quality.

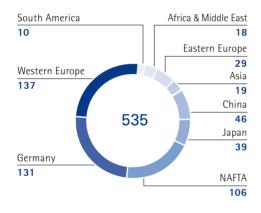
# Organisational structure



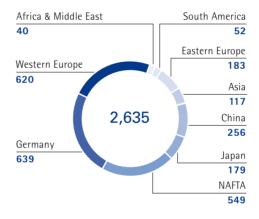
In terms of sales and results development, 2011 was the best year in the history of the MEC Group. The sales of EUR 433 million from the previous year were increased, in absolute terms to EUR 535 million (+24 per cent). The increase in profit was also the largest which the Messer Group has ever achieved. This development is due above all to the good market position of our divisions which offer a uniformly high level of quality, service and customer proximity.

# Key figures 2011

# Net sales of MEC Group by region in million Euro



# Numbers of employees of MEC Group by region















# ASCO Carbon Dioxide





## Profitable growth

With the acquisition of the Swiss company Remco AG, has closed the last gap in the value creation chain in its dry ice technology segment. Remco constructs exclusively for ASCO a complete line of dry ice production and dry ice blasting machines. For ASCO, the acquisition of Remco is particularly significant, as the production and further development of dry ice systems technology can now be more closely integrated as a core business into the corporate structure of the ASCO Group, where it will lead to synergy effects. Together with the locations in France and New Zealand ASCO now has totally three subsidiaries with production facilities.

# Long-term effects

The plant construction business of ASCO Carbon Dioxide Ltd, Switzerland, was affected by the long-term fallout from the previous year's global economic crisis as well as the volatility of exchange rates, which resulted in a slightly below-target sales performance.

# Broad product range

ASCO Carbon Dioxide is a provider of individual and complete  $\mathrm{CO}_2$  solutions. The product range includes automatic dry ice production machines,  $\mathrm{CO}_2$  production and recovery units, dry ice blasting units,  $\mathrm{CO}_2$  storage tanks,  $\mathrm{CO}_2$  cylinder filling systems,  $\mathrm{CO}_2$  vaporisers and other  $\mathrm{CO}_2$  accessories. Product development and service are based on two strong pillars: firstly, on more than 80 years of practical exprience in every aspect of  $\mathrm{CO}_2$  and dry ice, and secondly, on the company's highly skilled and extremely loyal and committed workforce. Thanks to this know-how and the breadth of the product range, customers benefit from complete and individual solutions from a single source.

ASCO is available to the entire Messer Group as competence centre for CO2 and dry ice.

www.ascoco2.com



Complete CO<sub>2</sub> and dry ice solutions from a single source



The head offices of ASCO Carbon Dioxide in Romanshorn, Switzerland



Under the ASCOJET brand, ASCO also offers tailormade complete solutions in dry ice blasting technology.

# **BIT Companies**

## Continued growth

In 2011 BIT Companies (BIT) experienced rapid growth in in-vitro diagnostics and contract manufacturing. Sales and profits rose significantly, driven mainly by the enormous motivation and commitment of our 300 employees. A record number of newly completed projects has already been achieved. BIT will in the future continue to concentrate on sustainable growth and expansion of customer service.



# Comprehensive service provider

BIT is the leading full-service provider for a wide range of diagnostic and medical equipment.

We are an international company operating from locations in Germany, France, Japan, USA and China and delivering our services worldwide. Our long-standing clients include young Companies as well as world market leaders.

BIT offers the full range of contract development and manufacturing services as well as equipment after-sales service to medical, diagnostic and industrial OEMs. We are the independent market leader in Europe and the USA for high-quality IVD analytical systems for the high-end OEM market.

## Individual solutions

BIT offers its customers individual contract development and manufacturing of medium to complex instrumentation systems and customised automation solutions. Instrumentation for Life – your partner of choice for product development, manufacturing and after-sales service, always applying the highest quality standards in compliance with ISO 13485, ISO 9001 and the FDA.

www.bit-companies.com



Complex system production based on the KAIZEN philosophy



A strong R&D team develops IVD instrumentation for global OEMs.



BITSMARTSOLUTIONS: OEM instrument solutions on a vertical and horizontal product platform

# Castolin Eutectic



## Strong sales and profit growth

In the fiscal year both sales and profits were increased further. The CastoLab® service activities made an ever greater contribution to the company result. Expansion of these service activities will continue to be part of our core strategy in the future. New markets in Eastern Europe, Russia and Asia were also opened up, and these will in the future be expanded.

# Specialist for Wear and Fusion

Castolin Eutectic is the worldwide leading provider of professional solutions in the areas of repair, maintenance and anti-wear protection. We provide products with application know-how to customers and have been awarded for our service-based business. More than 100 years of experience in welding, brazing and thermal spraying technologies means that we stand for professional and innovative solutions.

## Solutions from a single source

Our products and services prolong the life of your machinery and equipment, increase productivity and reduce costs. Castolin Eutectic is a one-stop solution provider with the most comprehensive range of products in this sector, including maintenance operations and readymade components. The main focus of our applications technology expertise is on industry. In over 100 countries, Castolin Eutectic employs 1,400 people, of which 700 are highly qualified engineers and international applications specialists working in this field.

www.castolin.com www.eutectic.com



Professional application carried out in one of our CastoLab® Services workshops



Complete Castolin Eutectic product range

# Messer Cutting Systems

#### World of Excellence

The activities developed very well in 2011. At the same time the economic situation improved, meaning that Messer Cutting Systems got off to a good start on its way out of the crisis. In particular the new production locations in Brazil and India offer promising prospects; the expansion of our sales offices in Eastern Europe, South America and Asia will ensure optimised global market coverage.



Messer Cutting Systems has developed a company which is active worldwide. This growth provides the basis for our success, our market leadership and our multicultural variety which will also open up numerous opportunities in the future. Our comprehensive range of services focuses on customer-oriented innovations and top quality.

If the general conditions remain the same, increasing sales and profits are to be expected in the near future. We anticipate continued positive growth and increasing profitability for 2012 to 2014. Rapid stabilisation of the markets, a reduction of debts in the financial world and a reduction of national deficits will also be decisive for the company's development. Regaining trust in financial and government institutions will also play an important role. Thanks to measures which have already been introduced, Messer Cutting Systems is ideally prepared for the future. "Excellence" is the result of the corporate values we put into practice and is the key to success.

#### Partner for cutting systems

Messer Cutting Systems is a global provider of products and services for the metal processing industry which sets the standards worldwide. As a trailblazer in the industry we supply complete solutions and focus on advising our customers and customer-oriented innovations. Messer Cutting Systems has more than 800 employees at five main locations with production centres and is represented in over 50 countries. The product range includes oxyfuel, plasma and laser cutting systems – from manually operated machines to special machines for shipbuilding and systems for oxyfuel welding, cutting, brazing and heating. Spare parts, repairs, modernisation, maintenance and service as well as environmental technology from Messer EnviroTec complete the range.

Software solutions from MesserSoft optimise production and business processes. The state-of-the-art training and application centre clearly mirrors the goal of intensive dialog with the customers.

#### www.messer-cs.com



The ESSEN hand cutting torch for flame cutting material of up to 500 mm in thickness and for gouging



Process optimisation with solutions from MesserSoft



Messer Cutting Systems – synonymous with advanced cutting technology

# Spectron Gas Control Systems



#### **Excellent order situation**

Because of its central importance for the Messer Group, in 2011 Spectron was spun off as an independently operating line of business and posted an outstanding company result in its very first year. The order situation developed extremely positively – especially in the new markets in Asia, where major successes were achieved. Spectron will grow further and continue the expansion strategy it has adopted.

# Continuing spectrum of products

Spectron Gas Control Systems is the specialist for gas supply systems. The Spectron brand represents a large range of products comprising just the right regulators, valves and manifolds for a broad spectrum of gases. They cover the full range of applications extending from a simple valve all the way through to gas cylinder cabinets for semiconductor gases.

Spectron also includes alarm and control systems for gas applications and gas-purification systems for ensuring the purity of gases. Spectron provides its customers with the highest levels of performance, quality, reliability and technical expertise.

With an additional production site in Great Britain and its worldwide network of distributors, the company is globally well-positioned and always close to its customers.

www.spectron.de

Tapping points for high-purity gases







Gas cylinder cabinet for the photovoltaic industry

Tapping points for industrial gases

# Messer Medical Home Care

#### Focusing on the homecare sector

Within the Messer world, Messer Medical Home Care Holding (MMHCH) concentrates on activities in the homecare sector. In the past these activities were integrated separately in the Messer Group, which made it difficult to focus and align them clearly.

Messer Medical Home Care

MMHCH regards itself as a service provider which looks after patients in the home environment. The focus here is on COPD patients, people who suffer from sleep apnoea and patients who rely on respiratory support. Diagnostic solutions for doctors and hospitals are further integrated components of the corporate strategy.

Since 31 March 2011 MMHCH implemented a new organisation and has set a new course for its future development in the focus countries. These focus countries include Austria and Belgium, which were the first to be integrated into MMHCH. The French company joined in the autumn of 2011, and Slovakia, followed at the end of the year. In the same period the homecare activities in the subsidiaries in several Eastern European countries were strengthened with the support of the Messer Group. Today, MMHCH has 70 employees.

## Strategic goals for 2012

In 2012 various product lines of medicinal devices are to be presented because this sector continues to promise high growth rates. Here MMHCH will profit from partnerships with various manufacturers.

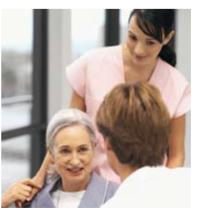
Further enhancement of the cooperation with the subsidiaries of the Messer Group is also a strategic goal for 2012. We wish above all to accelerate the positive development and to increase the number of companies in MMHCH.

In the future we will continue to develop and offer innovative solutions for patients, doctors and health authorities. The aim here is to place us in a sustainable, competitive position in a sector of the health system which is becoming increasingly important.

#### www.messer-medical.at

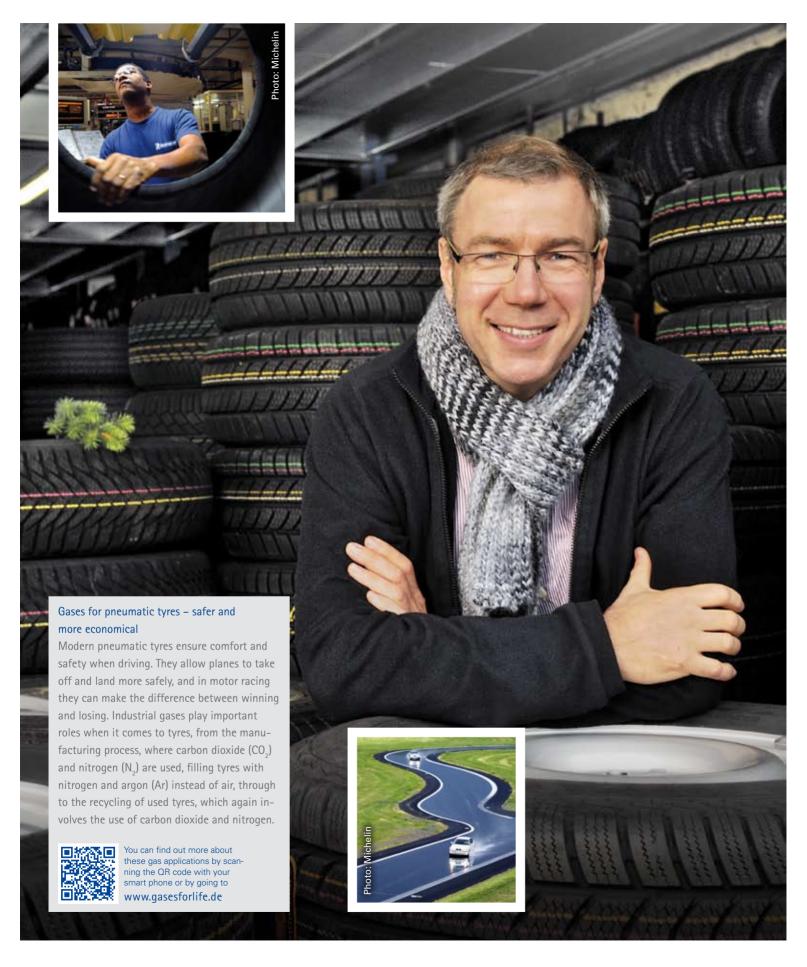


Diagnostic solutions for doctors and hospitals





Messer Medical Home Care helps people who need respiratory support.



# Financial year

# Review of economic development

#### Global economic environment

The global economy continued to recover in 2011, albeit with the pace of growth slowing down perceptibly. This development was due primarily to slower growth in industrialized countries caused by a strong swing towards saving and consolidation. By contrast, most of the emerging markets continued to grow at a relatively fast rate.

As in the previous year, the rate of growth within Europe varied greatly from country to country. According to IHS Global Insight, Germany, Central Europe and Eastern Europe continued to grow in 2011, although at slower rates than in 2010. By contrast, gross domestic product (GDP) stagnated or contracted in a number of Southern and Western European countries which were particularly badly hit by the sovereign debt crisis.

Growth rates in China also fell compared to the previous year, but they nevertheless remain at a high level. Notwithstanding the fact that investment dropped slightly after China's economic stimulus programme came to an end, China continued to be the mainstay of the global economy.

# Messer's performance in relation to economic conditions

As expected, worldwide economic growth was slower in 2011 than it had been in 2010. In addition to this, the European economy was particularly volatile as a result of the worsening euro sovereign debt crisis. According to the IMF, global GNP rose by 3.8 per cent in 2011, hiding the fact that there was a marked difference between the performance of developed industrial states (+1.6 per cent) and emerging markets (+6.2 per cent). In the case of the latter, a quarter-by-quarter analysis shows that the particularly extraordinarily dynamic growth seen in the final quarter of 2010 did not continue into 2011. Global sales of the Messer Group rose by 13 per cent – i.e. slightly lower than in 2010 (+14 per cent) and in line with general economic conditions in 2011.

# Earnings performance

Messer Group generated worldwide net sales of K€ 1,028,602 (2010: K€ 909,020) which can be analyzed by region as follows:



Sales growth was recorded across all regions in 2011, with substantially higher increases being recorded for China, Vietnam and Peru (included in Other) than for Europe. Although purchase prices for energy, raw materials and bought-in products continued to rise, the trend was not as extreme as it had been in 2008 and 2009. Development in the regions was as described in detail below:

#### Western Europe

Net sales rose by 9 per cent compared to one year earlier. This was mainly attributable to business activities in Germany, where sales were up by a good two thirds compared to the previous year. One of the main contributory factors was that the air separation unit at Salzgitter Flachstahl GmbH in Salzgitter, which went into operation in August 2010, was included for the full year. Operations in France and Switzerland also generated growth. Revenues from sales of industrial gases in Spain – which recorded one of the slowest growth rates in the region – were slightly down on the previous year.

#### Central Europe

Compared to the previous year, sales recorded for the Central Europe region were down by almost 6 per cent. This development was entirely due to the change in the group reporting entity for industrial gases activities in the Baltic and the Ukraine; with effect from January 1, 2011, the Group's interests in the entities in these countries have been consolidated using the equity method (and no longer fully consolidated). On a comparable basis, sales of fully consolidated entities in Central Europe increased by a good 6 per cent. Sales went up in Austria, Poland and the Czech Republic at practically the same rate (+7 per cent); only Slovakia reported a lower growth rate.

## South Eastern Europe

The Messer Group's best sales performance in Europe was recorded in South Eastern Europe, where revenue rose by 10per cent compared to the previous year. Unlike in the previous year, all of the Messer Group's major entities in this region reported sharp growth in 2011. This was most pronounced in Serbia, Macedonia and Turkey, each of which saw growth rates of approximately 17 per cent. Turkey's sales performance benefited significantly from the Group's first air separation unit in that country commissioned in June 2010. Industrial gases activities also developed favourably in Bosnia and Herzegovina, Croatia, Slovenia, Romania and Hungary, with each of these countries reporting a growth rate of in excess of 5 per cent. Bulgaria was the only country in this region in which a lower sales growth rate was recorded.

#### China

The rapid growth rate of Messer Group sales in China continued, rising 28 per cent compared to the previous year, with all ten operating companies benefitting from the strength of the Chinese economy. Most of the Messer companies' sales growth came from the provision of on-site services to steel works customers. One of the reasons for the sales growth was that two air separation units which had gone into operation in 2010 at the joint venture company Hunan Xianggang Messer Gas Products Co. Ltd. were included for the full year in 2011. An air separation unit went into operation at the Sichuan Pangang Messer Gas Products Co. Ltd. joint venture in November 2011 and, in line with the requirements of IAS 17 (in conjunction with IFRIC 4), resulted in a one-off sales impact of approximately € 27 million. Furthermore, Yunnan Messer Gas Products Co. Ltd. also completed the turn-key delivery of an air separation unit with a sales volume of approximately € 18 million at the end of 2011.

#### Vietnam and Peru

In Vietnam sales rose once again in 2011 by more than 40 per cent compared to the previous year. The air separation unit which went into operation in the North of Vietnam in October 2010 contributed largely to this result. This plant, Messer's first air separation unit in Vietnam, provides on-site supplies for a steel factory customer on the one hand and the independent supply of products for the liquid gases market on the other. Business developed equally positively in Peru, where sales rose by a further 25 per cent thanks to advances made on the bulk and cylinder gases markets.

#### Messer Group

Overall the Messer Group recorded a group net profit (including profit attributable to minority interests) of  $K \in 53,819$  for the financial year 2011. The gross profit amounted to  $K \in 433,864$  (42.2 per cent of net sales) and the operating profit amounted to  $K \in 97,645$  (9.5 per cent of net sales). The operating profit was therefore  $K \in 10,786$  up on the previous year, mainly due to the  $K \in 23,193$  increase in other operating income arising from exceptional items relating to the changes in the group reporting entity. This contrasted with an expense of  $K \in 15,000$  for impairment losses (reported in cost of sales) on property, plant and equipment. Impairment losses on goodwill totalled  $K \in 20,103$ , compared to  $K \in 22,435$  in the previous year. Those impairment losses were recorded in particular for individual entities which have so far been comparatively slow to recover from the financial and economic crisis; in these cases, the possible long-term adverse effect on business had to be taken into account in forecasts of future cash flows. Profit

before tax and minority interests is stated after a net interest expense of  $K \in 21,540$  which deteriorated by  $K \in 3,505$  due to the higher level of debt during the year. The financial result includes net fair value losses on interest swaps containing fixed interest rates higher than the market level (2010: net fair value gains). Taking into account all of the above factors, the group net profit after deduction of profit attributable to minority interests totalled  $K \in 34,233$  and was therefore  $K \in 4,167$  higher than in the previous year.

#### Net assets position

The consolidated financial statements have been drawn up in accordance with International Financial Reporting Standards (IFRS). There were no major changes in IFRS requirements actually applied and no changes in consolidation principles or accounting policies. The balance sheet total (total assets/ total equity and liabilities) as at December 31, 2011 amounted to K€ 1,958,773. As in the previous year, noncurrent assets accounted for the largest proportion (78 per cent) of this amount. Tangible and intangible assets represented the largest combined item on the assets side of the balance sheet (71 per cent). The carrying amount of these two items together increased by 3 per cent in 2011 as a result of further investments in tangible assets. Non-current lease receivables and cash at banks account for 4 per cent and 5 per cent respectively of the balance sheet total.

At 56 per cent, the equity ratio (including minority interests) was slightly lower than at the end of the previous year. Gross debt accounted for 27 per cent of the balance sheet total and increased by  $K \in 59,100$  compared to one year earlier due to the refinancing of the Group. Net debt increased by  $K \in 53,373$  from  $K \in 376,064$  at December 31, 2011 to  $K \in 429,437$  at the end of the reporting period.

## Change in net working capital

Net working capital comprises inventories, advance payments from customers, trade receivables and trade payables. At December 31, 2011 net working capital stood K€ 124,379 (2010: K€ 103,929), whereby the increase was largely attributable to assets under construction relating to finance lease arrangements and which, as a result of the application of IAS 17 (in conjunction with IFRIC 4) are included in inventories (K€ 52,991). The ratio of inventories less advance payments from customers plus receivables on the one hand and trade payables on the other is therefore approximately 2:1; the ratio of net working capital to sales went up from 11.4 per cent to 12 per cent.

Improved receivables management and higher sales enabled us to reduce DSO (Days of Sales Outstanding) from 66 days at December 31, 2010 to 62 days at December 31, 2011.

We use the performance indicator return—on-capital-employed (ROCE) to analyze and optimize our net assets position. We measure our performance on the basis of ROCE and draw up our forecasts and capital expenditure plans in the light of it. For the purpose of our computations, our "return" is based on EBIT adjusted for amortization/impairment losses on goodwill. Capital employed represents the interest-bearing operational capital carried on the balance sheet that Messer Group needs to sustain.

| Return-on-Capital-Employed (ROCE)                         | Jan. 1 –<br>Dec. 31, 2011 | Jan. 1 -<br>Dec. 31, 2010 |
|---|---------------------------|---------------------------|
| EBIT  | 97,645                    | 86,859                    |
| + amortization/impairment losses on goodwill              | 20,103                    | 22,435                    |
| EBIT adjusted   | 117,748                   | 109,294                   |
| : Capital employed  | 1,266,064                 | 1,192,754                 |
| ROCE in %   | 9.30%                     | 9.16%                     |
| Derivation of capital employed from the balance sheet     |                           |                           |
| Other intangible assets and property, plant and equipment | 1,058,596                 | 1,036,815                 |
| Finance lease receivables                                 | 83,089                    | 52,010                    |
| Net working capital                                       | 124,379                   | 103,929                   |
| Capital employed  | 1,266,064                 | 1,192,754                 |

## Financial position

Messer's liquidity is adequately secured by stable cash flows, existing and unused credit lines of  $\in$  83.9 million and high cash balances.

# Financing arrangements

On June 14, 2011 the Messer Group's financing was restructured before the originally agreed term. In this context, the following facilities were terminated on June 14, 2011:

- SFA I: K€ 260,000 "Senior Term and Revolving Facilities Agreement" from July 28, 2005, between a
  consortium of banks under the lead management of Bayerische Hypo- und Vereinsbank AG and ING
  Bank N.V. on the one side and Messer Griesheim Vierte Vermögensverwaltung GmbH and a number
  of its group entities on the other;
- SFA II: K€ 100,000 "Senior Facilities Agreement" from January 19, 2009 between a consortium of banks under the lead management of Bayerische Hypo- und Vereinsbank AG on the one side and Messer Group GmbH as borrower on the other.

The amount being utilized under SFA I and SFA II at the termination date amounted to K€ 144,950 and K€ 100,000 respectively. In addition a bilateral loan of Messer Griesheim China Holding GmbH amounting to K€ 11,073 was repaid. Existing guarantees were transferred to the new Revolving Facilities Agreement. The USPP Series A and Series B ("USPP I") financing arrangements from July 28, 2005 remain in place.

The following terms and conditions apply to the new credit arrangements in conjunction with the refinancing: Note Purchase and Guarantee Agreement between Prudential Investment Management, Inc. ("Pricoa"), Metropolitan Life Insurance Company ("MetLife") and ING Investment Management ("ING") on the one side and Messer Group GmbH and Messer Finance S.A. on the other for K€ 160,000 and K'USD 57,000 ("USPP II"). USPP II falls due for payment at the end of the credit period. The credit arrangements are spread over the following group entities:

| Borrower                       | Interest rate p.a. | Amount       | Lender  | Maturity      |
|--------------------------------|--------------------|--------------|---------|---------------|
| Messer Group GmbH – Series A   | 4.55 %             | K€ 40,000    | Pricoa  | June 14, 2021 |
| Messer Group GmbH – Series B   | 4.6975 %           | K€ 40,000    | MetLife | June 14, 2021 |
| Messer Group GmbH – Series C   | 4.86 %             | K'USD 57,000 | ING     | June 14, 2021 |
| Messer Finance S.A. – Series A | 4.55 %             | K€ 40,000    | Pricoa  | June 14, 2021 |
| Messer Finance S.A. – Series B | 4.6975 %           | K€ 40,000    | MetLife | June 14, 2021 |

Pricoa and MetLife are each making K€ 40,000 available to Messer Group GmbH and Messer Finance S.A. ING is making K'USD 57,000 available only to Messer Group. The USD-denominated loan has been fully hedged by a Cross Currency Interest Rate Swap at a rate of € 1: USD 1.4179, therefore giving an equivalent of K€ 40,200.

In order to finance net working capital and investments in Europe, Unicredit Bank AG, Bayerische Landesbank, ING Bank N.V., Frankfurt Branch and Landesbank Hessen-Thüringen Girozentrale are providing K€ 150,000 based on a Revolving Facilities Agreement ("RFA"). The RFA runs until August 2, 2015. The margin is based on the ratio of net debt: EBITDA. The initial margin is 1.1 per cent p. a. based on a net debt / EBITDA ratio of more than 1.75 but less than 2.25.

The USPP II and RFA are secured by the same collateral given to secure the USPP I. In this context, shares in individual group entities have been pledged and guarantees provided by individual group entities. The USPP I Series B and the RFA fall due for payment on August 2, 2015. If all covenants are being complied with at that date, the USPP II lenders will release the collateral given.

#### Consolidated cash flow statement

| Abbreviated version in K€   | Jan. 1 -<br>Dec. 31, 2011 | Jan. 1 -<br>Dec. 31, 2010 |
|---|---------------------------|---------------------------|
| Profit before tax   | 70,499                    | 73,444                    |
| Cash flows from operating activities                              | 143,405                   | 143,412                   |
| Cash flows from investing activities                              | (125,614)                 | (129,002)                 |
| Cash flows from financing activities                              | (13,262)                  | 2,269                     |
| Change in cash and cash equivalents                               | 4,529                     | 16,679                    |
| Cash and cash equivalents   |                           |                           |
| at the beginning of the period                                    | 101,762                   | 81,257                    |
| Currency translation impact on cash and cash equivalents          | 6,171                     | 4,501                     |
| Change in cash funds relating to change in group reporting entity | (4,973)                   | (675)                     |
| at the end of the period  | 107,489                   | 101,762                   |

At K€ 143,405, cash flows from operating activities were at a similar level to the previous year. Exceptional gains resulting from changes in the group reporting entity in 2011 are not all cash flow relevant or are required to be allocated to other cash flows.

Net cash outflows for investing activities again reflect high levels of investment (in total K $\in$  19,630 higher than in the previous year). This was offset by proceeds from the sale of subsidiaries totalling K $\in$  18,573. Including the lower level of proceeds from the sale of tangible and intangible assets, the net cash outflow for investing activities was K $\in$  3,388 below the previous year's figure.

Cash flows from financing activities resulted in a net cash outflow of K€ 13,262. New debt raised amounted to K€ 28,024, and was more than offset by interest payments, refinancing costs and a dividend payment to the shareholder of Messer Group GmbH.

At December 31, 2011 the Messer Group had cash and cash equivalents totalling K€ 107,489 (December 31, 2010: K€ 101,762).

In 2012, 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. These funds will be generated out of cash flows from operating activities, existing funds and credit lines available to the Group. Derivative instruments with maturity dates ranging from 2013 to 2019 are in place for an amount of € 110 million as a hedge against the interest rate risk relating to the portion of the USPP I due 2012. 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.

# Risk and opportunities management

## Risk report

As an international supplier of industrial gases, the Messer Group is exposed to opportunities and risks which inevitably arise in connection with entrepreneurial activities. 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. Future earnings will depend both on the operating performance of the gases business and on the state of the economies in individual countries.

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. Eastern European currencies have come under pressure in the wake of the financial crisis; exchange rate fluctuations have therefore gained even more importance. The reoccurrence of crisis situations within oil-producing countries, 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 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.

#### 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. The integration of new member states into the EU entails risk in that many previously staterun 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 net sales. In these circumstances, the downward pressure on selling prices would probably increase.

#### Operational risks

Expansion in various markets involves greater demands being placed on the Group's infrastructure. We endeavour to avoid business interruptions for our customers through regular maintenance and monitoring of 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 to ensure that supplies to customers are safeguarded even in emergency situations.

The Messer Group is continually developing new strategies. As well as expanding and strengthening our existing business and continually optimising 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 our activities on existing markets and to divest from non-core business activities. 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.

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) and therefore from the quality of service/products of our suppliers and business partners. Many of the projects in which we are involved relating to the construction of air separation units and on-site plants are organized on the basis of joint arrangements. There is therefore a risk that some projects do not fully meet the expectations placed in them. This is frequently not due to technical problems or lack of personnel-related or financial resources, but rather to joint arrangement constellations, in which the parties do not always deliver the necessary level of continuity, priority-setting and determination demanded by complex projects. This situation often leads to long delays in completing a project.

#### IT risks

The importance of information technology for day-to-day work is constantly growing. Our IT centre in Germany gives us 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 due to natural hazards or human error. In order to avoid this risk, our IT centre applies its own IT risk management system, including ongoing testing of the system architecture.

## Financing risks

We require funding to finance our growth and ambitious capital expenditure program. We are therefore dependant on the finance 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.

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 programmes 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.

## 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 defence 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 2011 shows, however, that the implementation of stricter environmental regulations often results in a more efficient production process and a higher quality product.

#### Overall conclusion

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 2011, 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 and pro-active management of risks enable us to reduce risk.

## **Opportunities**

Opportunities arise for the Messer Group from the multifarious usages of industrial gases to produce products needed in all fields of life. Our broad customer base and diversified product portfolio enable us to overcome a weaker economic phase without losing sight of our long-term objectives. Through investment, we have the opportunity to respond to tougher competition and to maintain/strengthen our market position. We are taking advantage of the opportunities arising from internationalization – in particular in the light of positive developments on the emerging economies and the eastwards expansion of the EU – by purposefully 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.

## 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 incurrence.

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 was only partly staffed during the financial year 2011 so that only two status audits were carried out for European entities of the Messer Group. In China, the local central organization carried out internal audits during the year (most of them relating to tax matters) and some status audits. These included testing compliance with corporate guidelines and sample testing of controls applied to accounting documents within the various business processes, in order to check the effectiveness and commercial viability 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. Recommendations made by the Internal Audit department were prioritized and implemented before the end of the financial year. Messer Group GmbH's Internal Audit department will be back to full strength for the remainder of the year from April 2012 onwards.

The Group's Safety, Health, Environment, Quality (SHEQ) departments continue 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 virtually ruled out. 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.

It is essential that we ensure compliance with the covenants attached to the USPP I, USPP II and RFA financing arrangements. One of the principle covenants in this context is the net debt (gross financial liabilities less cash funds)/ EBITDA Covenant, which was expanded to include ratios based on 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. 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.

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.

Management considers, as a result of the overall assessment of the risk situation, that risks are limited and manageable and that they do not endanger the Messer Group's going concern status. The risk profile has not changed significantly in the financial year 2011 by comparison to the previous year.

# Outlook

During the final four to five months of 2011, as the euro debt crisis worsened and efforts to hold down inflation in China became an urgent issue, uncertainty about economic developments in 2012 grew considerably. This was evident in the forecasts published at the beginning of 2012 by the world's leading economic institutes – among them the IMF and the World Bank – which modified their predictions downwards and now see 2012 as a transitional phase, leading to a more stable environment for economic growth from 2013 onwards.

The IMF forecasts that global GNP will grow by 3.3 per cent in 2012 – i.e. at a slightly slower rate than in 2011; the World Bank on the other hand expects growth to slow down considerably and predicts world-wide GNP growth of just 2.5 per cent. It is generally agreed that the upswing in emerging markets/newly industrializing nations will also weaken but will nevertheless be disproportionately stronger than in industrialized countries. The IMF and the World Bank estimate that economic output in developed industrial countries will increase by a good 1 per cent, whereas in the emerging industrialized nations it will rise by more than 5 per cent. At the same time, however, it is assumed that there will be a mild recession in the euro zone. The world economy remains vulnerable, above all because of the tension emanating from the financial crisis and debt situation, primarily in Europe but also in the USA and Japan. Raw material prices are initially expected to develop moderately.

The main focus of our business in Europe will be on further exploiting the production capacities we have created in recent years in Belgium, Germany, France and Turkey.

The Chinese economy continued to develop vigorously in 2011. Even though the current spate of measures being pushed through to hold down the inflation rate are likely to slow down the pace of economic growth, we nevertheless expect further substantial market growth in China. We will participate in this growth through our own companies and through the long-term business relationships we have with a large number of important local industrial companies. In addition, we intend to expand our bulk market capacities and enter into/build up our activities on the local markets for special gases and  $CO_2$  over the coming years. We also see Vietnam as one of the direct winners of Chinese economic growth and we intend to expand our activities there in 2012 by starting operations at the first Messer  $CO_2$  plant, situated in the south of the country.

Thanks primarily to our long-term purchasing strategies we do not expect energy costs, although of great significance for the industry, to become over-burdening.

We will continue to forge successful alliances with our customers and business partners in order to sell our products and technologies.

Financial year Outlook

Based on our medium-term planning for 2012 and 2013 we do not only intend to increase sales revenue continuously, we also plan to implement measures wherever necessary to stabilize and increase the profitability of the Messer Group. One good example of this is the expansion of our production capacities in Europe in recent years which has enabled us to become less reliant on our competitors and brought about reductions in the manufacturing and purchase costs of our products. Furthermore, we are strengthening our profitable business base in China by gradually expanding the production capacities of our existing industrial customers and by pushing ahead with our stated business model, for instance by building up our bulk market capacities. Ongoing activities to optimize production and transportation processes help to counteract the effect of constant rises in the price of electricity and diesel.

Our forecasts for the main key performance indicators of the Messer Group for the financial years 2012 and 2013 are as follows:

|  | 2012   | 2013   |
|--|--------|--------|
| Sales growth rate <sup>1)</sup>              | 5.5 %  | 7.7 %  |
| EBITDA margin                                | 20.2 % | 21.3 % |
| CapEx/net sales                              | 22.1 % | 22.7 % |
| Net working capital <sup>2)</sup> /net sales | 11.6 % | 10.0 % |
| Debt/balance sheet total                     | 28.5 % | 30.4 % |

<sup>1)</sup> Excluding exceptional effects of applying IAS 17 (in conjunction with IFRIC4), currency factors and changes in the group reporting entity.

The management of Messer Group GmbH has fairly presented the business performance, the results of operations and financial condition of the Messer Group to the best of its knowledge and has appropriately evaluated and described the opportunities and risks which are relevant for the future development of the Messer Group.

<sup>2)</sup> Inventories, trade receivables/payables and advance payments from customers

# Consolidated Balance Sheet

| in K€       |  | Dec. 31, 2011 | Dec. 31, 2010 |
|-------------|--|---------------|---------------|
| Assets      | Intangible assets  | 444,065       | 479,087       |
|             | Property, plant and equipment                            | 936,723       | 905,081       |
|             | Investments in associates                                | 50,712        | 13,924        |
|             | Investments in other companies and financial investments | 2,780         | 12,418        |
|             | Deferred tax assets                                      | 12,294        | 10,506        |
|             | Other non-current receivables and assets                 | 82,356        | 54,885        |
|             | Non-current assets                                       | 1,528,930     | 1,475,901     |
|             | Inventories  | 93,809        | 84,040        |
|             | Trade receivables  | 177,737       | 166,155       |
|             | Assets held for sale                                     | 137           | 6,941         |
|             | Income tax assets  | 1,990         | 2,765         |
|             | Other receivables and other assets                       | 48,681        | 34,813        |
|             | Cash and cash equivalents                                | 107,489       | 101,762       |
|             | Current assets   | 429,843       | 396,476       |
|             | Total assets   | 1,958,773     | 1,872,377     |
| Equity and  |  |               |               |
| Liabilities | Share capital  | 100,000       | 100,000       |
|             | Reserves   | 797,708       | 777,440       |
|             | Profit after income tax                                  | 34,233        | 30,066        |
|             | Fair value reserve                                       | 2,839         | 4,223         |
|             | Currency translation reserve                             | 23,918        | 24,156        |
|             | Equity attributable to owners of the parent              | 958,698       | 935,885       |
|             | Non-controlling interest                                 | 135,006       | 127,071       |
|             | Equity   | 1,093,704     | 1,062,956     |
|             | Provisions for employee benefits                         | 20,931        | 19,711        |
|             | Other provisions   | 12,120        | 12,766        |
|             | Non-current financial debt                               | 375,023       | 421,372       |
|             | Deferred tax liabilities                                 | 41,633        | 44,204        |
|             | Other non-current liabilities                            | 13,232        | 7,458         |
|             | Non-current liabilities                                  | 462,939       | 505,511       |
|             | Other provisions   | 21,280        | 20,575        |
|             | Current financial debt                                   | 161,903       | 56,454        |
|             | Trade payables   | 143,468       | 127,354       |
|             | Income tax liabilities                                   | 4,018         | 6,763         |
|             | Other current liabilities                                | 71,461        | 91,377        |
|             | Liabilities held for sale                                | _             | 1,387         |
|             | Current liabilities                                      | 402,130       | 303,910       |
|             | Total equity and liabilities                             | 1,958,773     | 1,872,377     |

# Consolidated Income Statement

| in K€   | Jan. 1 –<br>Dec. 31, 2011 | Jan. 1 -<br>Dec. 31, 2010 |
|---|---------------------------|---------------------------|
| Net sales   | 1,028,602                 | 909,020                   |
| Cost of sales   | (594,738)                 | (479,605)                 |
| Gross profit  | 433,864                   | 429,415                   |
| Distribution and selling costs  | (264,194)                 | (252,086)                 |
| General and administrative costs  | (88,686)                  | (83,463)                  |
| Other operating income  | 44,720                    | 21,527                    |
| Other operating expenses  | (7,956)                   | (6,099)                   |
| Impairment losses on goodwill   | (20,103)                  | (22,435)                  |
| Operating profit  | 97,645                    | 86,859                    |
| Share of the profit of associates accounted for using the equity method | 3,514                     | 2,333                     |
| Other investment results, net   | (7)                       | (53)                      |
| Interest income   | 2,101                     | 2,160                     |
| Interest expense  | (23,641)                  | (20,195)                  |
| Other financial result, net   | (9,113)                   | 2,340                     |
| Financial result, net   | (27,146)                  | (13,415)                  |
| Group profit before income taxes  | 70,499                    | 73,444                    |
| Income taxes  | (16,680)                  | (24,504)                  |
| Group net profit for the year   | 53,819                    | 48,940                    |
| Of which attributable to:   |                           |                           |
| owners of the parent  | 34,233                    | 30,066                    |
| non-controlling interest  | 19,586                    | 18,874                    |

# Consolidated Cash Flow Statement

| in K€  | Jan. 1 –<br>Dec. 31, 2011 | Jan. 1 -<br>Dec. 31, 2010 |
|--|---------------------------|---------------------------|
| Group profit before income taxes   | 70,499                    | 73,444                    |
| Income taxes paid  | (21,254)                  | (16,685)                  |
| Depreciation and amortization of property, plant and equipment and intangible assets | 143,303                   | 120,065                   |
| Gains arising on changes in scope of consolidation                                   | (25,251)                  | _                         |
| Losses / (gains) on disposals of fixed assets  | (772)                     | (5,015)                   |
| Changes in investments in associates   | (3,514)                   | (2,333)                   |
| Interest result, net   | 21,540                    | 18,006                    |
| Other non-cash financial result  | 9,113                     | (2,340)                   |
| Changes in assets resulting from finance lease arrangements                          | (52,687)                  | (30,965)                  |
| Changes in inventories   | 16,294                    | (10,897)                  |
| Changes in receivables and other assets  | (11,704)                  | 350                       |
| Changes in provisions  | 1,324                     | 3,468                     |
| Changes in trade payables and other liabilities                                      | (3,486)                   | (3,686)                   |
| Cash flows from operating activities   | 143,405                   | 143,412                   |
| Purchase of property, plant and equipment and intangible assets                      | (130,274)                 | (122,994)                 |
| Purchase of investments and other non-current assets                                 | (19,123)                  | (6,773)                   |
| Acquisition of subsidiaries  | (974)                     | (9,072)                   |
| Acquisition of shares of minority shareholders                                       | (158)                     | _                         |
| Proceeds from disposals of property, plant and equipment and intangible assets       | 4,029                     | 7,641                     |
| Proceeds from disposals of subsidiaries and loans                                    | 18,573                    | 33                        |
| Interest and similar income  | 2,313                     | 2,163                     |
| Cash flows from investing activities   | (125,614)                 | (129,002)                 |
| Changes in capital by shareholders of Messer Group GmbH                              | (8,000)                   | (2,500)                   |
| Proceeds from non-current financial debt   | 218,049                   | 48,002                    |
| Proceeds from current financial debt   | 72,233                    | 6,926                     |
| Repayments of non-current financial debt   | (215,557)                 | (12,574)                  |
| Repayments of current financial debt   | (46,701)                  | (22,406)                  |
| Dividends paid to non-controlling shareholders                                       | (7,041)                   | (10,979)                  |
| Contributions by non-controlling shareholders  | 1,022                     | 16,433                    |
| Interest and similar expenses paid   | (22,719)                  | (20,265)                  |
| Other financial result, net  | (4,548)                   | (368)                     |
| Cash flows from financing activities   | (13,262)                  | 2,269                     |
| Changes in cash and cash equivalents   | 4,529                     | 16,679                    |
| Cash and cash equivalents at the beginning of the period                             | 101,762                   | 81,257                    |
| Exchange rate impact on cash and cash equivalents                                    | 6,171                     | 4,501                     |
| Cash relating to changes in scope of consolidation                                   | (4,973)                   | (675)                     |
| Cash and cash equivalents at the end of the period                                   | 107,489                   | 101,762                   |

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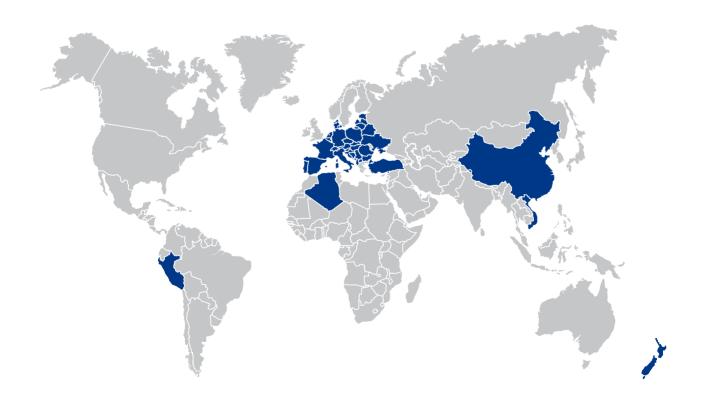
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This annual report has been put together by the Board of Messer Group GmbH and its subsidiary companies and majority holdings as well as by senior staff from the corporate departments.