



# Enterprising Future

We talk about the financial year 2007  
and the future of the Messer Group.



## Short profile

Messer is the largest owner-managed industrial gases specialist and has more than 60 companies operating in over 30 countries in Europe, as well as companies in China, Vietnam, Algeria and Peru. The international activities are directed from Sulzbach near Frankfurt am Main, while the central technical functions of Logistics, Engineering and Production as well as Technology Management are controlled from Krefeld, Germany.

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

The Messer Group has state-of-the-art research and competence centers in which it develops application technologies for the use of gases in almost every sector of industry, in food technology, medicine as well as research and science.

# The Messer Group worldwide

**Holding in Germany**  
Messer Group GmbH  
www.messergroup.com  
info@messergroup.com

**Austria**  
Messer Austria GmbH  
www.messer.at  
info.at@messergroup.com

Laborex-Sanescos  
medizinisch-technische  
Geräte GmbH  
www.laborex-sanescos.at  
office@laborex-sanescos.at

**Algeria**  
Messer Algérie SPA

**Belgium**  
Messer Belgium N.V.  
www.messer.be  
info@messerbenelux.com

**Bosnia-Herzegovina**  
Messer Sarajevo Plin d.o.o.  
www.messer.ba  
info@messersarajevo.ba

Messer BH Gas d.o.o.

Messer Mostar Plin d.o.o.  
www.messer.ba  
messenger@tel.net.ba

**Bulgaria**  
Messer Bulgaria EOOD  
www.messer.bg  
office@messer.bg

**Croatia**  
Messer Croatia Plin d.o.o.  
www.messer.hr  
mg-croatia-plin@zg.t-com.hr

**Czech Republic**  
Messer Technogas s.r.o.  
www.messer.cz  
info.cz@messergroup.com

**Denmark**  
Messer Danmark A/S  
www.messer.dk  
danmark@messergroup.com

**Estonia**  
Elme Messer Gaas A.S.  
www.elmemesser.ee  
emg@emg.bsr.ee

**France**  
Messer France S.A.S.  
www.messer.fr  
info@messer.fr

**Germany**  
Messer Industriegase GmbH  
www.messer.de  
info.de@messergroup.com

**Hungary**  
Messer Hungarogáz Kft  
www.messer.hu  
info@messer.hu

**Italy**  
Messer Italia S.p.A.  
www.messeritalia.it  
info.it@messergroup.com

Messer Medical S.r.l.  
www.messeritalia.it  
medical.it@messergroup.com

**Latvia**  
Elme Messer L SIA  
www.elmemesser.eu  
eml@eml.lv

Elme Messer Metalurgus  
LSEZ SIA  
elme@apollo.lv

**Lithuania**  
UAB ELME MESSER LIT  
www.elmemesser.lt  
vilnius@elmemesser.lt

**Macedonia**  
Messer Vardar Tehnogas  
d.o.o.e.l.  
messervt@mt.net.mk

**Montenegro**  
Messer Tehnogas AD  
tehgasd@cg.yu

**Netherlands**  
Messer B.V.  
www.messer.nl  
info@messerbenelux.com

**People's Republic of China**  
Messer China  
www.messergroup.cn  
communications@messergroup.cn

**Peru**  
Messer Gases del Peru S.A.  
messenger.peru@messergroup.com.pe

**Poland**  
Messer Polska Sp. z o.o.  
www.messer.pl  
messenger@messer.pl

**Portugal**  
MesserGas  
Distribuição de Gases  
Industriais  
www.messer.pt  
info.pt@messergroup.com

**Romania**  
Messer Romania Gaz SRL  
Messer Magnicom Gaz SRL  
Messer Energo Gaz S.R.L.  
www.messer.ro  
mrg@messer.ro

**Russia (Kaliningrad)**  
000 Elme Messer K  
www.elmemesser.ru  
elmemesser@blr.ru

**Switzerland**  
Messer Schweiz AG  
www.messer.ch  
info@messer.ch

ASCO CARBON DIOXIDE LTD  
www.ascoco2.com  
info@ascoco2.com

**Serbia**  
Messer Tehnogas AD  
www.messer.co.yu  
marketing@messer.co.yu

**Slovakia**  
Messer Tatragas s.r.o.  
www.messer.sk  
info.sk@messergroup.com

Messer Slovnaft s.r.o.  
www.messer-slovnaft.sk

**Slovenia**  
Messer Slovenija d.o.o.  
www.messer.si  
info.si@messergroup.com

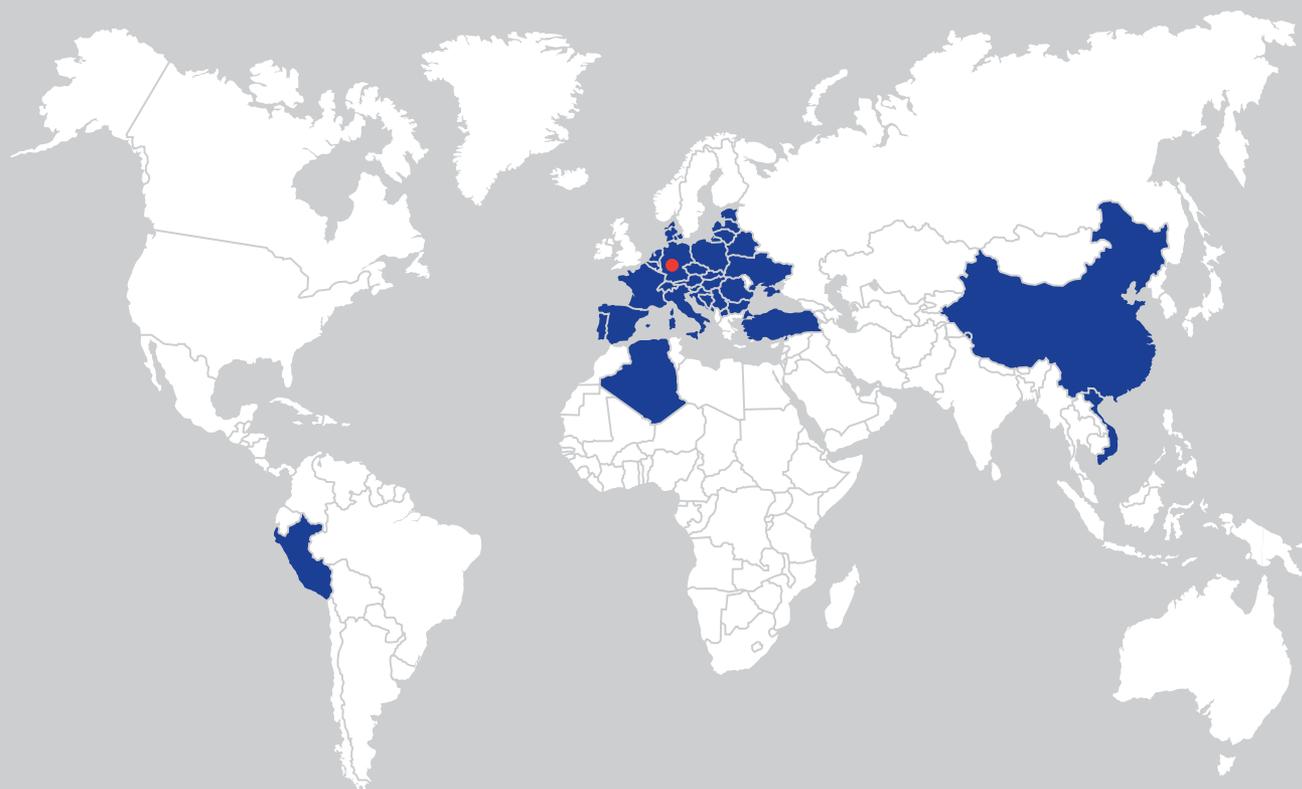
**Spain**  
Messer Ibérica de Gases S.A.  
www.messer.es  
info.es@messergroup.com

Messer Odra Gas, spol. s.r.o.  
www.mgog.cz  
mgog@mgog.cz

**Turkey**  
Messer Aligaz, Sanayi Gazlari AS  
www.messer.com.tr  
aligaz@messer.com.tr

**Ukraine**  
Elme Messer Ukraine  
Kharkovski Autogeni Plant  
www.elmemesser.com.ua  
emu@emu.com.ua

**Vietnam**  
Messer Vietnam Industrial  
Gases Co., Ltd.  
Messer Haiphong Industrial  
Gases Co., Ltd.  
info@messer.com.vn



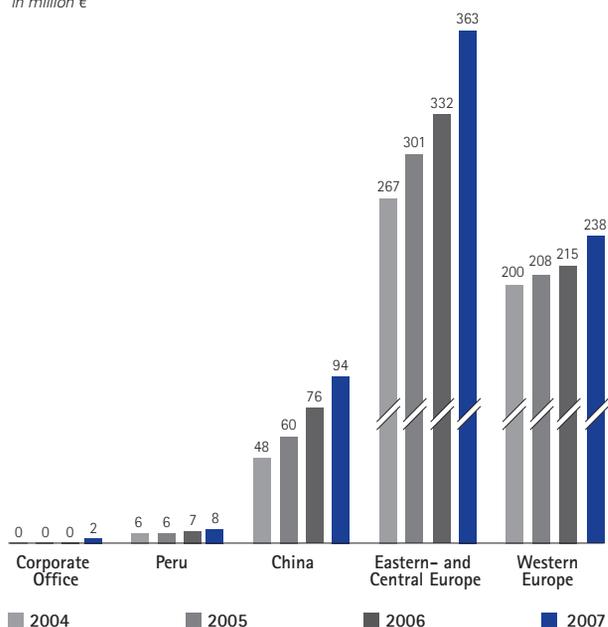
# Key Messer Group figures at a glance

as of 31 Dec. 2007

	2004	2005	2006	2007
Net sales <i>in million €</i>	521	575	630	705
EBITDA <i>in million €</i>	130	138	144	154
EBITDA margin <i>in percent</i>	25	24	23	22
Investments <i>in million €</i>	92	108	153	173
Employees	3,762	4,005	4,247	4,380

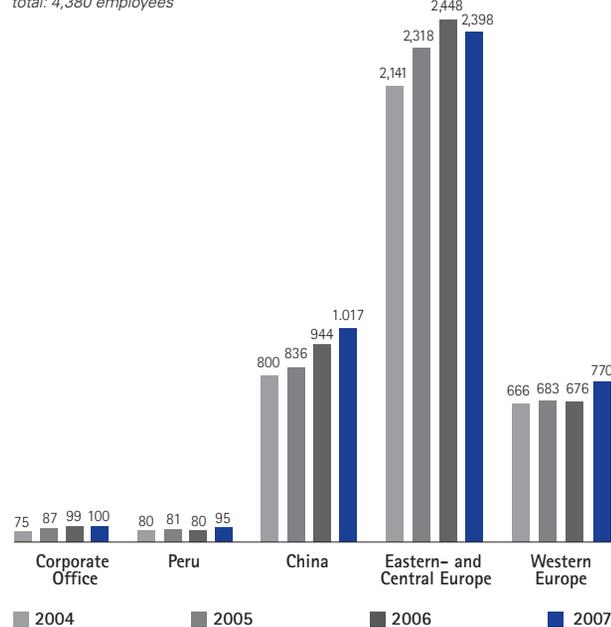
## Net sales (consolidated) by region

*in million €*



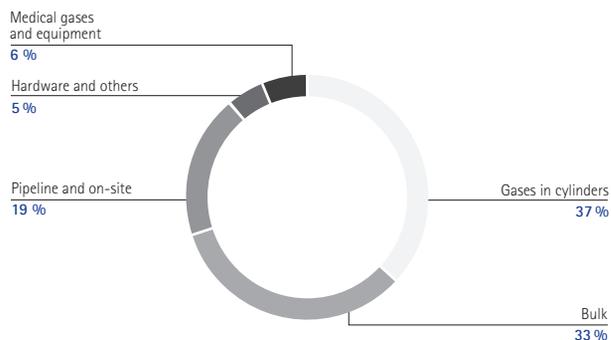
## Number of employees by region

*total: 4,380 employees*



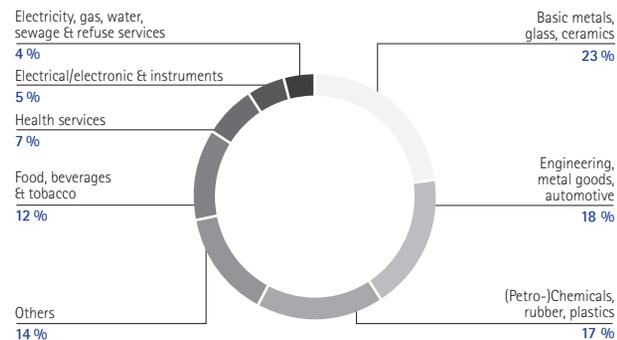
## Net sales by product groups

*in percent*



## Net sales by industry segments

*in percent*



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Stefan Messer (r.) and Hans-Gerd Wienands not only review the business year 2007 but also take a look ahead to a future that promises yet more success.

## Dear Business Partners, Customers and Employees,

In this, our fourth year since becoming independent, we have been successfully building upon our 109 years of history. We have benefited thereby from a vibrant global economy as well as from a consistent implementation of our corporate strategy.

We have significantly expanded our carbon dioxide product range and expertise thanks to our acquisition of Asco Carbon Dioxide Ltd. in Switzerland. We are now a full-service provider for the production, analysis, distribution and application of CO<sub>2</sub> in liquid, gaseous, solid and super-critical form.

We have acquired the shares of our minority partners in Spain, Bosnia-Herzegovina, Romania and Bulgaria, as well as at OxysphAir in Belgium, which has allowed us to simplify our corporate structures in these countries considerably. In selling our companies in Finland, Greece and Sri Lanka and establishing a new company in Albania, we have continued to focus on our core geographical markets.

We are working to reduce our dependence on competitor supplies by planning and building eleven new air separation plants in Europe. We are building green field plants in France, Poland and Turkey, with the latter two due to come on stream at the end of 2008 and the beginning of 2009 respectively. The joint venture plant with Linde in Brittany will go into operation in the middle of 2009.

On-site facilities with long-term supply contracts and integrated liquid capacity are being built for Mittal Steel in Bosnia-Herzegovina, for Lonza in Switzerland, for TKM Resita in Romania and for Interpipe Dneprosteel in the Ukraine. In Spain, we are expanding our existing production capacity by building another air separation plant, which will feed gaseous product into the existing pipeline network and will also produce liquid products for the local market.

As part of our re-entry into the German industrial gases market, we have signed long-term on-site contracts with Deutsche Edelstahlwerke in Siegen and Salzgitter Flachstahl in Salzgitter. This means that Messer will soon be a major player in industrial gas production in Germany again. Both plants will produce liquid products for the surrounding market in addition to supplying the main client.

All these new plants will be up and running by the end of 2010, thereby making a clear contribution to the strategically important independent product supply.

Filling plants for industrial gases started operation in Denmark and eastern France. Further filling plants for industrial gases are being built in Italy, Romania, Spain and Germany. The existing speciality gas plants in Belgium, France, Austria and Switzerland have been further expanded. In Gumpoldskirchen, we have commissioned a large storage tank for liquid helium as well as a residual gas disposal plant.

We are going to build a krypton-xenon crude gas facility as an extension to our new air separation plant in Xiangtan (China), the largest we have, in order to become more independent in this sector as well. The new air separators in Foshan and Zhanjiang were officially opened in the year under review. Further plants are under construction in Chengdu, Yuxi and Yiangjiang. With this new investment, Messer will be operating 20 air separation plants in China.

As well as continuously expanding our production and distribution centres in China, we will now also have our own product source in Vietnam after securing an on-site contract with the Hoa Phat Steel Company in Hanoi, the capital of this rapidly growing South-East Asian country.

Our business in Peru has also developed positively. The takeover of Sider Peru by the Gerdau Group means that our air separation plant in Chimbote is now finally in continuous operation. The plant can therefore also produce argon now, which – as almost everywhere – is in short supply.

In terms of the standardisation of production technology and logistics, further improvements and systems have been implemented in the areas of filling technology and route planning.

As regards our application technology work, we are cooperating with competent technology partners on 37 customer-oriented development projects. New contracts in metallurgy, food technology, environmental chemistry, industry and cutting and welding in every region are facilitating above-target organic growth.

In order to implement our trans-national sales strategy and strengthen the synergies in Europe, our corporate management structure has been enhanced by the addition of a "Central Sales Functions" unit with effect from January 1<sup>st</sup>, 2008.

Training and professional development remained an important part of our strategy in 2007. The first trainees to complete our internationally oriented dual vocational training have been given permanent contracts. Our international employee exchange programme has been further developed. We have also launched a European training programme for graduates.

Social responsibility and safety were once again at the very top of our list of priorities in 2007. Many projects and improvement measures served to further strengthen our corporate values in this respect.

The major challenge for 2008 is to build and commission the new air separation plants in Europe and Asia on schedule and to consolidate our re-entry into the German market. The expiration date for the moratorium on using the Messer brand name was stipulated in the contract with Air Liquide to be the May 7, 2008, thus enabling us to rename our German company from "Gase.de Vertriebs-GmbH" to "Messer Industriegase GmbH" as of that date. With the construction of the air separation plants in Siegen and Salzgitter as well as the filling plant in Siegen, we have created all the necessary conditions to allow us to operate in the market as a fully-fledged industrial gas supplier. Our customers will be served by an experienced sales and service team. As a family business, we rely on solidarity and cooperation with other medium-sized private enterprises. Under the motto "Connected by Common Values", we want to offer an alternative to our all-powerful listed competitors by providing good service, reliable supplies and fair terms. We are interested in building long-term partnerships with our customers based on trust, and our initial successes shows that we are taking the right approach.

The realisation of a vision is only possible with dedicated and loyal customers, partners, shareholders, supervisory board members and employees. We would like to thank all of you for the trust you have placed in us as well as your willingness to support us so actively in implementing our successful strategy. Please continue to support us so that, in Germany too, Messer can once again develop into a leading industrial gases supplier.

Yours



Stefan Messer, CEO



Dr. Hans-Gerd Wienands, CFO

# Supervisory Board Report

## Company performance and projects

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 May 2, September 12 and November 19 as well as at an extraordinary meeting on July 13, 2007.

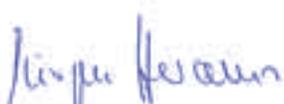
Furthermore, the supervisory board was informed about important business transactions and decisions. Legal transactions requiring the board's approval were submitted to the board for its decision.

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<sup>st</sup>, 2007, as well as the management report from Messer Group GmbH and the Messer Group have been audited and certified by the auditing company KPMG Deutsche Treuhand-Gesellschaft AG, Frankfurt am Main. The audit reports were discussed at the board meeting on April 29, 2008 with the assistance of the auditors. The supervisory board had no objections and is in agreement with the auditor's results.

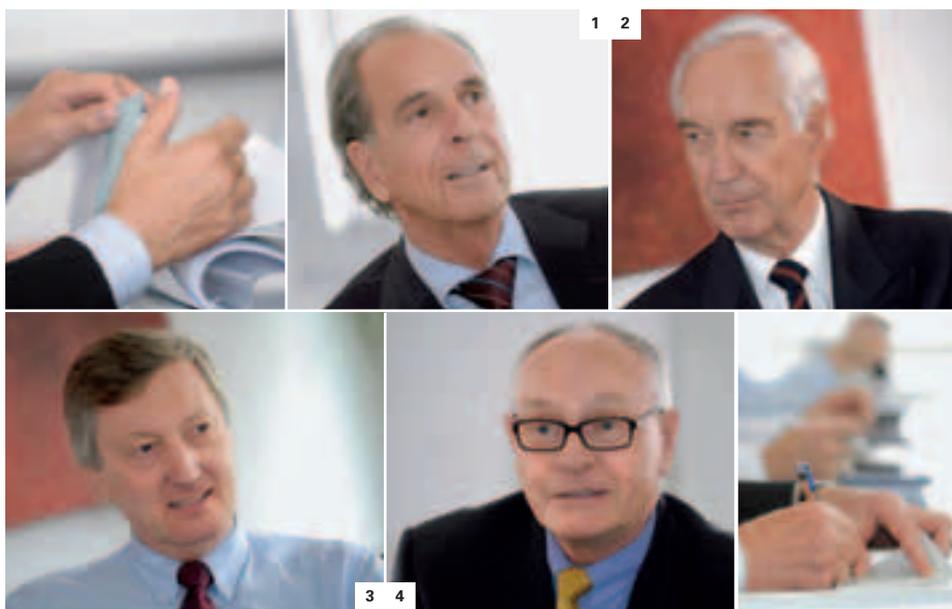
The supervisory board would like to thank the management as well as all employees of the Messer Group for their efforts and successful work in the 2007 financial year.

Sulzbach, April 29, 2008

Supervisory board



Dr. Jürgen Heraeus, Chairman



**1 Dr. Jürgen Heraeus:** Chairman of the Supervisory Board of Messer Group GmbH, entrepreneur, Chairman of the Supervisory Board of Heraeus Holding GmbH

**2 Dr. Bodo Lüttge:** Vice Chairman of the Supervisory Board of Messer Group GmbH, Diplom-Kaufmann

**3 Dr. Karl-Gerhard Seifert:** Member of the Supervisory Board of Messer Group GmbH, Chairman of the Supervisory Board of AllessaChemie GmbH, chemist

**4 Peter Wilhelm Storm van's Gravesande:** Member of the Supervisory Board of Messer Group GmbH, consultant

**Dr. Jürgen Großmann** (not pictured): Member of the Supervisory Board of Messer Group GmbH until 31.12.2007, entrepreneur, Chairman of the Management Board of RWE AG, graduate engineer



Production plant for hydrogen  
at huntsman in Hungary





“We are investing heavily in our independence. Our flexibility and our presence in local markets make us a trustworthy partner for the future.”

*Adolf Walth*



Central Sales Functions: Dr. Andreas Donnerhack, Dr. Hermann Grabhorn,  
Dr. Christoph Erdmann and Paul Grohmann (top l. to r.),  
Matthias Thiele, Adolf Walth and Ulrich Thorwarth (bottom l. to r.)

“We are taking another step in demonstrating our commitment to our customers. The investments will open up completely new options for us.”

Interview with **Adolf Walth**, Executive Vice President Sales Marketing and Operations Europe

As a medium-sized company it is impossible to be everywhere, particularly since we operate in a capital-intensive industry, so financial resources have to be carefully targeted. For that reason, we are increasing our focus on expanding our core markets as well as the availability of our core products. In this way, we are creating the conditions for a successful future.

**Mr. Walth, what does the new organisational structure mean for Sales?**

We have strengthened our sales operation by assigning Group-wide decision making authority to the extended management team. We are currently investing a lot of effort in building air separation plants in our core regions. This will create an independent product supply and ensure our future growth. Supply shortages will be a thing of the past once the current projects have been completed. In Europe, we now operate ten air separation plants for the production of technical gases. A further eleven plants will come on stream in the next two to three years. This will double our capacity! In line with this development, we are building up new sales structures and are planning a whole series of measures.



Adolf Walth

**What are these measures?**

For a start, we would like to use the next few years to build up our staff capacity in a targeted way. We are planning to strengthen our collaboration with universities and institutes in every field and industrial sector. We would like to attract trainees, interns, and undergraduate and postgraduate students who are carrying out research into gas-relevant topics, conducting market studies or lecturing on this subject. Throughout Europe, we want to attract graduates who will commit themselves to the company and the Messer brand, in order to develop new research topics and new ideas for every sector, as well as to disseminate this knowledge.

**You mentioned research – what role will the patenting of research results play in the future?**

As a family company, we cannot make massive investments. Instead, we have to differentiate ourselves from our large competitors through the quality of

our work. In 2007, we applied for patents for 17 processes. That is more patents per employee than the former Messer Griesheim GmbH achieved. We are happy with this trend, however we want to continue to grow more quickly in terms of patents than turnover. Protecting knowledge will become even more important in the future as there will be far-reaching industrial changes in the area of energy generation. I expect worldwide demand for industrial gases to increase sharply in the coming years. We will not be able to play a part in the construction of every production facility; however, as a company, Messer can contribute its know-how in the use of gases and through new technologies position itself in this changing market through new technologies.

**To what extent are you being supported in this by partnerships, for example with your customers?**

Successful alliances with our customers and partners are analysed for their potential for international expansion. I am talking, for example, about our



*Adolf Walth and Frank Hopfenbach, Managing Director Messer Industriegase in Germany*



"Key account management only works if you know your customers and their needs well. This is essential."

Klaus Ludwig,  
*Vice President Key Account Management, Central Sales Functions*

cooperation with the French firm Olivo, with whom we developed the very successful Siber System for food transport refrigeration. But the collaboration of our Polish colleagues with Trumpf in the area of laser gases is also interesting. These alliances are intended to help us market our products and technologies. We are also planning to make relevant changes to our key account management: we are proactively engaging with our customers, analysing which of our technologies will make our customers more successful. All our internal sales tools are being revised centrally and are being made available to our sales staff as a standard work for industrial gases which will serve as an optimum source of information and basis for their work.

**Are you also planning to market your products by electronic means – using the Internet?**

Yes, e-business is generally slightly more awkward in the industrial gases sector than in many other sectors. In several countries, we have had very good experiences with electronic portals for years in connection with specific topics and tasks. We are learning from our good examples and are planning to invest in a functional web shop. At the same time, we are going to develop our Internet presence in order to provide an attractive and extensive source of information. We are going to sell a lot more molecules in the future, via all channels.

**Finally, what do you think the future holds for the industrial gases market?**

In internal working groups, we are intensively studying economic trends in the industry and their significance for the Messer Group. This is a continuous process, but we already know that the field of medical gases is an important strategic element in terms of consolidating our future market position. For example, home care has become very important in Western Europe in recent years, and this will soon also be the case in Central and Eastern Europe. The supply of medical gases – such as oxygen for respiration – has definite advantages for us: the growth in this sector is very promising and it is nowhere near as capital intensive as the industrial gases sector. But wherever the trends may lead, we will carefully coordinate all our activities as a new Sales Team together with our colleagues from the national subsidiaries. In this way our success should be assured. ■

## Legal and Insurance

Interview with **Dr. Christof Spenrath**, Senior Vice President Legal

**Mr. Spenrath, as an internal service provider and advisor, the Legal and Insurance Division is involved in an incredible number of processes and projects. What have these been in the past year?**

There was one really dominant aspect. In fiscal 2007, the Messer Group undertook considerable efforts to be even closer to our customers in our core markets and to offer even greater product safety and availability. This has necessitated major investments, for example in Poland, Switzerland, France, Romania, Bosnia-Herzegovina, Vietnam and the Ukraine. My colleagues and I support the administrative and legal processes, particularly in expanding our investment portfolio but also in adjusting our portfolio. We have consolidated and expanded our local presence as well as our market position through targeted takeovers such as the majority stake in Asco Carbon Dioxide or through the establishment of new companies in our core markets such as

Messer Medical in Italy, Messer Albagas in Albania and Messer BH Gas in Bosnia-Herzegovina. At the same time, we have done some tidying up in terms of our associated companies.

**Saving costs through the sale of companies?**

In 2007 we severed ties with three shareholdings in Greece, Finland and Sri Lanka which no longer fitted into the strategic concept. But above all, we have also tightened our shareholding structure through the liquidation of intermediate holding companies and the takeover of joint venture partners' shareholdings. Due to new fiscal conditions in China, the corporate structure of our Chinese subsidiaries has been transformed in order to achieve a significant tax optimisation in future. Considerable synergies have also been generated through the tax-optimised configuration of a sale and lease back

"The Messer Group has undertaken considerable efforts in this financial year in order to be even closer to its customers in future."

Christof Spenrath



## Auditing

Interview with **Michael Holy**, Head of Internal Audit  
(as of 31 Dec. 2007)

process. The structural changes and new start-ups made it necessary to adjust our financing agreement of 28.07.2005 – our Senior Facility Agreement, or SFA for short. In accordance with the SFA, Messer is obliged to secure the loans and funding provided by the Hypovereinsbank by pledging shares. Each significant change in the shareholding structure also requires the SFA to be adjusted.

### How are new projects approved – are there special decision-making bodies?

Yes, there are. Our investment forum normally checks all the investment requests from our subsidiaries as an independent committee. The investment forum draws up a decision document for the management and has become so established that even our Supervisory Board essentially relies on the forum's recommendations. In this way, all the important investments are thoroughly examined and the pros and cons evaluated.

### How are you approaching the future?

Very optimistically and, fortunately, free of major inherited burdens! Significant legal proceedings resulting from the restructuring of the Messer Group after the 100 percent takeover by the family have been won or successfully completed. A big relief for all of us! By improving our internal auditing procedures and further optimising the insurance structure, in particular in the area of risk management, and by developing knowledge management as well as a Group-wide personnel network in the legal and insurance fields, we have made communication and coordination processes much more efficient. We welcome new challenges – together we will overcome them!



"We actively involve the local employees in the audit."

Michael Holy

### Mr. Holy, is it also possible for auditing to produce good news?

Yes, of course! If a need for improvement is discovered, then that is certainly good news. If the system is working optimally, then so much the better. In 2007, the Internal Auditing Department carried out internal audits at the subsidiaries in Croatia, Bosnia-Herzegovina, Hungary, Serbia and Slovenia. It was possible to clear up several critical issues as part of these regular audits. We were therefore able to make numerous suggestions to the audited companies with regard to improving the transparency of their business processes. Actively involving local employees in the audit proved to be a particularly effective approach. As a result, the measures proposed by the Audit Team were supported and quickly implemented. In future, too, the aim of these internal audits will be to check the effectiveness and efficiency of processes as well as the correctness and reliability of financial reporting.

### Do you see yourself and your department as a team that uncovers weaknesses in order to get rid of them?

Yes, definitely, because we do not only carry out regular audits. In order to continuously meet the corporate governance requirements, we particularly want to work on improving and systematically implementing the authorisation concept in 2008 as part of "SAP Harmonisation".

# Application Technology, Research and Technology Development

Report from **Dr. Andreas Donnerhack**, Senior Vice President Application Technology



Andreas Donnerhack

## Patents

The results from our development projects are continuing to be systematically turned into patent applications. Thus there were a total of 19 reported inventions in relation to new gas processes in 2007. 17 inventions were submitted to the Patent Office.

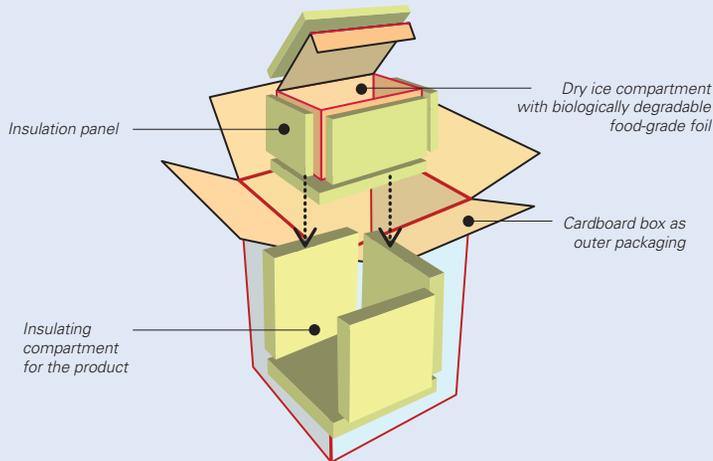
## New applications and processes

### Radiant tube burner (FFG)

We worked on the development of a radiant tube burner in a project supported by the Austrian Research Promotion Fund (FFG). In contrast to conventional burners, where combustion takes place in a free jet, these burners are surrounded by a radiant tube which only passes the heat to the material being heated by means of radiation in a protective gas atmosphere. This technology markedly lowers the burner's natural gas requirement and reduces the NO<sub>x</sub> emissions through flameless combustion, without significantly changing the basic conditions in the furnace itself. Difficult material questions were resolved in the first research year and preparations are underway for a prototype to be tested.

### Eco-Pack – environmentally friendly refrigerated transport with dry ice

Ecopack is a recyclable, isothermal, disposable container that allows dry-ice-cooled samples to be transported. The pack consists of the outer box, the biodegradable insulating material and a biodegradable plastic film which acts as a moisture barrier. This means that conventional plastics such as polyurethane, polyethylene and polystyrene foam can be replaced without impairing the protective and insulating properties of the packaging system. It fully complies with the specifications set by manufacturers in the food and pharmaceutical sectors for the transportation of their products. In addition, it complies with EN 13432 for biodegradable materials.



Ecoboxes fulfil all standard safety and insulation criteria.



DuoCondex plant at Sanofi-Aventis in Vitry-sur-Seine near Paris

A further application in the paper industry: during recycling dry-ice gently removes adhesive residues from paper.



### Influencing the Ca balance through LCO<sub>2</sub> in paper production

Calcium is one of the most important additives in the production of pulp, a mash of paper or fibre dissolved in water. This element, which is classified as a metal, occurs in two different forms, but only one of the two forms – the bound form – is required. The preferred form can be brought about more effectively by adding CO<sub>2</sub>. This has already been verified in two operational tests. The total chemical requirement for chemicals has been significantly reduced through the favourable effect of carbon dioxide on the system. It was also shown that there were fewer deposits in paper machines that had been treated with CO<sub>2</sub>. An additional positive side effect of this was the marked reduction in odour emissions.

The decisive factor, however, is the maximal solution efficiency of CO<sub>2</sub>. The introduction of gaseous components into the paper making process should, in principle, be avoided at all costs. It is therefore essential to ensure that the CO<sub>2</sub> dissolving process takes place with maximum efficiency. Messer has developed an injection system for this, which efficiently injects liquid CO<sub>2</sub> into the difficult-to-treat pulp matrix.

### DuoCondex dual plant

DuoCondex plants clean highly loaded waste gas flows from industrial plants by condensing and freezing out the contaminants. Cryogenic liquefied nitrogen is used to cool the apparatus. As part of the ongoing improvement of the DuoCondex technology, a dual plant was specially developed for the chemical industry, where such plants have to be in operation around the clock. As soon as the condensers on the first unit freeze up after several hours of operation, the waste gas is switched to a second module. The first unit is then defrosted and cooled down again before the next switchover.

The first plant of this type was installed and put into operation at Sanofi-Aventis in Vitry sur Seine near Paris. The two main condensers are clearly visible in the picture.

### Cement cooling

The cement cooling process, which we developed together with a partner and for which a patent is pending, mixes a cooling medium (liquid CO<sub>2</sub> or liquid nitrogen) with the pneumatically conveyed cement on the way to the silo. The required target temperature of the cement can be programmed into the control system. This cooled cement is then used to lower the temperature of the fresh concrete accordingly. The main advantage of this process over conventional concrete cooling with liquid nitrogen lances is the good utilization of the cold energy that is applied.

A total of five cement cooling plants were installed in 2007, one each on five different building sites, predominantly in Austria. The new process has thus been successfully launched onto the market in the first year after completion of process development.

Moreover, talks are underway with manufacturers of fresh concrete mixing plants with a view to integrating this new technology into new plants at the manufacturing stage.

### Snow blasting/Thermocool

Snow blasting with dry ice has been increasingly used as an environmentally friendly cleaning process for two years, especially by car manufacturers and suppliers. Liquid CO<sub>2</sub> is expanded in this process, and the dry ice that this gives rise to is blasted onto the dirty surfaces with compressed air. Ultra-fine particles, release agent residues and thin layers of grease are effectively removed. This application is used as a pre-treatment step prior to the painting of plastic and metal components.

The tried and tested Thermocool process, which, if the CO<sub>2</sub> storage tank is operated properly, makes it possible to achieve a greater dry ice yield with cost savings of up to 15 percent, not only leads to a higher blast medium yield when snow blasting, but also gives a markedly higher abrasiveness depending on the mode of operation of the storage tank, and therefore a much better cleaning effect. Messer has applied for a patent for this process.

### Contaminant-reduced shielding gas mixtures

The emissions from cutting and welding are repeatedly subjected to new limits. Since January 2006, there has been another lowering of the permitted emission limits, specifically in relation to fine dust. The permitted concentration in breathing air has been reduced from six to three mg/m<sup>3</sup>. For many welding companies, these limits represent a huge challenge. As a gas manufacturer, we have the opportunity to make the market aware of the advantages of modern shielding gases for welding. Provided there is a verifiable effect! In 2006, a project was launched in collaboration with the University of Hanover





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- 1 Higher welding speeds with TIG welding
- 2 Successful market launch of cement cooling
- 3 In the food technology centre in Mitry-Mory, France. Frank Gockel, Technology Manager Food

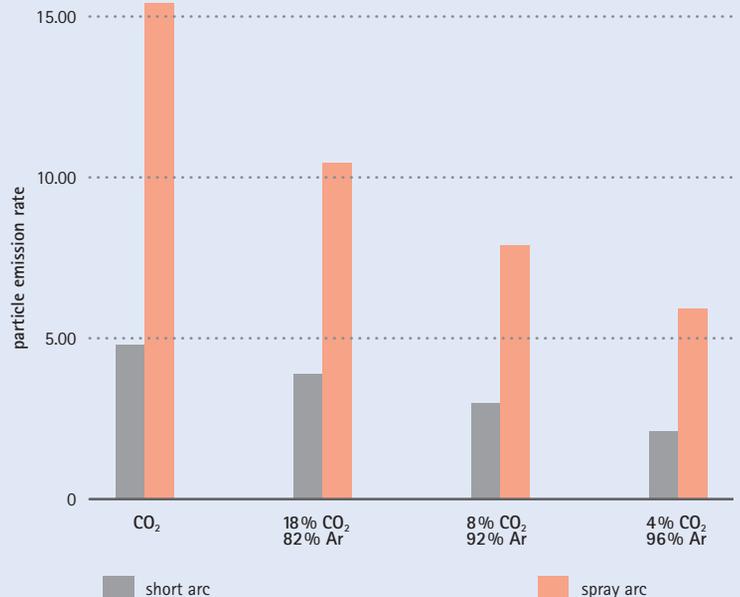
to demonstrate the precise effects of welding shielding gases on emissions. Meanwhile, the tests for metal active gas (MAG) welding of non-alloyed and low alloy steels with flux-cored wire and solid wire have been completed. The tests have shown that emissions can be influenced by choosing suitable shielding gases for welding. This relates to the type of emissions (nitrogen oxides, carbon monoxide, iron oxides) as well as the quantity, size and size distribution of the particles.

We will also be testing MAG welding of high alloy steels with flux-cored wire and solid wire as well as the processing of light metals.

### New shielding gas mixtures

With manual tungsten inert gas (TIG) welding of high-alloy materials, predominantly in the construction of chemical process equipment, the user expects a higher welding speed as well as cost savings through reduced reworking. The shielding gas Inoxmix He3 H1, which was developed specifically for this area of application, reduces the amount of pickling required (chemical reworking for the removal of oxide layers), improves weld fluidity and gives better weld penetration or, alternatively, higher welding speeds. Numerous customers have introduced this gas during the reporting year.

### Modern shielding gases play an active role in improved work place safety.



There were further innovations at Messer in the area of MAG welding, too: customers using tried and tested standard shielding gases, like Ferromix C18, who would like additional improvements can achieve a more intensive weld penetration, smoother weld surfaces and higher welding efficiency for all welding positions with Ferromix C12 X2.

### Expansion of the technical centres

At our burner test stand in Gumpoldskirchen, Austria, we have developed the new burner generation – Oxipyr-Air and Oxipyr-flex – to a point where they are ready for marketing. We expanded the burner test stand for this. A spraying tower for the production of microparticles has been installed in the food technology centre in Mitry-Mory, France. Another mill has been installed at our cold grinding centre in Willich. And our welding centre in Germany has moved to the facilities of Niederrhein University of Applied Sciences in Krefeld, together with whom we want to utilise technical synergies in the field of joining technology.

By implementing these measures, we are meeting new technological challenges from the market as well as our customers.

## Gas Logistics and Supply

Interview with **Ulrich Schlegel**, Senior Vice President Logistics, Sourcing and Filling Plants

“The responsible treatment of nature and its resources is very important to us. We have therefore invested in a state-of-the-art residual gas disposal plant.”

Ulrich Schlegel



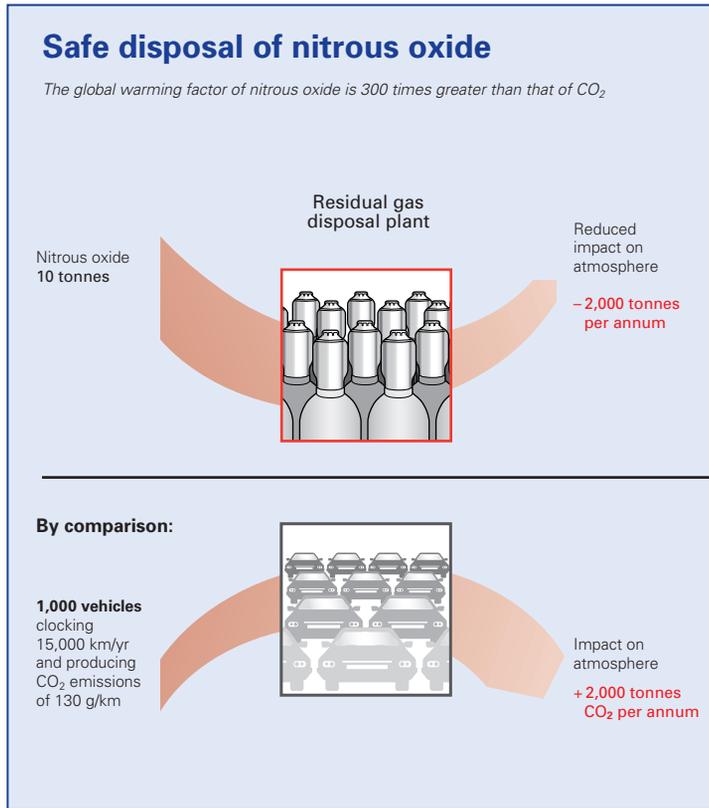
**Mr. Schlegel, what are your priorities in the area of gas logistics and supply?**

This is quite clear – work safety and cost optimisation. We need to carry out production and filling in a cost effective and efficient way, while at the same time ensuring maximum safety for employees and customers. In the past year, the Supply Chain Management team therefore launched the PRIMUS project – Program for the Improvement of Productivity and Safety – the aim of which is a standardised Group-wide definition of the technical standards and processes in production and filling.



**What measures does this programme cover?**

In Europe alone, the Messer Group is planning to build five filling plants in 2008, which are all to be built in accordance with the cost and performance optimised standard as defined in PRIMUS. Our safety, health, environmental and quality experts will support this project by developing work place safety and environmental protection rules that apply across the Group. Environmentally acceptable action – the responsible treatment of nature and its resources – is one of the main points of our mission statement. We have therefore



invested in a state-of-the-art residual gas disposal plant at our Gumpoldskirchen specialty gases plant in Austria, which went into operation in 2007. Here we dispose of toxic, flammable or environmentally hazardous gases professionally and in compliance with all the relevant safety standards for the entire Group.

**Gas production and delivery are very capital-intensive. What do you do to keep costs down?**

We have carried out comprehensive country-specific profitability analyses to support the management in their efforts to further optimise the cost and sales structure of the entire Messer Group. We have now defined a significant savings potential in gas production and transport for the individual subsidiaries. This is to be implemented in 2008. But you are right: the high level of investment involved in renewing our vehicle fleet continued in 2007. We were able to hand over a total of 21 vehicles to the national subsidiaries, with another 20 still to be delivered.

**Were you able to detect any changes in the market?**

Demand for noble gases such as helium, krypton, xenon and argon grew worldwide, in some cases dramatically. Thanks to a number of new contracts, we were able to meet our customers' requirements and provide a reliable basis for customer supplies.



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- 1 Above the roofs of Krefeld: the Cylinder Filling team met at the Messer Group premises.
- 2 The environmental importance of residual gas disposal is particularly apparent with the potentially climate-damaging nitrous oxide.
- 3 Providing a reliable basis for customer supplies
- 4 Cylinder handling at the Gumpoldskirchen site in Austria



4

## Safety, Health, Environment and Quality (SHEQ)

Interview with **Danilo Ritlop**, Senior Vice President SHEQ

**You help the Messer Group achieve its strategic goals in the area of Safety, Health, Environment and Quality. How do you and your team do this?**

We see ourselves as service providers and members of a team. As part of the PRIMUS Team, we help develop Group-wide standards that are designed to further ensure more safety, quality and environmentally friendly production in the future. We have already compiled a detailed list of hazards for oxygen

filling. In 2008, a list of hazards will also be prepared for acetylene and inert gas filling. The SAP Harmonisation project is also one of the activities to standardise Messer processes. A particularly big effort was put into the control of hazardous substances in the warehouses in accordance with the relevant Seveso Directive. These activities ensure our compliance with the strict EU environmental directives, which has a positive effect in terms of working and communicating with the local population.



1 SHEQ meeting in Puteaux, France

2 Safety, quality and environmentally friendly production in the foreground



"Numerous safety measures have already been successfully established through safety audits and safety newsletters."

Danilo Ritlop



**What are you doing to make the production of gases as safe as possible?**

Five safety audits were carried out in 2007 to ensure safe production in the future. In the coming years, our aim is to carry out at least one audit in all the countries where there are Messer companies. Unfortunately, there were some accidents in 2007 which we examined these in the proper way and recorded them in the statistics. We have introduced risk analysis software and trained a team. This group of experts will carry out a risk analysis in every Messer plant in the next few years. Because of the major importance and scale of this project, it will have the largest amount of time devoted to it in 2008. We have already stipulated and successfully established numerous safety measures through safety audits and safety newsletters.

**You took charge of SHEQ in 2006. What kind of network exists to the rest of the company?**

We have completely renewed our old manuals. The "SHEQ Policy" document is important. This document was recently approved by the Messer management and forms the basis of an integrated SHEQ system. The second document is the "Recall Plan". This is a result of the cooperation between Corporate SHEQ, the Legal Department and Head Office. SHEQ Management is increasingly becoming a unified, established organisation, which is reflected in the constantly improving and strengthening communication and cooperation not only with the SHEQ Managers but also directly with our colleagues from Production and Communication Management. The SHEQ Committee represents an important working group that promotes teamwork and mutual consultation. A lot of attention will continue to be paid to the SHEQ intranet content to ensure that everyone has access to all the important information and documents. We are now continuing to expand our area: in 2007, initial talks were held with a view to setting up a joint quality management system. The first evaluations and proposals regarding the introduction of a standardised quality management system will be made in 2008. ■

## Engineering and Gas Production

Interview with **Dr. Frank Ruhland**, Senior Vice President Engineering & Production

“Cooperation is the key factor in successful project implementation. Open communication and team spirit support our working processes.”

Frank Ruhland



**Mr. Ruhland, what is meant by an “expansion of the production units”?**

Our strategy includes the expansion of our production units in Europe and China in order to guarantee an independent product supply for our customers and “to exploit free liquid capacities”, in other words to produce gases for new customers as well as the expansion of our business with existing customers. Approximately 200 million euros are being invested in, primarily, new air separation units, of which 80 million euros are going towards building up the business in Germany. We are planning to build a total of 14 air separation units, where we will produce the air gases nitrogen, oxygen and argon. The construction of seven units in Europe and China is already in full swing. Our strategic goal is to achieve independence from external gas purchases.

**At least 14 new production units which have all to be planned and built at the same time – what challenges does this pose for the workforce?**

Cooperation is the key factor in successful project implementation. Good preliminary planning for one plant may not be a substitute for the design of the next one, but open communication and team spirit support our working processes. To be honest, there is no other way to implement the projects, as we are working at full capacity and are hiring new staff accordingly.

**What new areas do the projects touch on?**

In Europe, we will put a greater emphasis on power procurement in the future because, although our new plants use much less energy on account of their modern technology, we need to optimise costs in this regard. To this end, an "energy working group" has been set up, and the PRIMUS Team is also working on this.

- 1 *Using the advantages of local air separators – here a model of the new unit in Spain.*
- 2 *Exciting action: positioning of the coldbox at the Spanish construction site in El Morell.*
- 3 *Impressive: the coldbox has a length of 54 meters*



**What will happen when further projects come along?**

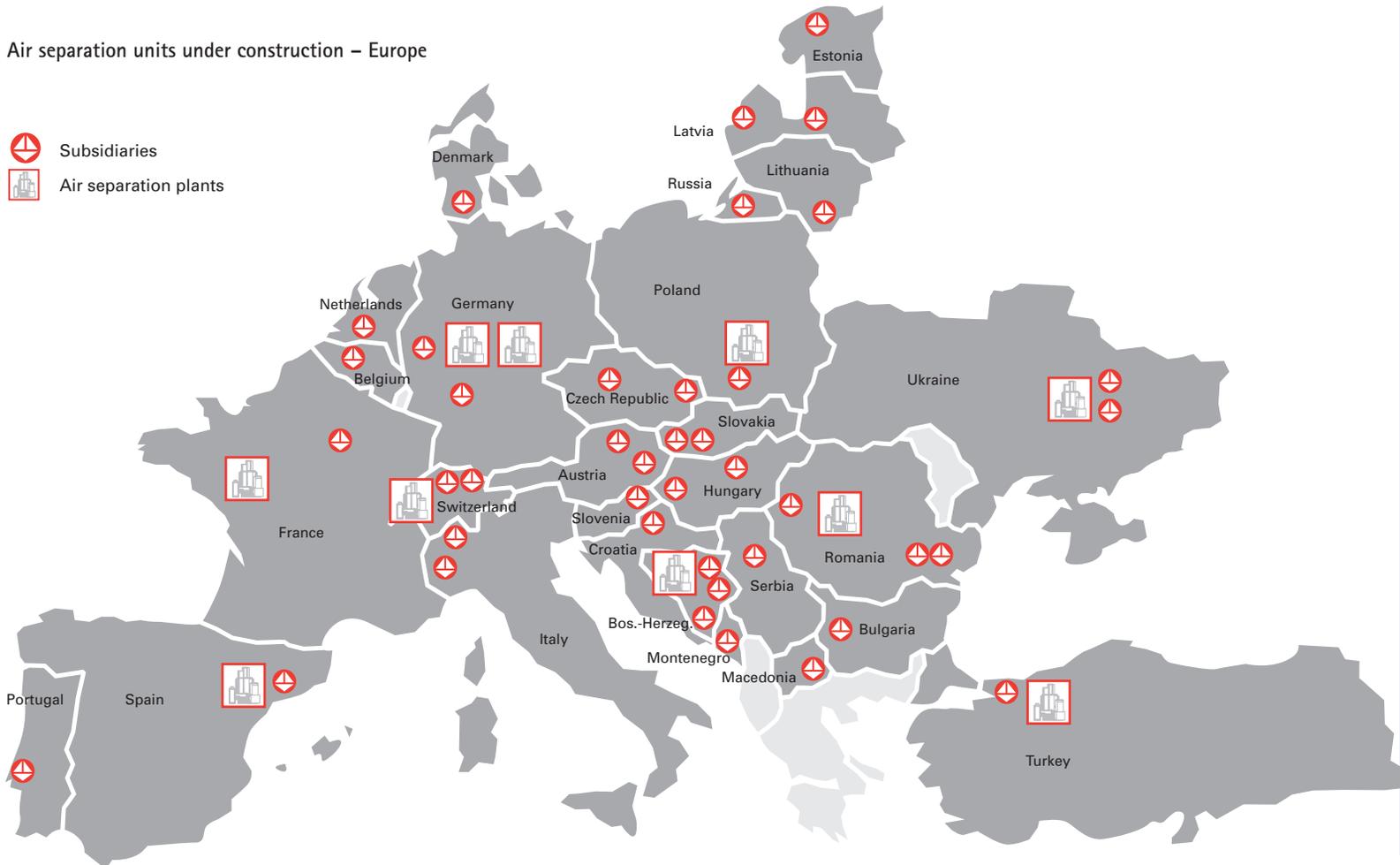
Investments for the year 2008 will include several air separation plants, for example in Rybnik (Poland), Visp (Switzerland), Saint Herblain (France), Resita (Rumania), El Morell (Spain) and in the Ukraine. All of these received planning permission last year or even earlier. As we are at the limit of our personnel resources, the project in the Ukraine has been assigned to an external company. We will react in the same way when we have other bottlenecks. ■

- 1 Foundations for the coldbox in the Spanish air separation unit
- 2 Condensor coldbox during assembly



**Air separation units under construction – Europe**

-  Subsidiaries
-  Air separation plants



## Plant engineering at Messer – transnational cooperation

One major advantage of the Messer Group's worldwide presence is the ability to use synergies. One such area is the planning and construction of on-site nitrogen production plants where the German-Slovenian collaboration has proved a major success.

We carry out the construction of on-site nitrogen production plants independently from start to finish. First the Engineering Team in Krefeld jumps into action, dealing with conceptual planning, specifications and the procurement of the main components. Detailed planning and the

procurement of pipelines, cables and other hardware is carried out by an experienced team from Messer in Slovenia. The compressor, all the components for air pre-treatment as well as the electrical equipment and the measuring and control equipment of the remote controlled units are compactly housed in a standard container. This phase is monitored by the Messer Group's Engineering Team, but the expertise of the specialists from Krefeld is only required on site for a few days, during the actual construction of the containers. As a result of this optimally coordinated teamwork, we are in a position to supply nitrogen generators quickly and very competitively for the entire Group.



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1 Exemplary: the CryoGan nitrogen generator in the new Messer design

2 The plants are monitored in the Control Center in Budapest.

3 Do-It-Yourself: Messer produces on-site plants for nitrogen production autonomously.



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### Cooperation model extended

This division of work dates back to the construction of the first CryoGAN nitrogen generator based on the new Messer design, which was installed at Julon in the Slovenian city of Ljubljana at the beginning of 2006. Based on the excellent collaboration with the engineers and fitters from Messer Slovenia, it was agreed that the team would also undertake the detailed planning and installation of similar plants for customers in other countries. Three plants have now been successfully built in this way – a cryogenic generator and two membrane plants.

The cryogenic generator is linked to the European Control Center in Budapest and supplies nitrogen reliably and in accordance with each customer's specifications.

## Information Technology

Interview with **Jürgen Zöllner**, Senior Vice President IT and Managing Director of the IT company Messer Information Services

**Mr. Zöllner, the responsibilities of IT are characterised by a long-term focus but are also supposed to yield rapid success amongst users – could you give us an update?**

That's right! We continued the systematic implementation of the Server Based Computing Rollout in 2007. The project has been running since 2005 and is aimed at making the central server and IT applications available to all employees worldwide via the central data processing centre in Germany. The consolidation of databases and tools and the use of a standardised software landscape will save costs and increase the security of our data. Successful rollouts to the central server farm in Groß-Umstadt were carried out at Messer Italia and at Messer Technogas in the Czech Republic in 2007. There were partial implementations at our subsidiaries in Spain, Croatia, Belgium and Poland. Between the start of the project

and the end of 2007, the number of employees using a shared database increased from 300 to 1300.

**What new projects are you working on at Messer Information Services?**

The focal point of IT's strategic orientation has been SAP harmonisation in the Messer Group. After successfully completing the creation of a prototype in March 2007, we were able to start installing the system across the various Group companies. When SAP harmonisation has been completed in 2009, around 22 European companies of the Messer Group will be using a single SAP system. A great project! This will enable us to give our customers consistent service quality across national boundaries while at the same time increasing delivery reliability.

"This will enable us to give our customers consistent service quality across national boundaries while at the same time increasing delivery reliability."

Jürgen Zöllner



**Messer Information Services has the highest training quota in the Messer Group. What is the reason for this?**

We train IT specialists and IT management assistants – these are very popular occupations in Germany. Messer is continuing its tradition as a family business and is laying the foundations for the future of the company and the future of young people by offering a broad programme of training and advanced training. With a high training quota of 15.4 percent in 2007, we as an IT company are making a disproportionately large contribution to the training of young people. We have appointed three new trainees, thus raising the number of trainees to six. Our trainees are fully integrated into day-to-day operations. But we also have an important network that links us to the national subsidiaries: the IT managers of Messer Benelux, Messer Polska and Messer Tatragas in Slovakia have each taken on the Europe-wide role of looking after

individual IT modules and applications that are used across the Messer Group. The transfer of IT tasks to the subsidiaries promotes international cooperation and the transfer of both experience and knowledge within the Messer Group. ■



1 David Krause is one of six trainees at Messer Information Services.  
2 The Messer Information Services team at its site in Groß-Umstadt, Germany

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## Human Resources

Interview with **Dr. Jürgen Herrmann**, Senior Vice President Human Resources

"We would like to give employees at Messer the opportunity to input their ideas and play a more active part in shaping their working environment."

Jürgen Herrmann

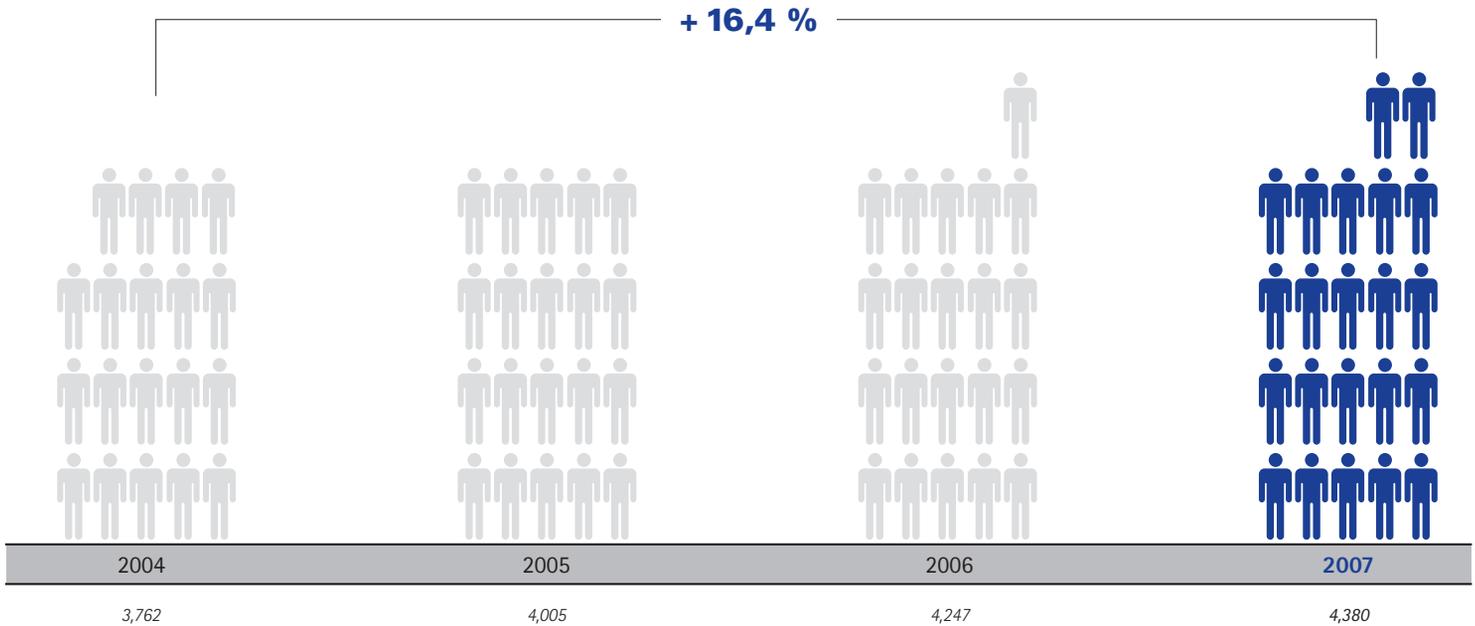


### **Mr. Herrmann, what areas did your work in Human Resources focus on in 2007?**

The Human Resources Division performs a service function for all the subsidiaries of the Messer Group and is used in different ways depending on the structure of our organisations in the various countries. Since the formation of the German associated company Messer Industriegase, until May 7 known as Gase.de, one of the main areas of personnel activity in 2007 concerned the hiring of the necessary staff for rebuilding our former domestic market. We were able to fill all the

approved positions with qualified and experienced staff who possess extensive knowledge of the gas business. Generally, our work is geared to supporting the corporate strategy. Of course our new strategic focus on strengthening our sales structure had a direct impact on personnel development. The "Sales and Marketing" function, which had previously been under-represented in the Central Functions, was strengthened. This function is now directly represented in the management, and other sub-functions have also been expanded, especially in the area of strategic marketing and the European medical business.

Employees' development



The work of Human Resources always has an impact on the future – what other foundations have you been laying?

We would like to give employees at Messer the opportunity to input their ideas and play a more active part in shaping their working environment and making the Messer Group more successful. We have issued standard guidelines for idea management in our majority shareholding companies. One of the main aims of these guidelines is to use suggestions for improvements right across the Group. These suggestions may be rewarded with payments of up to 12,200 euros. Each company nominates a representative who organises idea management in that particular company. The subject of ideas will also play a major role at the Senior Management Conference 2008. ■



The German holding company Gase.de was launched in May 2007. (f. l.) Dr. Hans-Gerd Wienands, Hartmut Böse and Stefan Messer

# Corporate Communications

Report from **Diana Buss**, Vice President Corporate Communications



Diana Buss

## A strategy developed and communicated

In 2007, the focus of Corporate Communications was on strategy development and communication within the Messer Group. Our task was to disseminate the contents of a strategy paper, which had already been prepared as part of the Senior Management Conference 2006 and subsequently

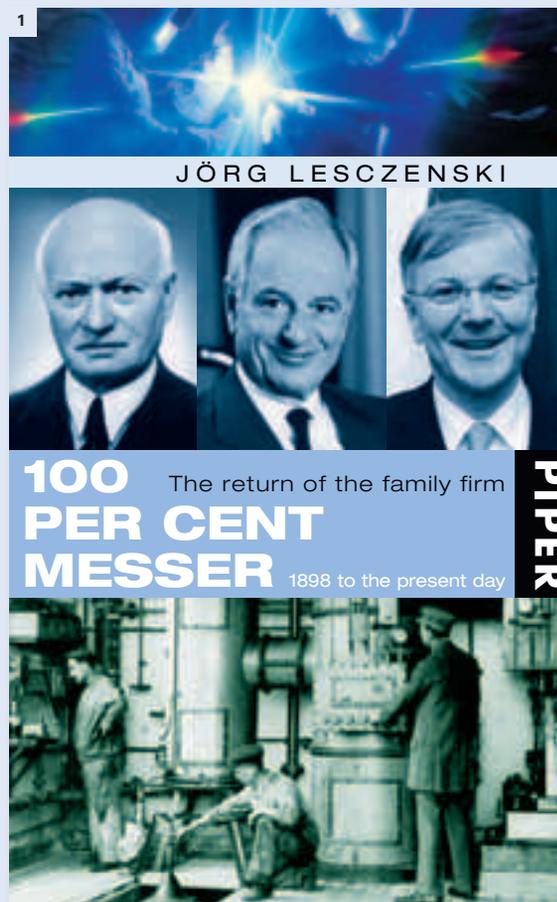
adopted in 2007, across the entire Group, in order to better integrate the employees into the process of implementing the corporate objectives. In an initial step, the strategy paper, which consists of six guiding principles, was made available on MesserNet, our corporate intranet, in 25 languages in order to facilitate a better understanding of its contents. The managing directors of the subsidiaries were responsible for familiarising their employees with the strategy paper and for introducing country-specific measures aimed at achieving the relevant objectives.

## Corporate Conference 2007 – The Messer Identity

Strategy was also the main theme of the Corporate Conference 2007 for around 60 managing directors and senior managers. For the first time, all the planned, initiated and implemented measures that were necessary for the achievement of the Messer Group's vision could be seen in their entirety – and thus the strategy process also became transparent. In addition, Corporate Communications communicated the results of the Conference in the December issue of the "messenger" staff magazine under the heading "Mission, Strategy, Investment: Messer sharpens its identity". The article on the Corporate Conference also featured a table presenting all the guiding principles, objectives and strategic measures of the Messer Group at a glance.

## New look website

The relaunch of our website, encompassing a new design was started on December 7, 2007. It is intended to clearly communicate our strategy of presenting Messer in the years ahead as an innovative, customer-centred, family business with a rich tradition. The content has been restructured and revised to make the web pages more user-friendly. There is now a major emphasis on products and technologies. The project was successfully completed in January 2008, with 21 Messer Group companies now having switched to the new-look web presence.





- 1 The newly published book on Messer
- 2 Participants of the Corporate Conference 2007
- 3 [www.messergroup.com](http://www.messergroup.com): the new internet site



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### The book "100 per cent Messer" has been published

In October 2007, the book "100 per cent Messer - the return of the family firm: 1898 to the present day" was published by the renowned German publishing house Piper Verlag. In the book, historian Dr. Jörg Lesczenski from the Johann Wolfgang Goethe University in Frankfurt/Main describes the different periods of our company's history under the leadership of Adolf Messer, Dr. Hans Messer and Stefan Messer. On the occasion of the Corporate Conference 2007, the historian gave a fascinating lecture on Messer's 109-year history as a lesson in private entrepreneurship. The author gives an informative and detailed account of how Messer was won back as a family enterprise through a successful policy of restructuring and debt reduction after the Hoechst pullout. To make it possible for the book to be written at all, it was necessary to carry out a lot of research, sourcing historical texts, photographs and graphical material. Corporate Communications supported this work throughout the whole process. At the beginning of 2008, Stefan Messer presented each employee of the Messer Group with a copy of the book in recognition of their loyalty.

### Press releases doubled

In 2007, Corporate Communications strengthened its media relations work considerably, doubling the number of articles published in the German media compared with 2006. The main focus in the business press was on our investments in Europe and Asia, often combined with a profile of owner Stefan Messer and his company. All the press reports on our investment in new production units were also published in the German trade press. The marked increase in media relations activity should help raise the public profile of the traditional Messer brand during the period of the ban on using the brand in Germany until activities in the German market are resumed in May 2008. This objective has also been supported by Stefan Messer's profile in the national media. ■

## Medical

Interview with **Matthias Thiele**, Vice President Medical Gases

**Mr. Thiele, in 2007 the Medical Gases business was defined as a core activity of the Messer Group and, in this connection, you have been put in charge of European operations. Is this a completely new field?**

First of all, let me say that we have formed a team! The Medical Gases Division consists of a team of talented people from various national subsidiaries, allowing us to guarantee a "European orientation". And no, it is not a new field. Gases such as oxygen, helium, nitrous oxide and carbon dioxide have long played an important role in medicine. There are two important quality aspects: firstly, the large number of gas mixtures for a range of medical requirements, and secondly, the purity and careful production of the gases. Our business is local, so the emphasis varies from subsidiary to subsidiary. However, we would like to become a full-service provider for gases and medical technology throughout Europe.

**What are the next steps?**

We are particularly focused on supplying our customers with medical oxygen. This already forms a component of the Medical Gases-related business activities of our subsidiaries, albeit with a potential for expansion. Our aim is to become a full-service provider in the area of respiration in each European market. From ambulances to hospitals through to home care, we want to offer a guaranteed supply of oxygen. The two market segments are called Clinical Care and Home Care. Just as important is the associated hardware, which we sell as commodities and without which we would not be competitive. Here we are supported by Laborex-Sanescor, our subsidiary in Austria, who supply us with these products. Another part of our work is developing the business with medical gases and products in Germany. In future, there is also the possibility of forming alliances that would further enhance our expertise.



"Our business is local, so the emphasis varies from subsidiary to subsidiary. However, we would like to become a full-service provider for gases and medical technology throughout Europe."

Matthias Thiele



1

- 1 *Breathe in health*
- 2 *Customer specific medical gases on-site*
- 3 *Medical oxygen from Messer helps to improve quality of life*



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**Your target groups for medical gases are sure to be different from the industries that you supply with technical gases – what are the special features?**

This is particularly the case in home care, where the customer structure is completely different and our sales structure has to be tailored accordingly. In Belgium and Italy, we have already separated the Industrial Gases and Medical Gases business areas (see box). In Italy, one in 1000 people requires liquid oxygen for respiration in old age. But we also offer the supporting back-up and medical services and conclude contracts with health authorities, physiotherapists, as well as care and transport services. Please don't misunderstand me: we don't deliver medical care, but rather are care coordinators for the benefit of our customers. ■

### Messer Medical commences operations in Italy

On January 1<sup>st</sup>, 2008, Messer Medical S.r.l. commenced operations on the Italian market. The company was formed in November 2007. It is a wholly owned subsidiary of Messer Italia and is based in Collegno. Messer Medical took on 30 employees from Medical Gases at Messer Italia and also inherited all its customers in this field. Furthermore, all the relevant licences, permits and authorisations were transferred from Messer Italia to the new company. With six distribution and production sites in



Collegno, Bari, Brugine, Naples, Rome and the Calabria region, Messer Medical has an extensive distribution network, which will enable it to grow in the future. Messer Medical will focus even more intensively on Messer's medical gas supply business. The main focus will be on developing the market for the use of oxygen and medical equipment in the

home care sector as well as medical services. To this end, the new company offers a new concept for integrated patient services, covering almost every area, such as oxygen for respiration, home care, patient monitoring, rehabilitation and artificial nourishment.



Messer Hungarogáz operates an on-site facility for nitrogen and synthetic air at the TVK chemical plant in Hungary.



“With eleven years of experience in China, we are optimistic about the future. We want to double our turnover in the next five years. It has already increased fivefold since 1996.”

*Helmut Schneider*



Helmut Schneider, Chief Executive Officer of Messer in China, knows the specific features and success factors of the Chinese industrial gases sector.

“Where there is one air separation plant, no-one would think of putting another one next to it.”

Interview with **Helmut Schneider**, Chief Executive Officer Messer China

In 2007, Messer had eleven operating companies with 15 locations in the gas sector in China. Six of these firms are joint ventures, and the rest are wholly owned. Since the beginning of its activities in China, Messer has not only concentrated on the coastal regions but has also been a pioneer in terms of investing in the Chinese inland provinces.

Helmut Schneider, Managing Director of Messer in China, names the following factors for success: knowing the market and your partner, conducting contract negotiations meticulously and remaining flexible, without abandoning the basic ethical and professional principles of the management. “At the same time, it is important not only to want to avoid making mistakes but also to learn from them”, says Helmut Schneider, explaining one of his basic principles. The industrial gases clientele in the Middle Kingdom is dominated by the big customers from the steel industry. But this is set to change.

**Mr. Schneider, the industrial gases business is very capital-intensive and its structure is completely different in China from that in Europe. How is Messer faring in China?**

Since the takeover of the Messer Group by the Messer family in 2004, we have focused on expansion and have primarily grown with our key clients. In 2005 we invested 24 million euros, and in 2006 this figure rose to 40 million euros. In the past year, 35 million euros flowed into our Chinese business, with 60 million euros planned for 2008. Thanks to the worldwide boom in the steel sector, our customers need to produce more and therefore have a greater

requirement for gases, especially oxygen, in their processes. As a result, existing locations are being expanded or new ones developed. An example of this is a new development by one of our customers in Yuxi in Yunnan Province. We won the supply contract after an invitation to tender – the customer also took part in the tender process and examined the possibility of in-house gas production. Xiangtan Steel, our partner and biggest customer worldwide, also decided last year to build a new steel plant in Yangjiang in the southern Chinese province of Guangdong. Our joint venture, Xianggang Messer Gas (XMG), will operate a production plant with an initial output of 15,000 standard cubic meters of air gases per hour, in addition to which it will build a condenser for 150 tons per day. We won the contract thanks to our strong and successful partnership.

**What is your strategy for maintaining this strong position if demand from steel producers should drop again?**

In April 2007, Zhangjiagang Messer, the youngest of our companies in China, celebrated the official opening of its air separator in the Zhangjiagang Chemical Park. Zhangjiagang Messer also produces hydrogen in the industrial

park, which is located 150 kilometers north-west of Shanghai. We built the air separation plant in Zhangjiagang independently of an important pipeline customer. From the outset, our gases are produced for customers with a broader industrial spectrum. We had previously used a similar concept in Ningbo and Foshan. We want to build more production sites like this in China in order to diversify further in the future. To increase sales of cylinder and liquid gases, we will also need to expand our sales organisation. But we are going one step further into the future: in Wujiang and Chengdu we have built plants for the production and filling of specialty gases, while in Foshan a specialty gases plant is already under construction. This is a completely new development for us in China and will represent a challenge in the coming years.

**Are you worried about the competition – is a company's corporate structure a factor in China?**

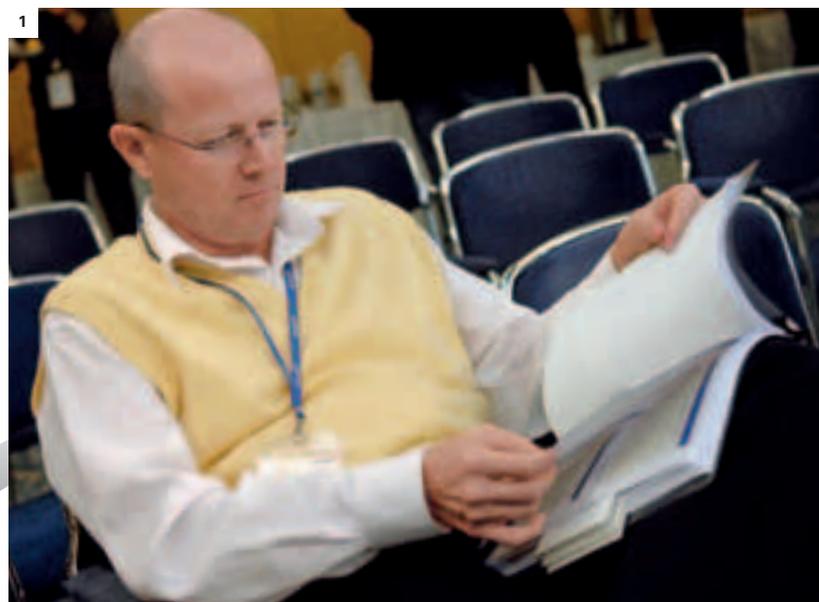
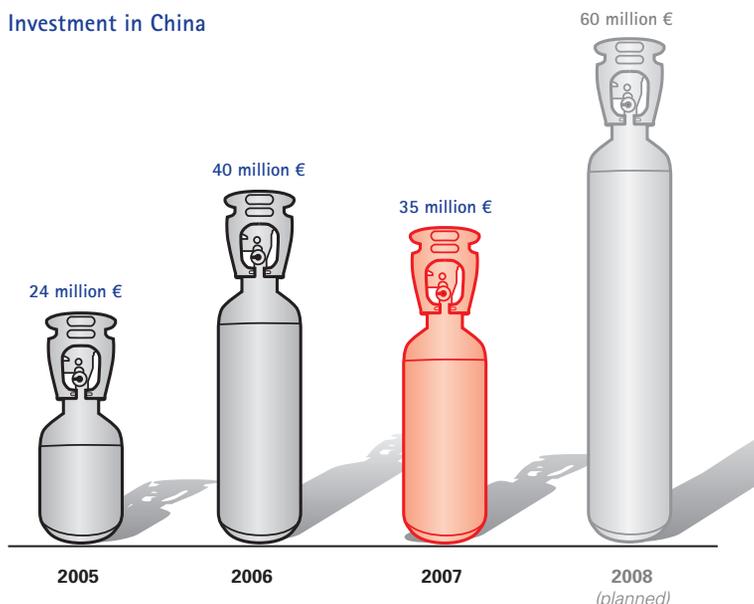
The major international competitors, in particular, continue to be very active in China, and we encounter the big names in practically every project. But local competitors – some of whom have been formed with European investor's capital – have also become much more aggressive in recent years and are increasingly enticing employees away from our sector. When it comes to awarding contracts, the size of a company is often an important factor, especially for Chinese state companies; this sometimes reduces our chances, because, as a medium-sized

company, we do not correspond to the ideas of the big state companies. Nevertheless, we are very successful because we conclude and carry out long-term contracts, building up successful and sometimes harmonious partnerships in the process. The fact that we are a family company is irrelevant here, however – if anything, it is greeted with surprise, because China does not have a medium-sized business sector on the same scale as Germany. German companies are definitely held up as an example in China: "Made in Germany", reliability, thoroughness and straightforwardness – these terms might seem like clichés to us but here they are still very much regarded as German virtues.

**How do you ensure a good working environment in this huge country with its complex structure?**

We are pleased about having a relatively low staff turnover. Our people are not that quick to leave us. There are many reasons for this loyalty, the main one being the success of the company and how our employees are integrated into this success. It is fun to work in a successful organisation. We achieve our good working environment by expecting and promoting responsibility and individual initiative; this is an invaluable motivational factor. We have a decentralised set-up, with our head office located in Shanghai, where we don't actually do any business. Our employees like our decentralised structure of responsibilities. In the area of employee communication, we are following unusual paths for China: we

**Investment in China**





2

have a staff newspaper which appears regularly. And although we had to learn to deal with factual information carefully in this newspaper in order to prevent it falling into the hands of our competitors, it has proved to be a success, especially in terms of promoting identification with the values and objectives of the entire Messer Group. Both our staff newspaper and our intranet are available in English and Chinese.



3

### MESSER IN ASIA



- *Messer is represented via 15 companies in all the major industrial centers and also in inland China.*
- *Strategic goal: Dominant position in the interior provinces*
- *Messer invests in the largest air separation plant in Vietnam.*



4 5

- 1 *Helmut Schneider*
- 2 *Management meeting in China*
- 3 *Opening of the Zhangjiagang Chemical Park*
- 4 *Xiangtan Steel's production site*
- 5 *Gas via pipeline for steel production*

# Asia



Asia – 60 percent of the world’s population – around four billion people – live on the world’s largest continent. Messer has companies in China and Vietnam. In China, Messer is represented by 15 operational companies in the best known industrial centres of the People’s Republic. For Helmut Schneider, who is responsible for the entire Asia region, it is important not just to concentrate on the coastal regions but also to be a pioneer in terms of investing in the provinces.

## Report from Asia

### Entry into new market segments in China

Rohm and Haas is one of the world's largest manufacturers of special materials. The company, which is currently building a new research and development center in Shanghai, has been sourcing its special laboratory gases from Messer since August 2007. Kern-Liebers is a German company in China specialising in the production of spare parts for precision instruments in China. The company is investing in the construction of a new factory building for its plant in Taicang in Jiangsu Province. Messer will supply the gases for the newly built heat treatment shops, including nitrogen, carbon dioxide, methyl alcohol, propyl alcohol and ammonia. Even though the customer's annual consumption is not that high, the construction of a specific on-site plant is a complicated job with high safety requirements. Messer will use the experience of this project to gain other on-site customers in China. Benteler is one of the 100 largest German industrial enterprises and is currently investing in a new production facility for automotive parts in

On-site production facility in Taicang



Research and development center of Rohm and Haas in Shanghai

Qingpu, Shanghai. Future production will require large quantities of nitrogen, oxygen, argon, carbon dioxide and hydrogen as shielding gases for heat treatment and soldering. Messer China signed the supply contract at the end of September 2007.

Stefan Messer joins German delegation

### Strengthening chemical industry networks

Stefan Messer travelled to China in June 2007 as a member of the business delegation accompanying Michael Glos, the German Business and Technology Minister. During the delegation's visit, Stefan Messer also took part in the "Strengthening cooperation in the chemical industry" working group, as the Chinese industrial gases market is also experiencing major changes.

### More oxygen, more steel

The blast furnaces in the Chinese Xiangtan steelworks in Hunan Province consume an enormous quantity of oxygen. The fifth air separation plant – and by far the biggest in the Messer Group – on the site of the steelworks, has been in operation since July 2007, ensuring such a high availability of industrial gases that Xiangtan is even able to increase its steel production from the current level of 6.5 million tons per year. Oxygen

Largest air separation plant

## Oxygen for the treatment of drinking water

The Changsha waterworks in China's southern province of Hunan has been using oxygen for the purification of drinking water since August 2007.

The oxygen is used in the production of ozone in an ozone generator. Ozone effectively rids water of organic and inorganic substances such as iron and manganese and, as a strong oxidising agent and antiseptic, is able to get rid of odours and discoloration in the water caused by organic substances. Furthermore, ozone increases flocculation in the water, thereby improving the degradability of the organic contaminants and helping to achieve rapid disinfection at a low dosage. At the same time, ozone does not produce any waste products, unlike disinfection with halogens (for example chlorine). In addition to the supply of gases, Messer also provides services for the construction, operation and maintenance of gas plants in China. At present, the waterworks treats up to 100,000 tons of water per day, which equates to a requirement of 1.4 million cubic meters of liquid oxygen per year. The capacity of the waterworks is to be doubled in the next year, and even tripled in the next five years.



*Vast dimensions: Each day up to 100,000 tonnes of water are purified by the Changsha water-treatment plant.*

Report from Asia  
 Report from Eastern Europe  
 Report from Western Europe  
 Report from Peru



- 1 Air separation plant at the Xiangtan steelworks in Hunan Province, China
- 2 Messer China supplies gases via pipeline to the electronics manufacturer Intel.
- 3 Signing a contract with steel producer Hoa Phat Steel in Vietnam.



promotes combustion and is used in furnaces to efficiently achieve the high temperatures necessary to melt steel. CMG has already built the sixth air separation plant on the site of the Pangang Group Chengdu Steel Mill.

#### **Pipeline supplies electronics manufacturer**

Messer China has moved an air separation plant to the site of the Intel factory, which has been supplied with the necessary gases via a pipeline since May 2007.

#### **Largest air separator in Vietnam**

Messer is investing around 13 million euros in the largest and most modern air separation plant in Vietnam. The air separator and gas liquefier will be built on the site of the steel producer Hoa Phat Steel. The contract for the supply of oxygen, nitrogen and argon will run for 25 years. When the production unit goes into operation, 16,500 standard cubic meters of oxygen per hour will flow into the steelworks in Hai Duong Province via a pipeline. ■

## Eastern Europe



Strengthening close customer relations is Dirk Fünfhausen's central target then, "In Central Europe, Messer's medium-term objective is to fully utilise the additional capacity that will be created by the new air separation plants. The emphasis will be on the profitable expansion of our business with existing customers rather than on a purely volume-based strategy."

"In the countries of South Eastern Europe, where the per capita consumption of industrial gases is, as yet, less than half of what it is in Western Europe, there is still huge potential in every sector of industry." So the assessment of Johann Ringhofer.

## “We have very close customer relationships, which we are strengthening all the time.”

Interview with **Dirk Fünfhausen**, Senior Vice President Central Europe, and **Johann Ringhofer**, Senior Vice President South Eastern Europe

**Mr. Ringhofer, how would you characterise the economic environment in Eastern Europe?**

*Ringhofer:* The European Union is expanding into Eastern Europe and, as a result, the framework conditions for industry are being harmonised in every country. EU standards primarily apply to quality and safety requirements. There is still a lot of foreign direct investment and labour is comparatively cheap. The further east we get, the greater the new demand for our gases. Romania, Turkey and Serbia are experiencing strong overall economic growth, which is also benefiting our sector. By making appropriate investments in these countries, we are creating an important foundation for the supply of products. Poland and Ukraine, where we are building new air separation plants, are outstanding in terms of their population density and area, and should also drive growth in that respect. Traditionally, the Messer name has a very good reputation in Eastern Europe. We are acting to the same standards as we did with our Swiss customer Lonza – nothing more, but also nothing less.



Johann Ringhofer



Dirk Fünfhausen

**Mr. Fünfhausen, what are the unique features of the Eastern European markets?**

*Fünfhausen:* We have a broader approach in Eastern Europe, with less involvement in niche markets than is the case in Western Europe. We are constantly expanding this comprehensive market position. We have long had a trans-national approach in Eastern Europe. This is mainly due to the fact that the infrastructure in the various countries is similar and developed at the same time. For Messer this translates as follows: one production unit supplies gases to customers across national boundaries. Our new air separation plant in Rybnik in Poland, due for completion at the end of 2008, will supply our companies in the Czech Republic and Slovakia, in addition to which it will supply Salzgitter AG in Germany, one of Europe's leading steel technology companies, until the dedicated air separation plant in Salzgitter comes into operation.

**Which technologies and sectors in Poland offer the best prospects for profitable growth?**

*Fünfhausen:* Of course, metallurgy is still a core sector in Poland. In the 2007 financial year, we won over 70 new customers requiring process and operating gases for laser cutting, laser welding or brazing. In Chorzów, our main location in Poland, we can fill cylinder packages with laser gases under a pressure of 300 bars, which makes us the only supplier of 300 bar packages in Poland. We have a very close working relationship with Trumpf in Poland and installed all the equipment in their manufacturing centre in Warsaw. However, we also have many projects in waste water treatment and drinking water treatment. We also supply oxygen to the booming fish farming industry in Poland as well as carbon dioxide for use in greenhouses, especially since this process avoids the expensive use of natural gas. For the food industry, we are developing innovative applications for refrigeration with liquid nitrogen or carbon dioxide. We have set the first milestone for the introduction of the Siber transport refrigeration system and are expanding our expertise in modified atmosphere packaging of food. We are expecting greater customer interest in this area thanks to growing exports to the Western European markets. With our help, the leading food producers are starting to replace preservatives with antiseptic processes involving the use of nitrogen. For example, we supply the Polish meat processing company Sokółów with liquid nitrogen for the cooling of meat products during processing and production.

**What are the main focal points in Austria?**

*Fünfhausen:* We can report successes in many different sectors at present: for example, in the Austrian construction industry, we have introduced cement cooling for another four customers. This process enables the temperature of the concrete to be controlled reliably while reducing the use of coolant. The food sector is also proving successful with three new customers for CO<sub>2</sub> greenhouse fertilisation and other contracts with food wholesalers for the installation of the Siber transport refrigeration system. In addition to Coca-Cola, Red Bull and Römerquelle, we have signed up another customer in the shape of drinks manufacturer Starzinger. For renewable energy generation at the Pischelsdorf bio-ethanol plant, Messer Austria supplies nitrogen for inerting and oxygen for cooling water ozonisation. We have a broad approach, also encompassing even the speciality gases sector. Our intensive working of the markets yielded growth of over 50 percent for krypton and helium in 2007.

**Mr. Ringhofer, you have achieved great successes in the area of food technology in Slovenia. Could you elaborate on this?**

*Ringhofer:* It is true that most of our new projects have been food-industry related, but there is still quite a lot of activity in cutting and welding. We are supplying Mercator with liquid carbon dioxide in order to produce dry ice for the Cryo2pack5 units that are used in transport





4

- 1 Messer is laying the foundation for environmental protection, health and productivity in Poland.
- 2 Messer Polska is the only supplier of laser gases in 300 bar cylinder packages in Poland.
- 3 Austria won three new customers for greenhouse fertilisation.
- 4 Cement cooling with nitrogen
- 5 Proconi freezes stuffed tomatoes and other goods.
- 6 The Mercator chain uses Cryo2pack for refrigeration.
- 7 Zoltek is our largest on-site customer in Hungary.

refrigeration. At Proconi, we have installed a tunnel freezer for rapid freezing of stuffed tomatoes, peppers and courgettes. Calcit has an annual requirement of 1000 tons of carbon dioxide for the production of calcium carbonate. Messer Slovenija is very important to our company: we are the first industrial gas supplier in Slovenia to be awarded a licence for the manufacture of medicinal products and are now able to sell oxygen for medical use in steel cylinders.

**Budapest is the head office for the South East European subsidiaries. You are running an air separation plant there as well as the Messer Control Center for the international monitoring of production plants. Hungary is obviously one country where Messer is already well established – but what are the new projects there?**

Ringhofer: We already have very close customer relationships, which we are strengthening all the time. In 2007, we more than doubled the quantity of gas we are producing for our long-standing customer Richter Gedeon, Hungary's leading pharmaceutical manufacturer, by installing a new on-site plant. Zoltek, Hungary's leading carbon fibre manufacturer, is our largest on-site customer. We secured a long-term supply contract with them by investing a further 2.65 million euros in order to expand nitrogen production. Carbon fibres are used in the aerospace industry as well as the automotive, plastics and construction industries. Fibre production involves the use of nitrogen for inerting during carbonisation of the fibres themselves.



5 6



7

One of the new customers is Hankook, the Korean tyre manufacturer, which has built its first European production facility in Hungary. Since March 2007, we have had a contract to supply 3.5 million cubic meters of nitrogen per annum until we can get a nitrogen generator installed to meet a growing demand that will reach approximately 10 million cubic meters of nitrogen a year in 2009.

**You have also established yourself as a key partner for the Hungarian food industry – what are the latest developments there?**

Ringhofer: As of this year, Waterdeep is producing a million bottles of Imola mineral water, 60 percent of which is carbonated. We are supplying 800 tons of carbon dioxide per annum, and this year a liquid nitrogen injector will come into operation as well. We are also supplying our partner Buszesz with carbon dioxide and nitrogen to provide internal pressure in PET bottles and drinks cans so that they remain stable in shape and can be stacked. The bakers

Zalaco are expanding their production and we are supporting this by means of a new cabinet freezer. Rapid freezing ensures that the products retain their high quality. Last but not least, we signed a contract with Unilever at the end of October 2006 for the supply of liquid nitrogen. It will be used for the rapid hardening of the chocolate coating on ice cream.

**In 2007, the Serbian subsidiary celebrated its 10th anniversary. How would you sum up your business activity in the heart of the Balkans?**

Ringhofer: Taking Messer and Tehnogas together, we can call on many years of experience in the gas industry in Serbia. This is the message we conveyed to our customers, partners and employees in 2007. For the third time in a row Messer Tehnogas won the best foreign brand award. The award is presented annually by the Serbian trade ministry and the Pregled newspaper. Two other German brands – Henkel and Raiffeisenbank – came behind Messer Tehnogas. The Serbian company has been awarded a HACCP certificate – mandatory in



the EU – for the safe production of gases used in the food industry. The certificate was issued by the Munich branch of TÜV, the German technical inspection agency. Even though Serbia has not yet joined the EU, certification became necessary because Messer Tehnogas supplies its gases, including CO<sub>2</sub>, nitrogen, argon and, since May 2007, nitrous oxide to the food industry and Messer companies in neighbouring EU countries. The HACCP system is audited annually.

#### How important is certification of this kind in your sector?

Ringhofer: Very important! Take Croatia for example – in the 2007 financial year, our main focus was on obtaining licences and certificates in order to consolidate our competitive advantage. Our awareness of the importance of quality assurance, for both our products and our services, was confirmed by two important licences – in September we also received the HACCP certificate in Croatia. This has allowed us to gain customers such as Coca-Cola, the

bakery chain Klara and Ledo, a supplier of ice cream and frozen fruit and vegetables. This certificate will be very important to us in the future, as Croatia is currently negotiating its accession to the European Union. The GMP licences that we received for medical oxygen and nitrous oxide have strengthened our leading position in medical gases with Croatian hospitals, where we have a very large market share. It is particularly important to underline that none of our competitors has all the necessary licences for the manufacture and sale of medicinal products. ■

### MESSER IN EASTERN EUROPE



■ *Market leader in various countries*

■ *Centers of excellence for applications in the metallurgical and industrial sector*

■ *Two production facilities for specialty gases in Austria and Hungary*

■ *Certified production of gases for the food industry and for medical applications*



4 5



- 1 The Messer Control Center in Budapest monitors all the plants remotely.
- 2 Delicious baked foods thanks to rapid freezing with liquid nitrogen
- 3 The Serbian subsidiary celebrated its 10<sup>th</sup> anniversary in 2007.
- 4 Messer Tehnogas received an award for the best foreign brand.
- 5 The Croatian subsidiary has received all the necessary licences.

## Report from Eastern Europe

### **Eastern Europe – focus on existing customers**

Iron and steel, food and environmental protection – these are the sectors that Messer sees as offering the greatest potential for the use of industrial and specialty gases in Eastern Europe during the coming years. The Messer Group predicts that the Polish and Ukrainian markets will be the biggest growth area in the Central European region. The "catch-up potential" – encompassing all its opportunities and risks – is greatest in Ukraine. Messer will be building air separation plants in Poland and Ukraine, which are due to go into operation in 2009 and 2010. In Ukraine, Messer will focus on selected regions and has signed a contract for the supply of air-derived gases via pipelines with a major Ukrainian steel producer. In South Eastern Europe, the trend for foreign investment is continuing, especially from Far Eastern countries such as Japan and Korea. Serbia and Romania are showing strong growth potential. The Turkish steel processing industry is another important market for Messer. In the Messer Group's technical center for metallurgical and industrial processes in the Austrian town of Gumpoldskirchen, technological innovations and improvements are being pursued in collaboration with customers on the basis of specific questions and issues.

Huge potential for growth in Poland and Ukraine

### **Freshness and safety for food and drinks**

The big supermarket chains have increasingly been moving into Eastern Europe and are facing the logistical challenge of keeping their perishable goods fresh during transportation and storage. However, the East European food industry is interested not only in ways of ensuring an unbroken refrigerated chain using carbon dioxide or nitrogen, but also in technologies for safe food production and filling of drinks containers.

### **Environmental trend continues**

There is a recognisable environmental trend across the whole of Eastern Europe, which is manifesting itself in the increased use of water treatment processes and emission controls, primarily through the use of carbon dioxide and oxygen. The main areas are the treatment and neutralisation of industrial waste water – including effluent from the steel industry – as well as the treatment of drinking water with carbon dioxide. However air pollution control and monitoring are also interesting specialty gas applications.

## Investment in Poland

### Future secured in the largest market in Central Europe

A foundation stone for a new air separation plant was laid at the beginning of October in the Upper Silesian city of Rybnik in Poland's industrial heartland. This is a milestone for Messer in Poland as, for the first time, it will give the Polish subsidiary its own independent air gas product supply for the largest industrial gases market in Central Europe. The investment of 30 million euros is being made in the 15<sup>th</sup> year of Messer Polska's existence. From the beginning of 2009, the plant will be able to produce technical and medical gases as well as gases for the food industry in the Polish, Slovakian and Czech markets. The plant will be one of the most modern air separation plants in the world.

### Growing environmental awareness in Poland

The environmental awareness of raw material suppliers is growing. An excellent example of this

is the project carried out at KGHM Polska Mied Legnica for the neutralisation of waste gases in sulphur furnaces and lead refining by the use of liquid nitrogen.

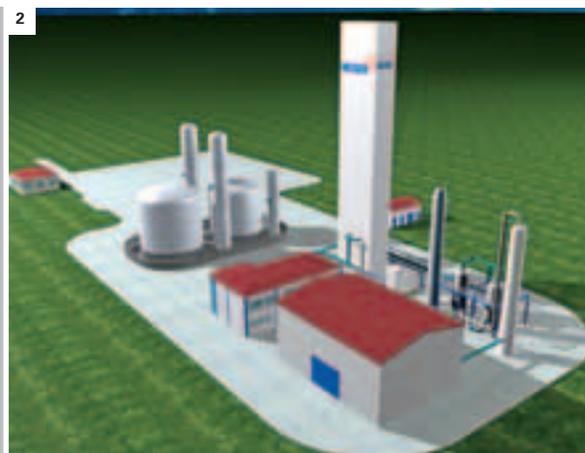
### Effective protective atmosphere

Endolin provides an example of a very effective means of creating a protective atmosphere for the heat treatment of low-carbon and low-alloy steels over a wide temperature range. The largest manufacturer of seamless steel pipes in Poland, WRJ Serwis, relies on Endolin. A roller hearth furnace has been fitted with an Endolin supply system. At the company's site in Siemianowice Śląskie, Endolin is used primarily for annealing pipes that are earmarked for export. These pipes require a particularly smooth surface, which had previously been impossible to achieve with exogas. Exports of these goods have risen markedly since the conversion.



1

1 One of the features of the pipes is their shiny surface.



2

2 Utilising the advantages of local air separators – here the model of the new plant in Poland.



Photo: Wienerberger

- 1 Blue-grey clinker bricks are extremely popular at the moment and are becoming a feature of more and more building facades.
- 2 There is a tradition of wooden houses in Austria. The appearance of weathered wooden facades can be brightened up with dry ice blasting.
- 3 The floor of the Hofkirche church in Innsbruck was embellished with dry ice.

### **Bricks get new colours thanks to nitrogen**

Blue-grey coloured clinker bricks are very popular at the moment. The colour of the bricks can be varied by reducing the oxygen in the kiln. To achieve this, nitrogen is fed into the kiln during cooling of the bricks. The brick manufacturer CRH is reacting to the new requirements of the market by installing inerting equipment at its brickworks in Gozdnica. Effective marketing and a good knowledge of the market enabled Messer Polska to clinch the nitrogen supply contract for this customer.

### **Technical consulting successful in Austria**

Systematic technical consulting for inert welding gases directly at the customer's premises has proved effective, with increases in sales of argon and argon mixtures. The exchange of experiences right on site contributes significantly to a successful customer relationship and will continue to be an important business development tool in the future.

**Exchange of experiences with customers**

### Creative use of dry ice blasting

The commissioning of the des CO<sub>2</sub> pelletiser in Schwaz (Tyrol) means that Messer Austria now also has a dry ice production facility in the west of Austria. Our know-how and collaboration with Asco Carbon Dioxide are contributing significantly to the continued expansion of our dry ice business. We have already carried out creative and successful operations: for example, cleaning with CO<sub>2</sub> is the perfect way of getting rid of graffiti without the need to mask window frames, panes or plastic parts and without subsequent cleaning – as is the norm with sand blasting and high pressure water blasting. In mountainous regions, wooden facades are traditional on houses, but rain and sunshine quickly weather the wood. Dry ice blasting allows the weathered surfaces to be rapidly stripped, which brightens up the appearance of the wood again. This process avoids the dirt produced by sanding and stripping by hand or by machine and there is no need for time-consuming

masking either, since the dry ice pellets do not cause any damage to windows. Since 2007, visitors to the famous Hofkirche church in Innsbruck, Austria, have been able to admire the new splendour of the floor mosaics. Broken tiles and dirt on the marble floor of the 450 year old basilica made it necessary to carry out restoration work. The use of dry ice blasting made it possible to clean the floor's marble texture, including around the altar, which is a protected monument. Compared to conventional cleaning with chemical solvents and steam blasting, dry ice blasting was much more gentle and thorough. One desirable side effect was that our process skimmed down broken areas of marble for subsequent restoration. An extraction system kept dust to a minimum. Compared to conventional procedures, cleaning with dry ice is a much more economical and environmentally friendly method and therefore a genuine alternative.

Giving wood surfaces a new shine



2 3

### Waste gas cleaning in the Czech Republic

Messer Technogas won two contracts for the DuoCondex process in November 2007. At Ivax Pharmaceuticals of Opava, the Czech Republic's leading pharmaceutical manufacturer, the waste gas is being cleaned by a nitrogen system. Another DuoCondex facility was put into operation at D+P Rekont for the environmentally friendly recycling of refrigerators.

### Pure water thanks to pure oxygen

The injection of pure oxygen helps to clean waste water in the modern industrial effluent treatment plants of chemical company Spolchemie and pulp producer Biocel. Both Czech companies had been anticipating sharp increases in pollution. The oxygen transfer in the biological treatment stages has now been increased; this involves the use of state-of-the-art injector technology from Messer, which ensures simultaneous oxygen injection and wastewater circulation.

Messer's injector technology

### Crystal-clear success

In January 2007, our Czech subsidiary delivered four oxygen burners for glass furnaces to Sklárna Heřmanova Hut', who have an annual oxygen demand of around three million cubic meters.

### Carbon dioxide – the way to a better environment

Environmental awareness in companies is changing – backed up by tighter legislation on the protection of air, soil and water. The Mlékárna Klatovy a.s. dairy in the Czech Republic is the first company in Central Europe to convert its waste water neutralisation plant from sulphuric acid to carbon dioxide from Messer. This simplifies the technological process while at the same time reducing the costs for maintaining pH by 36 percent.

Lowering costs in waste water neutralisation

### Dry ice cleans plastic

OLHO-Technik Czech uses the advantages of the new snow blasting method with carbon dioxide to clean plastic parts for the automotive industry. The snow is applied to the surface with compressed air.

## Hot and cold delicacies

Blinis with beluga caviar from a nitrogen barbecue, cryo-raspberry meringue, washed down with a Bloody Mary nitro – what sounds like a festive menu for astronauts aboard the International Space Station is actually the latest craze among devotees of molecular cuisine: cooking with nitrogen. Pushing the boundaries of the traditional art of cooking, the new sorcerers of molecular cuisine combine know-how, experience, chemistry, physics and science. In this way the transfer of technology



*Pamper your palate: cooking with nitrogen offers completely new culinary possibilities.*

between cooking and biotechnology, coupled with the creativity of the chefs, is leading to enhanced taste and enjoyment, culminating in an explosion of the senses. With only a few ingredients they can conjure a range of amazing effects – the sky is the limit as far as imagination goes: cold and frozen to minus 70 °C on the outside, with a warm filling at plus 20 °C on the inside. Contrasts such as this can be achieved in a single dish and truly deliver a spectacular and memorable culinary experience.

The ultra-fine particles of the snow jet remove the production residues, such as release agents and fats. In contrast to conventional cleaning with water, the new method does not require subsequent drying and therefore saves time. Messer won this new customer in the Czech Republic thanks to recommendations from the paint finishing systems manufacturer Vanjakob and the snow gun manufacturer mycon.

**Contract with Arcelor Mittal Ostrava renewed**

A new ten-year contract has been signed with ArcelorMittal Ostrava for the supply of gaseous oxygen, argon and nitrogen. This significant step sees Messer continuing a business relationship with the largest steel producer in the Czech Republic that dates back to 1993.

New contract



*1 State-of-the-art technology simultaneously provides for injection of oxygen and circulation of waste water in industrial effluent treatment plants.*

*2 OLHO-Technik uses dry ice to clean production residues off plastic parts.*

*3 The wastewater that is generated during the production of milk products is neutralised with CO<sub>2</sub>.*



1 Mushroom cultivation requires liquid carbon dioxide.

2 Elme Messer Gaas supplies nitrogen to Sillamäe among others.



Cooperation and supply contracts

**More gas for coal mining**

The contract with our on-site customer OKD, DPD a.s. for nitrogen supplies in coal mines, which was signed at the end of 2006 and is due to run until the end of 2015, was updated in the 2007 financial year as the customer is anticipating greater nitrogen demand for coal mining.

**Nitrogen for sea port**

2007 marked the beginning of a five-year collaboration between Elme Messer Gaas in Estonia and AS Alexela Sillamäe, operator of an oil terminal at the sea port of Sillamäe. Messer installed a nitrogen tank at the customer's site.

**New contracts in Lithuania**

Elme Messer Lit in Lithuania has signed gas supply contracts with five new customers in the laser manufacturing sector. Elme Messer Lit supplies liquid carbon dioxide to Baltic

Champignons for cooling compost to be used for mushroom cultivation. Since the summer of 2007, the Lithuanian Messer subsidiary has been supplying Statoil's first Baltic bio-diesel plant with liquid nitrogen for inerting.

**Nitrogen for mobile phones**

Messer is supplying Elcoteq Tallinn in Estonia with nitrogen. The subsidiary of Elcoteq SE, the largest European electronics manufacturing services provider for communications technology, is therefore one of Messer's most important electronics customers in the region. Due to the continuing trend towards miniaturisation of components and printed circuit boards, Elcoteq Tallinn, a manufacturer of mobile phones, wireless modules and cordless phones as well as equipment for communications networks, requires large quantities of nitrogen for use in soldering during the manufacturing processes.

### Refrigerator recycling in Lithuania

Elme Messer Gaas received its first order to supply nitrogen to the newly built refrigerator and electronic equipment recycling plant. The plant is the first of its kind in the Baltic states and has been operational

since January 2007. Over the next five years, Elme Messer Gaas will supply around 740,000 cubic meters of nitrogen to the recycler. Elme Messer Gaas therefore holds a 90 percent market share in Lithuania and is further consolidating its leading position.

High market share

## CO<sub>2</sub> neutralises alkaline river water

At the Narva Elektriijaamad power station in Estonia, oil shale is burned to generate electricity. Oil shale is the name given to sedimentary rocks that contain bitumen or non-volatile oils. Burning them generates energy. What is left behind is ash. This ash is transported by means of water from the furnace to the disposal site. Here the recirculating transportation water is stored for the interim in a pond next to the disposal site. In order to regulate the water level of the pond, it is necessary to discharge the water into the river Narva. Since the water is highly alkaline as a result of transporting the ash, it needs to be neutralised before being

discharged into the river. Originally, this was done by adding hydrochloric acid. Since the river, which is 78 kilometers long and forms the border with Russia, is a very important as the source of drinking water for Narva, the third largest city in Estonia, the power station operator opted for the environmentally friendly alternative from Messer: neutralisation of waste water using CO<sub>2</sub>.

### *One hundred percent effectiveness of carbon dioxide*

The neutralisation of the alkaline water with carbon dioxide offers particular advantages:

it is economical in terms of investment and use, there is no ecologically harmful salination of the water with chlorides or sulphates, and the CO<sub>2</sub> is easily dosable. Around 2,000 kilograms of liquid carbon dioxide is added per hour to the effluent, where it dissolves completely to form carbonic acid. The mildly acidic carbonic acid neutralises the alkaline water and, moreover, is completely harmless to humans and the environment since it is a natural component of drinking water. Thanks to the carbon dioxide being added in liquid form, there is no need to vaporise it beforehand, which saves energy.



The Narva Elektriijaamad power station in Estonia treats its waste water with CO<sub>2</sub>.

Photo: Narva



Experts from Messer check the quality of water that has been treated with carbon dioxide.



1 2

### **New customers for Messer Tatragas**

The Slovakian subsidiary, Messer Tatragas, has won attractive new customers such as Sachs Levice a.s. and Lear Corp. Prešov, who are both being supplied with welding argon. At Caurmeuse Košice, Messer Tatragas has installed a carbon dioxide extinguishing system. Messer has built a hydrogen station for U.S.Steel in Slovakia. This is used to produce the right furnace atmosphere during annealing.

### **Gases are “foodstuffs”, including in Slovakia**

Gases that are used in the food and beverage industry are subject to strict legislation since using them means they themselves become “foodstuffs”. Messer in Slovakia has been awarded ISO 9000 certification along with the HACCP certificate: Messer’s production, warehousing and distribution thus meet the strictest quality standards for technical gases in the food industry in line with European directives.

### **Plant modernised**

Messer Slovnaft has increased the nitrogen output of its backup for the Slovnaft refinery from 4,000 to 10,000 standard cubic meters per hour. At the same time, the Slovakian subsidiary has modernised the filling plant for forming gas and medical oxygen.

### **Air separator at ArcelorMittal in Bosnia-Herzegovina**

ArcelorMittal is expanding production at its Zenica steelworks in Bosnia-Herzegovina and has negotiated a supply contract with Messer for oxygen and argon in order to cover its demand for industrial gases. In the short term, Messer has modernised the existing oxygen production unit, enabling it to produce the oxygen required for this development phase on site. At the same time, a new air separation plant will gradually be built, which will meet the steel plant’s full demand for industrial gases from the middle of 2008. The challenge facing Messer is to supply the steel producer with over 15,000 cubic meters of oxygen per hour starting in the middle of 2008. Messer has put together a flexible concept with Arcelor-Mittal and is investing 20 million euros in the new air separation plant.

Investing in a flexible concept

### **Wind of change in Bosnia-Herzegovina**

Organisational changes were implemented at Messer Sarajevo Plin in 2007. Staffing adjustments have brought a wind of change into the company: the introduction of new methods in administration, sales and technology has led to results continuing to exceed targets. Sales are 18 percent above projections and twelve percent up on the previous year, thanks mainly to the increase in sales of liquid oxygen to ArcelorMittal Steel as well as the sales of welding gases.

Strictest quality standards

- 1 A drop of nitrogen ensures stability.
- 2 Amber fuel: the oil from rapeseed, sunflower seeds and soya beans is used to make bio-diesel.
- 3 Messer is supplying oxygen to the hospital in Mostar.



### Hospital in Mostar

Since spring 2008, Messer Mostar Plin has been supplying oxygen, nitrous oxide and liquid oxygen to the hospital in Mostar, which has moved to a new building.

### Messer in Romania supports TMK

Messer works in tandem with its customers: at the premises of the steel pipe manufacturer TMK in Resita, Romania, the Messer Group is building a 20 million euros air separation plant for the production of nitrogen, oxygen and argon. The Russian pipe manufacturer TMK (Trubnaya Metallurgicheskaya Kompaniya) is the second largest manufacturer of steel pipes in the world. When the air separation plant in Resita comes on stream – planned for July 2009 – Messer will for the first time have its own production plant in Romania. The air separator will supply oxygen, nitrogen and argon for local manufacturers and medical oxygen for hospitals and the home care of patients.

### Sparkling carbon dioxide for Romanian Coca-Cola

Messer Romania Gaz has taken a major step forward in the fiercely competitive Romanian beverage market: since March 2007, the soft drinks producer Coca-Cola has been getting its carbon dioxide from Messer in Romania. Messer Tehnogas and its excellent partnership with Coca-Cola were key to this success.

### Working quickly leads to success with customer

Speed can be a decisive factor. The willingness of Messer in Romania to make decisions at short notice has convinced Gormet, the Romanian subsidiary of the German company IEV, to enter into a long-term partnership. The metals engineering firm in Cluj requires the liquid gases argon, oxygen, CO<sub>2</sub> and acetylene in its production processes.

### Laboratories equipped in Macedonia

In Macedonia, Messer has equipped the laboratory of the firm Makpetrol as well as the laboratory of the Institute of Veterinary Medicine in Skopje.

### New company in Albania

Messer Albagas, our new Albanian subsidiary, was formed during the 2007 financial year.

### Serbia fills up with bio-diesel

In Serbia, the country's first bio-diesel production plant went into operation in the summer. In addition to bio-diesel, methanol storage tanks are also in place on-site at the Victoria Oil refinery in Šid near Novi Sad. Nitrogen is added to the methanol tanks as well as to the tanks with the finished bio-diesel. This protects the methanol and bio-diesel against moisture and atmospheric oxygen, thereby preserving high quality and preventing explosions.

### Purely a matter of taste

Even when filling still drinks, nitrogen ensures the preservation of taste and longer lasting freshness because it displaces oxygen. In the past few years, Messer in Serbia has put more than 20 liquid nitrogen injectors into operation in the edible oil and beverage industry. Approximately 250 tons of "food quality" liquid nitrogen per year are used for these applications in Serbia.

Gases for the metal industry

First independent production facility

### Symposia for wine-growers in Hungary

In May and June 2007, Messer in Hungary organised symposia for Hungarian wine-growers from Tokaj and Villány, the most important Hungarian wine-growing regions. The visitors were given demonstrations of possible uses for our gases, from the treatment

of grapes through to the serving of wine. Additional expert support was provided by the Corvinus University in Budapest: professors from the Faculty of Food Science's oenology department presented positive research findings in support of the advantages of using gases in the treatment of wine.

### Benefits for wine growers

## Customer links – by pipeline

Messer in Hungary has found an optimum way of supplying two partners with one on-site facility. Thanks to the geographical location and the good contacts with our partners TVK and Columbian, we were able to implement a remarkable technical project.

At the premises of the Hungarian TVK chemical plant in Tiszaújváros, Messer Hungarogáz is operating an on-site facility for nitrogen and

synthetic air. Columbian Tiszai Koromgyártó Kft is situated right next door to TVK. Columbian produces carbon black by burning oil and was seeking to increase its production capacity: one way of doing this is to increase the oxygen content of the air in the carbon black production process. The on-site facility at TVK produces waste gas with an oxygen content of 35 percent – more than the air in our atmosphere, which has an

oxygen content of 21 percent. This waste gas, which is normally released into the atmosphere, can be put to good use though – in the production processes at Columbian. Last year, a pipeline was built between Columbian and our on-site facility at TVK. The construction was preceded by an extensive survey and planning process because the production process at Columbian is very sensitive to the oxygen content of the air used in the process. Precise checks needed to be carried out to determine whether the oxygen content could be regulated precisely during the production process. This is necessary in order not to put the reactors in the carbon black plant at risk. We can now sell the residual gas to Columbian on the basis of a long-term supply contract.

### Carbon black for tyres

Carbon black is an indispensable material in the manufacture of tyres. It is not required for the colouring of the tyres, instead the use of carbon black influences the mechanical and physical properties of the tyres. The quality of tyres depends to a large extent on the quality of the carbon black and therefore on the reliability of Messer Hungarogáz.



TVK and Columbian are connected by a pipeline.



- 1 Research backs up the advantages of using gases in the treatment of wine.
- 2 Special products from a single source: In Hungary, Messer supplies the pharmaceutical manufacturer Servier with gases and gas mixtures as well as providing all the laboratory equipment.

### Equipping the laboratory

#### Contribution to pharmaceutical research

The pharmaceutical manufacturer Servier has decided to build a new pharmaceutical research laboratory in one of the most modern industrial complexes in Budapest. Servier has entrusted the job of installing all the laboratory equipment to Messer. The contract, which defines the framework conditions for this long-term collaboration, was signed at the beginning of November 2007. The laboratory, which is expected to be completed in 2008, will be supplied with high-purity gases and gas mixtures by Messer Hungarogáz.

#### Messer in Bulgaria

The Bulgarian company Messer Chimco Gas has been run as a wholly owned subsidiary of the Messer Group under the new name of Messer Bulgaria since 2007. Messer is a household name in Bulgaria, particularly in the area of laser gases and shielding gases for welding. But new applications, too, led to contracts being won, for example with Lactina, who freeze starter cultures with liquid nitrogen, or Alcomet, who use liquid nitrogen in the Incal process for aluminium extrusion.

#### New basis for growth in Turkey

Messer Aligaz now supplies 48 of its customers on site using tankers and liquid gases. The strong growth in this area is evidence of the good and promising development of the business in Turkey: in the past five years, annual customer demand has grown from 7,000 to 14,600 tons. Messer Aligaz currently fills 185,000 gas cylinders per year into its own gas cylinders and packages as well as a significant number of customer-owned containers. Messer Aligaz uses so-called rangers – 180-litre liquid gas exchangeable containers – as an innovative distribution method, primarily for supplying hospitals. Messer Aligaz counts numerous well-known firms among its customers, including BASF, Bosch, Elektrosan, ISA, Renault and Valeo. Another important partner is the Deniz Endüstri shipyard, which our Turkish colleagues supply with CO<sub>2</sub> via a 22,000-litre tank. The planned construction of an air separation plant, which is due to go into operation in 2009, will provide an even broader basis for Messer's strategic growth in the region. ■

### New production plant

## Western Europe



Western Europe – each country is different with local structures having grown over many years. For Messer this means, for example, strengthening the cylinder and bulk gas business in France whilst expanding the pipeline business in Spain. For Egon Glitz, Head of Messers Western Europe region, it is important that in each country individual strategies are sensibly formulated and consistently applied. “We can’t do everything”, he says, “but everything that we do, we can do well.”

## “We take individual strategic routes in each European country.”

Interview with **Egon Glitz**, Senior Vice President Western Europe

### **Western Europe, that sounds a bit like “old economy” and heterogeneous market – to what extent does this also apply to the activities of Messer?**

The gas market in Spain, Portugal, France, Belgium, the Netherlands, Denmark, Italy and Switzerland is, indeed, by no means uniform. Our business in these countries varies considerably depending on the local structures. Medical gases are becoming increasingly important, especially the home care sector in Italy and Belgium – an example of this is the acquisition of the Belgian medical technology company OxysphAir by our subsidiary Messer Belgium. Also unique is our pipeline network in Spain – at the industrial complex in Tarragona near Barcelona – via which we supply the chemical and petrochemical companies that are based there with oxygen and nitrogen. Building on this, we are noticing a dynamic development in the cylinder and liquid gases sector. Our investment in a new air separation plant, from which we obtain our products through cryogenic separation of air, represents an important step towards security of supply. The construction of the new production unit and a gas liquefier in El Morell is undoubtedly a significant step in terms of the future of Messer in Spain as well as for joint projects within the Messer Group with major European companies.

### **Apart from safeguarding existing business, what else does the expansion of production capacity in Spain represent?**

The new plant, which is due to go into operation in June 2008, will guarantee us product independence for gaseous and liquid oxygen and nitrogen as well as for argon. The air separation unit in Vilaseca that is currently in operation can therefore be maintained as a back-up plant in order to guarantee the pipeline and bulk supplies. The acquisition by the Messer Group of its competitor Air Products' shares in Messer Carburos was another step towards guaranteeing our independence. This means that the Spanish subsidiary is wholly owned by Messer for the first time since its formation. The company's name was changed to Messer

Ibérica de Gases at the beginning of 2008. The construction of a new filling plant in Alicante was targeted as the next step in the development of the company. This plant is to be completed by the end of 2008 and will contribute to consolidating our presence in the south-east of Spain. This will relieve the pressure on our Vilaseca plant and increase overall production capacity and profitability while also strengthening our position in the attractive markets of Catalonia and Levante.

### **Turning our attention to France, to what extent does your business reflect the French lifestyle?**

France is renowned for its cuisine – it is therefore no accident that we introduced a product range called “Gourmet” in 2006. Gourmet is a range



Egon Glitz



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of gas mixtures that are used in food production and processing. France is our biggest market for the use of CO<sub>2</sub> in food technology. We have a CO<sub>2</sub> production facility in Lavéra in the south of France and another two plants in Nangis and Rouen. We maintain our leading position through supply reliability and innovative technology development. At our food technology centre in Mityr-Mory – near Paris – we work on new applications together with our customers. Technologies designed to ensure an uninterrupted cold chain with the aid of dry ice are enormously important in this regard. One example is the patented Cryo2pack technology, which allows dry ice bags to be produced safely and cost-effectively: in 2007, Carrefour Logidis decided to gradually equip all its locations with this technology. For a start, Messer France leased two Cryo2pack5 units to the Plaisance du Touch location near Toulouse, coupled to a supply contract for 1,800 tons of liquid CO<sub>2</sub> per year. The contract with Carrefour Logidis is an important milestone in the marketing of this technology, since the company is one of the biggest references in the food market.

**What strategies are you pursuing in Belgium and the Netherlands?**

In Belgium, we have a company – formerly Oxydrique – that is over 100 years old. In the Netherlands, on the other hand, we have been active in the industrial gases market for “only” 15 years. In our business, you need at least ten years to develop a decent market position. In Belgium, the development of our existing business has a very high priority – we rely on service, new technologies and safety. In Machelen, a new “safety room” for

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the production of reactive gas mixtures went into operation in 2007. In the Netherlands, meanwhile, we want to gain new customers – primarily in the metal construction industry – through our technologies in cutting and welding. Right across administration and logistics in Benelux, we make use of synergies in order to ensure that customers are supplied cost-effectively and on time. Another very interesting area is the use of carbon dioxide in greenhouses. When it comes to greenhouse cultivation, the objectives of horticultural businesses are, of course, primarily commercial. Plants are therefore often “fertilised” with carbon dioxide to enhance growth. It is easier and cheaper to do this with pure CO<sub>2</sub>. In the greenhouse atmosphere, the concentration of carbon dioxide – which is absolutely crucial for photosynthesis – steadily declines during the day due to its consumption by the plants. However, this deficiency can be corrected by a targeted addition of CO<sub>2</sub> in combination with light.

Traditionally, the greenhouses are heated with natural gas and the CO<sub>2</sub> that is generated in the combustion process is cleaned and fed into the greenhouses. The use of pure carbon dioxide from gas cylinders or storage tanks to replenish CO<sub>2</sub> levels in greenhouses saves costs.

**Italy – the immediate associations are “solidarity” and “family”. Do you have this solidarity with your customers?**

Yes, I do think that there is a certain solidarity between us as a family business and our owner-managed customers. This is very much a feature of the infrastructure in the north-east, in the very dynamic Veneto region – this is good for us in the area of food technologies and welding technology. There are a large number of small specialised family-owned companies in Italy. For example, we have a customer who operates a laser facility day and night with family members and supplies the automotive industry.



3 4



- 1 Plants in greenhouses are “fertilised” with CO<sub>2</sub> to enhance growth
- 2 In the French town of Mitry-Mory, Messer runs a specialised technical centre for the development of technologies for the food and beverage industry.
- 3 The Cryo2pack technology facilitates safe and cost-effective filling of dry ice bags for food transport refrigeration.
- 4 The Gourmet brand covers all food gases, be they pure gases or mixtures.

**In Italy you get your CO<sub>2</sub> from a natural source. Is this not environmentally problematic compared with CO<sub>2</sub> extraction from industrial waste gas?**

Absolutely not! CO<sub>2</sub> from natural sources is constantly escaping into the atmosphere. We capture it and clean it for use in food and beverage applications in particular. San Pellegrino is a very attractive customer in this regard. San Pellegrino produces "natural mineral water" enriched with "natural carbon dioxide". I would like to emphasise that all the carbon dioxide we produce and sell may be regarded as "green CO<sub>2</sub>". We use CO<sub>2</sub> which would otherwise be emitted; it is used primarily as a coolant because conventional cooling uses a lot of energy. By providing an economic use for CO<sub>2</sub>, for example in water treatment and pH neutralisation, we are avoiding environmental pollution – this is true for us and all our competitors.



**1** Signing the contract at Lonza AG: (left to right) Klaus Kalbermatter, Visp Site Manager Lonza AG, Stefan Messer, CEO Messer Group GmbH, Lukas Utiger, Head of Organic Fine Chemicals and Performance Chemicals Group Lonza AG, Wolfgang Pöschl, Managing Director Messer Schweiz AG

**2** Carbon dioxide from Messer Italia's natural source gives sparkle to, among other things, the natural mineral water of San Pellegrino.

**3** Messer Schweiz is the specialist in speciality gases and mixtures.





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### And finally Switzerland – small but smart?

Indeed! Messer in Switzerland is our specialist. The cylinders are optimally maintained, and the filling quantities are small, reflecting the size of the market. We have a huge amount of expertise in specialty gases there and produce for both Western and Eastern Europe. Another strong point is our steam reformer for the production of high purity hydrogen. Messer Schweiz is the leader in Switzerland and the Messer Group when it comes to the filling of high purity helium using 300 bar technology. Another unique feature is that the Lenzburg-based company produces its energy ecologically at its own hydropower plant. But it won't be small for much longer. Messer has signed a deal with Lonza to build an air separation plant. Messer Schweiz is investing around 33 million Swiss francs in the production unit on the Lonza AG site in Visp/Lalden in the Swiss canton of Wallis. Lonza is the world's leading manufacturer of chemical and biotechnological ingredients and products for the life sciences industry. In Visp/Lalden, Messer will produce the industrial gases oxygen, nitrogen and argon for Lonza and the Swiss and Italian markets as well as medical oxygen for the hospital and home care sector. With this production facility, Messer Schweiz AG now has one

of the most comprehensive product portfolios in the country and is ideally placed for further market expansion. The collaboration between Messer Schweiz and Messer Italia is a good example of international cooperation within the Messer Group. ■

## MESSER IN WESTERN EUROPE



- *Country specific strategies for market cultivation*
- *Expansion of production capacities in Spain*
- *Maintaining our leading position in France*
- *More service, new technology and safety for Benelux*
- *Italy: customer structure shaped by family businesses*
- *New Swiss production unit in Visp/Lalden supports market expansion*

## Report from Western Europe



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### **Foundation stone for a secure future in Spain**

"A European Messer company should build a new air separation plant once every generation", is a wise old Messer saying. The former Messer production facility in Vilaseca, which was built in 1977, is soon to be replaced, for the company has invested almost 40 million euros in one of Spain's biggest air separation plants at El Morell. "The laying of the foundation stone in March 2007 was an important milestone for the employees of Messer Ibérica, as the new plant will ensure



## Investment in El Morell

security of supply for our customers and therefore a secure future for us", says Karl Hauck, Managing Director of the Spanish company. Messer Ibérica has 79 employees at the Vilaseca site on Catalonia's Costa Daurada, the golden coast. Together they prepared the celebration to mark the laying of the foundation stone and received 85 guests from industry and politics. A foundation stone is not only the starting signal for the team from Messer, it also moves the project from the planning table into the public spotlight. And the public needs to know that money is being invested, that jobs are being created and, above all, that the supply of gases – as important as water and electricity in many processes – is secured. Messer continues to supply nitrogen and oxygen to the most important chemical and petrochemical companies at the Tarragona industrial complex via its own 90-kilometer pipeline network.

- 1 Egon Glitz and Karl Hauck, Managing Director of Messer Ibérica de Gases, are jointly developing the strategy to expand the Spanish business.
- 2 The new air separation plant in Tarragona, Spain, is almost complete.
- 3 The employees of Messer France met in the new filling plant in Folschviller.



## Move to new locations in France completed

With effect from January 2007, Messer France's new head office is in Puteaux in the west of Paris, near the La Défense business centre. The move was made necessary by expensive renovation work in the old office building in Asnières. Messer now has a six-storey building with several training rooms. Furthermore, a newly opened, fully automated 300 bar filling plant in the east of France opens up a new region for us: Messer France's newest filling plant in Folschviller, near the border with Germany, went into operation in June 2007. An automated filling system developed by Messer facilitates accelerated and safe filling of gas cylinders with pure gases and gas mixtures up to a pressure of 300 bar. Messer also ensures the traceability of its products along the entire logistics chain to the customer.

## High pressure in Denmark

An investment of around two million euros has made Messer the first supplier of 300 bar gas cylinders in the Danish market. A new filling plant for these cylinders was officially opened and put into operation in Kolding, the centre of the Danish stainless steel industry, at the end of January 2007. The successful 300 bar technology primarily has economic advantages as it offers consumers increased content, and consequently longer application times, for the same size of gas cylinder.



Messer Denmark in Kolding is the first supplier of 300 bar gas cylinders in Denmark.

- 1 Since April 2007, Messer Belgium has been carrying out a third of its cylinder deliveries to the gas centers at night to avoid traffic congestion and save costs.
- 2 All cylinder movements can be recorded via a barcode on the cylinder neck.
- 3 The Home-Care business in Italy is especially growing. Messer has reacted to this by opening more production sites for medical gases.



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**Linde and Messer producing as LiMes**

Limes is investing around 20 million euros in a production facility for air gases in Saint Herblain near Nantes. The joint venture, in which the French subsidiaries of the German industrial gases specialists Linde AG and Messer Group GmbH have equal stakes, was formed in Paris at the end of 2006 specifically for this project. The plant is expected to go into operation in May 2009.

Joint venture in Saint Herblain

**Freshly packed in Belgium**

When we buy groceries, we increasingly want freshly packed meat, vegetables or salads. We want them to be healthy and appetising. The food industry has anticipated this trend – Messer Benelux is experiencing a substantial growth in the use of MAP gases (Modified Atmosphere Packaging). Our customers are looking for a gas partner with extensive know-how. The Gourmet range of gases is becoming increasingly important as gas cylinder turnover increases in Benelux. Messer Benelux introduced the BABEL cylinder tracking system in 2007. All new cylinders have been labelled with bar codes since 1998. Today, a complete record is kept of all cylinder movements between filling station, distribution centers and gas centers. The advantage of this is that there is precise registration right through to the customer's premises.

Successful new Gourmet range

## A signal for customers and colleagues

On May 1<sup>st</sup>, 2007, a new nitrogen filling plant for 300 bar cylinders went into operation in the Netherlands. Marina De Ridder, ComManager of Messer in Moerdijk, asked plant manager Peter Huijbregts about the investment.

### Why has this new plant been installed?

Messer B.V. has been able to increase sales of nitrogen by around ten percent in the past three years. Previously, nitrogen for the Dutch market was filled in Belgium. Now, 320,000 cylinders per year are filled in Moerdijk and delivered to customers – our own filling plant has made us much more productive. The management has thus given a major vote of confidence in the future of Messer B.V. in the Netherlands.



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## Night deliveries reduce costs

Since April 16, 2007, Messer Belgium has been carrying out 30 percent of its cylinder deliveries to the depots at night. Messer is the first supplier in the gas sector in Benelux to take this step, thereby strengthening its competitive position. It is no longer unusual to spend two hours in a traffic jam on daytime journeys and since there are seldom any traffic jams at night, the operating time for both vehicle and driver is reduced. This measure has reduced transport costs. Another advantage is that this brings Messer Benelux into line with the new EU regulations, which strictly regulate the driving and working hours of drivers. An important issue for the Messer management was the provision of additional safety measures for drivers on night-time journeys. To this end, all the drivers are issued with mobile phones. The drivers carry their mobile phone in their breast pocket. If the phone is moved out of the upright position, it alerts the driver after a few seconds. If the driver fails to answer, the mobile phone sends a signal to an external monitoring service. The driver can be located via the phone's built-in GPS receiver, allowing assistance to be sent to him at all times.

Safety for drivers

## Production expanded in Italy

In March 2007, Messer Italia's new 300 bar cylinder filling plant for technical gases went into operation in Brugine, near Padua. This led to a 14 percent increase in production in just three months. In the summer of 2008, another filling plant will come on stream in Settimo Torinese. Since 2007, Messer Italia has been allowed to produce medical gases in Calabria and Naples. By the end of the year, filling stations were also completed in Rome and Bari, where the company will also be allowed to produce medical gases as soon as the necessary permits have been issued.

New filling plant

### Important contracts secure future of Messer Italia

Messer Italia was able to extend an important liquid nitrogen supply contract with GlaxoSmith-Kline in Verona for another two years. Nitrogen is used in the production of medical products. Cytec Italy, one of our Italian customers, is a speciality chemicals company with global operations. It employs 170 people in Romano d'Ezzelino near Vicenza. Cytec needs nitrogen and oxygen for the production and processing

of polymers, and has signed a deal with Messer Italia for the construction of two PSA production facilities.

In April 2007, Messer Italia and UniCoop in Florence signed a contract for the transport refrigeration of fresh goods with dry ice. UniCoop now makes daily deliveries using around 400 containers equipped with Cryo2pack bags. By June 2008, 700 containers a day are to be equipped with the dry ice bags, which equates to an annual consumption of 700 tons of liquid carbon dioxide.

Long-term partnership

### Fine stone made even more beautiful

Travertine is one of the most commonly used stones in modern architecture, where it is used as a facade material, wall cladding and floor covering. The largest building in the world constructed of travertine is the Colosseum in Rome. Extensive travertine deposits are mainly found in central Italy, for example at Tivoli near Rome. In fact, the name travertine is derived from this town: Tivoli was known as Tibur in the ancient Roman Empire. The historical name for the stone is "lapis tiburtinus", the Tibur stone. Travertine deposits are also found near the Rapolano thermal spring, where Messer owns natural CO<sub>2</sub> sources. Band-saw working, polishing and washing of travertine require large quantities of water due to the large amount of natural calcium carbonate that is washed out of the stone and the fact that hoses and nozzles easily become blocked. The injection of CO<sub>2</sub> into the water, however, affects the lime-carbonic acid balance in such a way that the water can absorb more calcium carbonate, thus preventing the build-up of residues. This not only reduces the consumption of fresh water, but also makes the travertine lighter in colour and even more beautiful.



Working the travertine: water consumption is reduced by adding carbon dioxide.



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- 1 Dry ice blasting machines are primarily used in the cleaning of industrial plant and machinery.
- 2 Stefan Messer (left) acquired the majority stake in Asco Carbon Dioxide Ltd from Thomas Trachsel.
- 3 The whole team contributed to the successful outcome: (left to right) Pierre Vitali, Messer Schweiz; Ivo Lobmaier, Dr. Dimitri Delikaris, CERN; Hermann Grabhorn, Messer Group; Herbert Schöfnagl, Messer Austria; Giorgio Passardi, Klaus Barth, CERN; Daniele Landi, former Messer Austria.

Market share expanded

**Promising contract signed in Switzerland**

The signing of a contract in May 2007 saw Messer acquire a majority stake in Asco Carbon Dioxide Ltd based in Romanshorn. As a result of the takeover, our product portfolio has been augmented by the complete range of technologies covering every aspect of CO<sub>2</sub>, especially in the area of dry ice production and application. The plant and machinery business, which is focused on the production and application of carbon dioxide, is a key component with Asco having a substantial world market share in this area. The company is a technology leader in dry-ice blasting machines, whose uses include the industrial cleaning of industrial plant and machinery.

This acquisition sees Messer steadily expanding its market share in the Swiss industrial gas market and becoming the second largest supplier of carbon dioxide and dry ice.

**Helium cools CERN magnets**

Messer in Switzerland succeeded in winning a helium supply contract with CERN, the European Organisation for Nuclear Research based in Geneva. In the period up to 2011, Messer will supply up to 180,000 kg of helium. The helium is required for the start-up of the LHC (Large Hadron Collider) complex, where it will be used for cooling the superconducting magnets that are spread out along a 26.7 km underground particle accelerator. The helium will also be used to cool down the large spectrometer magnets for the physical analyses. ■

## Peru



"We are using the good economic situation to win new customers."

Juan Bedoya

## The allure of growing markets

Interview with **Juan Bedoya**, Managing Director, Messer Gases del Peru



- 1 Juan Bedoya
- 2 The huge mining trucks from Barrick are supplied with nitrogen.
- 3 Shipbuilding is one of Peru's traditional markets.

Peru – Since the beginning of 2007, the mood in the Peruvian market has been positive thanks to the good economic situation. Agricultural exports as well as the Peruvian natural gas sector and the mining and fishing industries are all benefiting from this. These are all areas in which Messer is also active with its gases in Peru. For Juan Bedoya, Managing Director at Messer Gases del Peru, that is reason enough to venture further into growing markets such as shipbuilding, the manufacturing sector and mining. "We are using the good economic situation to win new customers – this is part of our strategy", he informs us.

**Mr. Bedoya, Peru's economy is becoming increasingly privatised. More and more companies are moving in, and at the same time economic growth is increasing. What opportunities are there for Messer?**

In principle, Messer in Peru has new opportunities to consolidate its position in every sector with new and established application technologies and processes from Messer, as illustrated by the example of Maersk Peru: as exports of tropical fruit and vegetables increased, so did Maersk Peru's demand for nitrogen and CO<sub>2</sub> for the inerting and cooling of goods during shipping. Switching from gaseous to liquid carbon dioxide has made it possible to cool



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down the fruit in the refrigerated container twice as quickly as before. Our new way of evaporating CO<sub>2</sub> convinced the subsidiary of one of the world's leading container shipping companies and we were awarded the contract. At Construcciones A. Maggiolo S.A., the leading shipyard in Peru, we were able to lower the production costs for shipbuilding and maintenance and increase productivity by switching from the supply of oxygen in gas cylinders to bulk supplies of liquid oxygen.

We were also very successful in advising Motores Diesel Andinos S.A., Modasa for short, on boosting productivity. Motores Diesel Andinos is an important customer for us in the growing markets. In the past, the company only manufactured diesel engines for heavy goods vehicles and generators. Since the opening of a new plant in the capital Lima, Modasa has become one of the leading manufacturers of vehicle bodies for long-distance coaches as well as of generator engines in the Andes region. We had previously supplied Modasa with argon, oxygen, carbon dioxide, inert welding gases, welding rods and stick electrodes. After a successful consultation at Modasa about the use of industrial gases to boost productivity, we were awarded the contract to install a gas supply system. We also signed a deal to put a multi-plasma cutting system made by our sister company Messer Cutting & Welding into operation at Modasa.

The takeover of Sider Peru by the Gerdau Group has been especially important for us. Since then, our air separation plant in Chimbote has at last been able to produce air gases continuously, which we supply to the steel producer by pipeline, over the fence so to speak. The plant also produces argon, which, as almost everywhere in the world is in short supply in Peru.

**Mr. Bedoya, in August Peru was hit by a devastating earthquake. Did this terrible natural disaster also leave its mark on Messer?**

The quake only lasted a few minutes but destroyed whole towns, including large parts of the coastal city of Pisco. More than 550 people were killed by the strongest earthquake to hit the region in 25 years. Relatives of six Messer employees were among the victims. In spite of all the uncertainty and general chaos, our employees at our two locations were able to maintain supplies to customers. The readiness of my colleagues to take responsibility allowed us to get through this difficult situation and quickly get back to normality. However, our memories of those tragic events are still vivid. ■

## MESSER IN PERU



■ *A good economic situation in Peru*

■ *Advances in growing markets such as shipbuilding, the manufacturing sector and mining*

■ *New opportunities with new and established application technologies and processes from Messer*



Metal alloys are used in every industrial sector and are often high-tech products such as turbine blades.





“We work in trans-national teams. This is typical of our company and makes us unique among our competitors in the industry.”

*Jürgen Herrmann*



(l. to r.) Jana Duchova, Slovakia, Ute Schaad, Marlen Schäfer and Frank Hopfenbach, Germany, and Anita Kötél, Hungary, all took advantage of the international staff exchange scheme to gain new work experience.

## “The courage to overcome frontiers is decisive. Only then can you forge links that will last a lifetime.”

Interview with **Marlen Schäfer**, Manager Marketing Services, Messer Group, Germany

**Marlen Schäfer**, who is based at the Messer Group headquarters and has responsibility for Marketing Services within the Corporate Communications department, swapped jobs for two months with Anita Kötél, who works in Marketing and Communication at Messer Hungarogáz in Budapest.

### What persuaded you to take part in the staff exchange scheme in the first place?

From a career perspective, I was attracted by the idea of working in a Messer company that is more closely linked to the market than we in the holding company can be. I wanted to learn how marketing and communications staff deal effectively with colleagues from sales. Also, I had always wanted to go abroad, but the opportunity never presented itself. I wanted to go after graduating from high school, and then during my university studies, but once I got a job immediately after graduating, the opportunity was gone. In the past, I would probably have gone to America or Asia.

### Why then did you choose Hungary as your exchange country?

My colleague from Hungary had vaguely mentioned that she would like to work at headquarters for a time. After this, I thought about whether I would like to go to Hungary. It is a very different country from Germany, even though it is in Europe. It would be interesting to see how people work there, especially those who had experienced the socialist system, before the arrival of the free market economy. And, of course, Budapest is also fascinating as a European metropolis – one of the positive aspects of taking part in a staff exchange at Messer is that most of its bases are located in capital cities. So it didn't take me long to make up my mind – I wanted to go!

Anita Kötél and  
Marlen Schäfer



**And in the end you were the driving factor?**

Exactly! After my colleague Anita Kötél from Messer Hungarogáz came up with the idea, the initiative came from me. It was clear to me that our colleagues in the national subsidiaries knew less about our work than we did about theirs. I therefore wanted her to see the kind of things we produce and achieve in our Corporate Communications department. That the brochures or advertisements that are used in the national subsidiaries are not just thrown together without thought, but are carefully crafted in collaboration with specialists. I really wanted her to see – and then pass on this knowledge – the high level of information sharing that exists, and has to exist, with all the countries, and the wide range of opinions and wishes we often have to accommodate. There should be an appreciation of the fact that corporate communication cannot take every individual wish into account, but rather that communication has to take place within the framework of an overall strategy.

**What happened on your first day at work? How did you feel?**

I had already had a few days of induction prior to this, so I knew where my office was and where I would be living – everything was prepared. My colleagues even showed me the underground route I had to take. When I arrived for my two-month exchange, I was met at the airport and taken to my

flat. On my first day at work, we discussed all the projects that were planned for the next eight weeks and allocated the various responsibilities. We then did a tour of the main departments and I was introduced to my colleagues. Finally, I was invited to join the others for lunch! It was great; I was made to feel very welcome.

**Do you feel you are able to work effectively in a country whose language you do not speak?**

Yes, because I managed to build up the intranet of Messer Hungarogáz during my time there. At the beginning of my exchange there was no intranet; by the time I left, its design and content had been completed. Since I had more experience of the Group-wide content management system, my colleagues were able to benefit from this knowledge.

**How did you feel when you returned to Germany?**

I was looking forward to my work, to seeing my colleagues, and especially to being at home again. I was sad to leave, having formed very close working relationships during these two months. There was a moving farewell party at which presents were exchanged and a few tears were shed. But when you have been away from the office for a couple of months, there is a bit of catching up to do, dealing with things that your exchange partner perhaps did not have the



time or experience to deal with. The first couple of weeks after my return were therefore very demanding. Something has also changed in my private life. My daughter has become more independent. I came back with so many impressions, which were ultimately slightly overwhelming for my surroundings. I had to settle back into my old life, become immersed in the daily routine.

#### How has working together changed as a result of the staff exchange?

We have become more patient with each other. I now know that our Hungarian colleagues have to carry out an awful lot of demanding work at short notice for the Sales department – their day-to-day business is very time-consuming. I can understand it when the information I require isn't always available straight away. The opposite seems to be true as well.

#### Do you think your exchange can be used as a model?

Yes, I think so. I have written an internal blog about it, and we even covered the staff exchange in our customer magazine. The subject was even discussed at our senior managers' conference. This has led to several new expressions of interest in the scheme and has highlighted the subject of staff exchanges internally.



3  
4



1 View of the Fischerbastei in Buda

2 Collegiality over a meal (from left to right):  
Andrea Megyeriné, Krisztina Lovas, Zsófia  
Vakany, Katalin Kovács, Marlen Schäfer,  
Szilvia Kamaran

3 Mutual trust beyond the workplace: Marlen  
Schäfer (r.) with her temporary Hungarian  
colleagues Krisztina Lovas and Tibor Déry

4 Historic freshness: Budapest Market Hall

5 Magnificent view of Budapest:  
the Chain Bridge and Parliament

6 Buda's old town – a perfect place to linger



5  
6



## The best sour cherry strudel in the world

**Ute Schaad**, Controller of Messer Group in Sulzbach, swapped jobs with Aber Babic, Controller South-East Europe at Messer Hungarogáz, for a few weeks in March 2007.



**Ute Schaad**

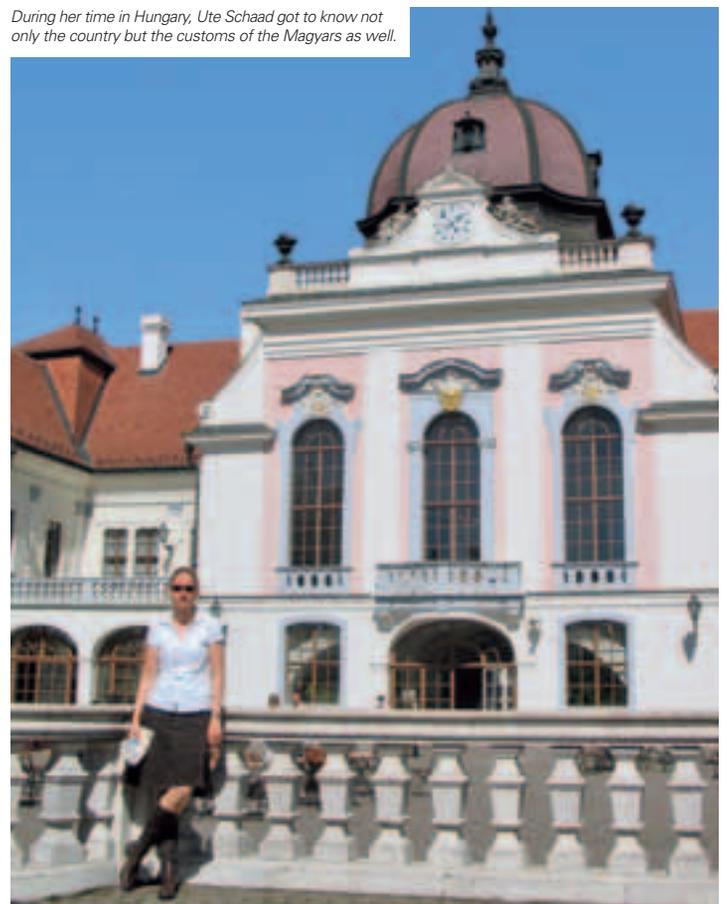
*Senior Manager*

*Internal Audit,*

Messer Group, Germany

I was attracted by the idea of getting an insight into a different culture over several weeks as part of a "job swap". My work in the Group Controlling department of Messer in Sulzbach involves dealing with many colleagues from the subsidiaries every month as we draw up the management report. In Budapest, I quickly got to know the other side. While we were preparing the quarterly accounts, my new colleagues patiently explained and showed me a lot of interesting things about the company. But Budapest, too, has a lot to offer: I would often stroll through the castle district on the Buda side and visit the traditional Café Ruszwurm, where I enjoyed the best sour cherry strudel I've ever tasted. You also get a wonderful view of the city from up there. The architectural diversity of the old and, in many cases, renovated buildings in the Pest part of the city is particularly impressive. Thus my stay in the Magyar capital was exciting and informative not just in terms of my job but also as a cultural experience. Köszönöm szépen! (Thank you very much!)

*During her time in Hungary, Ute Schaad got to know not only the country but the customs of the Magyars as well.*



## My adventure in the Middle Kingdom

**Frank Hopfenbach**, Controller at Messer's holding company in Sulzbach, swapped jobs for four months with his colleague Xu Qing, Chief Financial Officer at Messer China in Shanghai.

I first travelled to Hangzhou for six days to take part in the negotiations on the formation of Cryogenic Engineering GmbH. My first impressions were very positive – China seems to be quite Western-oriented in many respects. For example, there are well-built roads, huge skyscrapers and a magnetic monorail. "Patience" is the magic word in negotiations, however, as decision-making can often be a long drawn-out process. In terms of cuisine, there was a lot on offer: in addition to fresh fish, prawns, crabs and vegetables, there were also dishes like jellyfish, sea cucumbers, rice worms, deep-fried bees and snake. The highlight was when I was served a goose's foot. Armed with a glove, I nibbled a little bit at the individual toes, but that was all I could manage.

In April, as the newly appointed Chief Financial Officer for the China Region, I had the opportunity to take part in various meetings of the management boards of our subsidiaries. On my first business trip I had to go and see a customer who was refusing to pay. After he had promised to pay in future, he

invited us to eat with him. Apart from the usual delicacies, a tortoise was served on this occasion. This was washed down with Mao Tai – a Chinese white wine with 53 percent alcohol. So apart from patience, the ability to hold your drink is also quite useful.

I met my Chinese financial colleagues at a finance meeting in Lijiang. The highlight was the visit to the local primary school. During an English lesson, I tried to describe Western eating etiquette to the children. This was followed by a speech in Chinese in front of the assembled crowd of children and teachers, as well as the presentation of some gifts to the principal.

I went on other business trips to Western China. In many areas the countryside is quite stunning, although industrialization is also beginning to have an effect. By contrast, Shanghai is more businesslike. The city is dominated by skyscrapers and crowded streets – not just cars, bicycles and scooters, but crowds and crowds of people. It was overwhelming.



**Frank Hopfenbach**  
Manager Controlling,  
Messer Group, Germany



Frank Hopfenbach describes his experiences in China. He worked at Messer China for several months, getting to know the country and its people. Here he is pictured on Meli Mountain.



At a school in Lijiang, Frank Hopfenbach gave pupils a short lesson on Western eating etiquette.

## Company history straight from the horse's mouth

**Jana Duchova**, Marketing and Communications Manager at Messer Tatragas in Slovakia, spent three weeks in the Corporate Communications Department in Krefeld, Germany.



**Jana Duchova**  
Marketing and  
Communications Manager  
Messer Tatragas, Slovakia

Ever since Messer introduced the job swap scheme, I knew that I wanted to take part in it. Why? Because a period spent working abroad is both a professional and personal challenge, and because I love challenges! I had never spent several weeks in another country, without my family and friends. What would it be like?

Signing up for the job swap was very straightforward – all I needed to do was apply for a work permit. Internally, there was no red tape, just a couple of interviews. My colleagues in Krefeld rented me a furnished flat in a nice house directly opposite our company headquarters.

Now it was time to tackle those challenges. And my expectations? These were more work-related than anything else. And they were fulfilled:

I was able to attend the awarding of the Hans-Messer Prize in honour of the late father of our CEO Stefan Messer, where I met many members



*Jana Duchova explored Krefeld and the surrounding area.*



*Jana Duchova made use of the exchange to attend symposia.*

of the Messer family. I was also present when Stefan Messer was interviewed by a German national daily newspaper, during which I learned a lot more about the company than I had done in the years before – and straight from the horse's mouth, no less! I am convinced that such an exchange strengthens company loyalty. It certainly worked with me!

## Always reason to celebrate

**Monika Zbróg**, Assistant to the Board at Messer Polska, talking about her time working in the Legal Department at Sulzbach.

“Deep in the West, where the sun gathers dust, Life is so much better than most people know. Deep in the West, deep in the West ...”

That is a quote from a Herbert Grönemeyer song called “Bochum”, but this report has nothing to do with either the singer or the town. Instead it deals with my six weeks at the Messer Group in Germany. At the beginning of January, I travelled to Sulzbach for some training in the legal department, since I was going to be taking on a new area of responsibility back home at Messer Polska. On my first day, we were treated to coffee and cake by Stefan Messer himself in celebration of the new year. There would be more cake in the days to follow, although I sadly can't remember the names of the individual birthday boys and girls. Then a colleague from the legal department passed her final exam, so to celebrate we had – you guessed it – cake.

By now it was carnival season in Germany – so there was lots to celebrate, not necessarily with cake, but certainly with some fantastic parades. I was fortunate enough to witness one in Mainz. A colleague from the legal department invited me to her home in order to experience a proper German “Fasching” (Shrovetide carnival). I returned to my guest house with the traditional carnival greeting of “Helau!” ringing in my ears and pockets full of sweets. Between cakes I also learned a lot about insurance within the group and in relation to the national subsidiaries. I concerned myself with the current legal issues. In the afternoons, I was able to enjoy the surrounding Taunus region, where I went jogging. Thank God I had the time and inclination to do so, because otherwise I would have returned to Poland ten kilos heavier. The penultimate day of my stay was Valentine's Day. I spent the evening in a cosy restaurant with everyone from the legal department. That was my farewell at the end of an exciting period with great people, a beautiful region and some delicious coffee ... and cake. But that's not all; there was more cake to be eaten on my final day. I had taken this delightful tradition to heart and, before leaving, I made sure that each of my colleagues also got a piece of cake from me.



**Monika Zbróg**

*Management Team*

*Assistant*

Messer Polska, Poland



*Monika Zbróg and Yvonne Albedyhl at the street carnival.*



From the family album: Adolf Messer with his daughter Rosemarie.  
At the age of 20, Adolf Messer set up a small workshop for the manufacture of acetylene gas generators and lighting fixtures.



„When the head rules the heart it will cause bad blood. When the heart rules the head it will do no good. That cheer and blessing in both might reign, Give equal measure to the twain.“

Adolf Messer



Stefan Messer is back to the German market  
with Messer Industriegase GmbH.

“Profits are important for us, but they aren’t everything. It is just as important that we remain independent and develop our own ideas.”

Interview with **Stefan Messer**, Owner and CEO of the Messer Group

The return of Messer to the German industrial gases market after a contractual ban on the use of our trade name represents a major milestone in the history of our company. We aim to invest in Germany and to establish ourselves as a specialist provider in the industrial gases market. In our business dealings, we pride ourselves on upholding traditional values, on possessing soundly based expertise and on understanding the needs of our customers.

**Herr Messer, you made a successful return to the German market on 7th May with Messer Industriegase GmbH. How did you manage this?**

With a pioneering approach...and a certain amount of luck. After the sale of Messer Griesheim, it was clear to me that the four-year mandatory hiatus was an ideal time frame for planning our return to the German market. Freed from the burden of the past, we could completely concentrate on our business in our core regions of Europe and China and, at the same time, plan a new company in Germany from the ground up. Our modest aim was firstly to position ourselves as regional gas suppliers to small and medium-sized enterprises in the west and south-west of the country, in contrast to the Messer Griesheim days when, thanks to an extensive production network, we could deliver all over Germany. Today, we are concentrating on the growth of small and medium-sized and, above all, privately owned and operated companies in the evolving German market. We share with them common values such as trust and credibility, and such common characteristics as courage and flexibility.

**Exactly how have you gone about this?**

Once the competition moratorium expired in May 2007, we moved from the drawing board to the market, under the name Gase.de Vertriebs-GmbH. We chose this name, as the prohibition on the use of our trademark still had another year to run after the competition prohibition expired. But building up any business is difficult without production facilities and customers whose names we can give as references since, in the industrial gases sector, guaranteed delivery is the top priority. We looked for a partner to work with and found one in Deutsche Edelstahlwerke, or DEW for short, who are based in Siegen and part of the Schmolz + Bickenbach Group. We are building an air separation plant on the DEW site which will go into operation in 2009. This has sent out a clear message both internally and externally that we wish to invest in Germany. It has also helped to motivate our new members of staff, and has led to further success in that we are also going to build another air separation plant at Salzgitter AG in Salzgitter, allowing us to expand our business in Central and Eastern Germany.

**Herr Messer, what is your vision for the future?**

With our new German company, renamed Messer Industriegase GmbH on 7th May 2008, we want to become a big fish amongst the minnows, not the other way round. We have the benefit of our experience as a major industrial gas specialist. At the same time, our customers can profit from the flexibility and proximity of a supplier working at the same level as them. We are not concerned purely with ourselves and our shareholders but, as a family concern, we can also understand and respond to the needs of our customers.

**Why do you believe that the family-run company model still has a future?**

Even in the phrase "family-run business", the word 'family' still has very special connotations. It's not just that a family-run concern belongs to one set of people related by blood; in most cases, it is also run like one big happy family where traditional values such as trust, bonding, security and loyalty combine and can give you an edge in the market as well as specifically enhancing staff motivation and performance. The anonymity of the rat race, where staff can only be motivated to do their jobs with a stick and carrot, is no basis for sustained success. In that sort of environment, you miss out on



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1 Entrepreneur Stefan Messer

2 The Messer Family: Marcel, Maureen, Petra and Stefan Messer (f. l.)

3 Sorting through the archives: Marcel Messer shows his enjoyment of and interest in the company's history.

the human relationships that give workers a true sense of pride in what they are doing as well as helping them to identify with the company ethos. Of course, even when working for a family-run business, pay is going to play an important role. After all, everyone has to finance their lifestyle out of their salary. But it's only the 'emotional dividend' on top in the shape of a shared set of values that is able to promote solidarity and a willingness to strive for a common goal.

### Is a family-run company able to serve as a role model for German business?

In order to answer this question, I'd like to refer you to the now famous ten propositions put forward by academics at the University of Witten/Herdecke. These assert that family-run companies are different, more successful, more at risk but more intelligent; they have a different financial structure, a longer-term focus, more tradition, more enterprise, are more resistant to external advisers and are more durable. The ten propositions go on to demonstrate that there are a number of advantages and disadvantages to this particular company model which is so widespread in Germany:

- **Different**, because by definition the family exerts the decisive influence on how the company is run.
- **More successful**, because family companies are backed up by the trust, bonding and loyalty that is inherent in the nature of family relationships.
- **More at risk**, because in a family of entrepreneurs, you will often see disputes, loss of confidence or other clashes of interest that can impact on a company, sometimes with destructive force.
- **More intelligent**, because family-run businesses are not dependent on volatile capital markets. They can pursue long-term strategies.
- **Different financial structure**, because family-run concerns are always aiming to maintain their financial independence, although in the case of rapid expansion that can obviously be a disadvantage.
- **Longer-term focus**, because family companies stick with tried and tested business principles, customer and supplier relationships that have grown over time and, above all, with their established workforce.
- **More tradition**, because family companies pass on traditional values and patterns of working to management and workforce which leads to a more pronounced sense of identification with the company.
- **More enterprise**, because family companies are characterised by the will to shape their own destiny, by the urge to create something of lasting value, by their customer focus and by their willingness to take risks.
- **More resistant** to external advisers, because a family-run business is less likely to go along with fashionable management theory and will tend to rely on tried and tested methods.
- **More durable**, because it is not dependent on shareholder value considerations prevalent in the capital market. Having said that, it is necessary to deal properly with the paradoxes that arise from linking family with business by means of good management.

On balance, though, I feel able to say that well managed family concerns – ones where the owners put the interests of the company first – can be very successful indeed and that the ten propositions outlined above suggest that such companies have a certain competitive edge on large corporations. ■



“We are returning to our roots:  
as a family business.”

Messer’s history is the history of a family: the two are inextricably linked. The success of the book ,100 per cent Messer - the return to a family-run business from 1898 to the present day’ shows the importance of being aware of this history.

#### Adolf Messer's first steps into international markets (1889–1954)

Adolf Messer was born on 6th April 1878 in Hofheim/Taunus, the son of Johann Matthäus and Margarethe Messer. In 1898, aged 20 and still a mechanical engineering student, he set up a small workshop, which quickly led to his first successes with the construction of acetylene generators and lighting appliances. Even at this very early stage, Messer was looking beyond the German market. In the first seven years following the founding of the company, approximately 300 installations were exported. Since acetylene lighting installations were increasingly suffering

from the competition from gas lights and electrically powered lighting systems and, moreover, the demand for acetylene for cooking and heating was decreasing, Adolf Messer was quickly forced to change his product range: he took up autogenous welding and exported his first air separation units before the First World War. The expansion of the company was reflected above all in the establishment of branches and subsidiaries both at home and abroad, which became an important mainstay of the company. The outbreak of World War One in 1914 put a temporary stop to the company's international expansion. After 1918, in the difficult economic conditions of the post-war era, Adolf Messer put a lot of

energy into regaining export markets after the company's assets in Great Britain and the USA had been seized and auctioned off. In the 1920s, the company once again built up its contacts with foreign customers and consolidated its domestic market position in the cutting and welding sector, since the production facilities had survived the First World War almost unscathed. Even though Messer succeeded in continuously diversifying and modernising its product range, the company was not spared the effects of the Great Depression of 1929–1932. The global economic collapse led to a dramatic crash in industrial production.

Sharply declining sales and job losses also haunted

Messer's day-to-day business from the late 1920s onward. After the collapse of the Weimar Republic in 1933, the Frankfurt-based company operated in a macro-economic environment that was increasingly recovering from the severe economic crisis. German industry had already come through the worst of the recession by the spring of 1933, from which point it benefited from the global economic upturn as well as the armaments and employment programmes pushed through by the Nazi regime. At Messer & Co. GmbH, as at other companies, the day-to-day business was increasingly overshadowed by the forced military build-up,

and delivered four large-scale installations for the production of liquid oxygen to the army testing facility at Peenemünde. With the advance of the Allies in the final weeks of the war, all of Messer's production facilities gradually came to a standstill in the spring of 1945. The three years or so between the end of the war on 8 May 1945 and the currency reform 1948 were characterised by improvisation in every area. In terms of the company's development in the post-war period, it was an invaluable advantage that relations with long-standing foreign business partners could be quickly re-established on a basis of mutual trust in spite of the devastation caused

### On the way to becoming a global player The Hans Messer Era (1953–1993)

Hans Messer was still a relatively youthful 28-year-old when he relieved his father Adolf as CEO, but with him at the helm, the company now played a major part in the German Economic Miracle of the 1950s. Contributory factors in the success of Adolf Messer GmbH during these early days of the German Federal Republic were not only their activities in the key sectors of the thrusting, dynamic economy (steel and shipbuilding) but also the number of subsidiary and affiliated companies that they founded abroad. When the company's growth



1898

1910

1911

1932

1945

Frankfurter Acetylen-Gas-Gesellschaft, Höchst am Main

First air separation plant

Messer & Co. GmbH; Move into the USA

Production of arc-welding electrodes

Reestablishment of Adolf Messer GmbH and expansion in Europe and the USA

resulting in, for example, several orders from the German Army Ordnance Department for the construction of special machinery. Thus, electrical welding equipment from Messer was used for assembly of tank chassis, for improving resistance welding technology in order to achieve gas-tight seals on pressurised hulls and shells, or for developing the Nivosec 3-D cutting equipment which made it possible to carry out three-dimensional work on pressed steel turrets for armoured vehicles. The company was also involved in the research into the construction of missiles, which the army began testing in 1936,

by the Third Reich's aggressive foreign policy. In April 1946, for example, Adolf Messer had invited Raoul Amédéo to visit, followed shortly afterwards by his sons Pierre and Jean, in order to revive their collaboration through the formation of the Société Française des Appareils et Procédés Messer. Before Adolf Messer succumbed to a serious illness on 13 May 1954, he had ensured that the company would remain in family ownership. One year before his death at the age of 74, he had decided to transfer the responsibility for the overall running of the company to his son, Hans.

came up against natural internal limits in the early 1960s, the decision was taken in 1965 to merge Adolf Messer GmbH with parts of Knapsack-Griesheim AG, then owned by Hoechst AG, to form the new Messer Griesheim GmbH. This merger deprived the Messer family of executive powers – on paper at least – as it fundamentally changed the balance of ownership within the company: Hoechst's share of the DM 30 million equity was 66.6 percent with the Messer family in the shape of Messer Industrie GmbH retaining only 33.3 percent. Although the newly merged company was launched as merely one member of a large conglom-

merate, the family were nonetheless canny enough to ensure that the agreement made between Hans Messer and Hoechst AG safeguarded their influence over the ongoing story of Messer Griesheim. This advance understanding between Messer and Karl Winnacker set down in black and white that the family would have a permanent presence in the senior echelons of the company. The management board was to consist of "at least three and no more than four persons". As long as their share did not fall below ten percent, the Messer family was entitled to nominate one member and Hoechst to nominate two. The agreement went on to state, "Where a vacancy

any change to the essential purpose of the company, any application for a large-scale credit advance and the appointment or dismissal of board members. On top of this, there were various agreements made within the family to safeguard their influence on the operational side of the business. For example, Hans and Ria Messer decided to sign a document with their children whereby all family members agreed to exercise their voting rights within Messer Griesheim GmbH en bloc. An agreement dated 29th June 1979 that made Hans Messer the family spokesperson was also signed by the family of Erika Heberer (daughter of company founder Adolf

Messer Griesheim's history, which represented a doubling over the ten-year period. The actual driving force behind this growth was the industrial gases business which, between 1975 and 1989, contributed around 70 percent of annual sales. Alongside its traditional customer applications in the steel, shipbuilding, automotive and chemical industries, the company was also successful in exploiting new applications for compressed and liquefied gases, gas mixtures and specialty gases, which opened up new horizons in dynamic, emerging sectors of the economy and attracted a new breed of business partner. As the 'Iron Curtain' began to lift and Eastern Europe



1953

*Adolf Messer retires*

1953

*Dr Hans Messer takes the reins*

1963

*Edward Kennedy in Frankfurt*

1965

*Merger with Knapsack-Griesheim AG to form Messer Griesheim GmbH*

arises, each party will concur with the nomination made by the other party unless there are compelling reasons for objecting to the person nominated." Hans Messer was invited to become the first chairman of the new board ".... if he should so wish." In addition, both parties agreed to constitute a shareholders' committee ".... to which Hoechst and the Messer family would each send two members" and which ".... would have powers of instruction, particularly vis à vis the board." Finally, the basic agreement identified certain policy areas where decisions would require a 75 percent majority vote. These included

Messer) and the Adolf Messer Foundation. In short, despite their 'mere' 33.3 percent shareholding, the family retained a 100 percent influence over the running of the company. In the second decade after its foundation, Messer Griesheim GmbH demonstrated quite comprehensively that it had succeeded in tapping into synergies that were now exploited to their full potential. In the wake of a sustained period of general economic recovery, the company's worldwide turnover rose steadily, breaking through the DM one billion mark in 1978 and reaching an impressive DM 1.7 billion in 1984, the most profitable year up to then in

became accessible once more, Messer Griesheim was quick to recognise the business opportunities presented by these former communist-run states. By spring 1993, however, an era in the history of Messer Griesheim was coming to an end: in accordance with the agreement made with Hoechst AG, Hans Messer stepped down from the operational side of the business aged 68 and having spent the previous 40 years as its CEO. Even so, he stayed on in various other capacities and remained a member of the shareholders' committee and supervisory board until his death in 1997.

**Crises, turbulence, change**  
**From global player to „100 percent Messer“**  
**(1993–2004/5)**

Following Hans Messer's retirement from the senior management in 1993, the responsibility for running the company was passed to Herbert Rudolf, a family outsider who had had a good track record in managing Messer's USA subsidiary. As the 1990s progressed, the long-standing harmonious arrangement between Messer Industrie GmbH and Hoechst AG and the family's position in the company both came under severe threat. Under Herbert

into question by the new man in charge. It was Herbert Rudolf's clear intention to eradicate family influence from the running of the company altogether. During the 1990s, the business policies of Messer Griesheim became closely linked to the strategic goals of the Hoechst Group. From 1994 onwards, Hoechst's prime focus was on their core businesses of pharmaceuticals, agrochemicals and industrial chemicals and they were now keen to divest themselves of their two-thirds majority share in Messer Griesheim. There followed many years of debate about the future ownership structure of the Messer Griesheim Group and

Sachs and Allianz Capital Partners. They in turn took on two-thirds of the net deficit which by spring 2001 had reached the not inconsiderable figure of 1.72 billion euros. However, disputes within the family were also endangering the continued existence of the company. Thomas Messer, eldest son of Hans Messer, declined to take „any further responsibility for the maintenance and development of the family business“ as he wished to set his own personal course for the future. In December 1996, Thomas Messer resigned from Messer Industrie GmbH and gave away the greater part of his MIG shares to the charitable Adolf Messer Foundation. Just



**1966**

*Further expansion in Western Europe and the USA*



**1989**

*Expansion in Eastern Europe – Two-billion DM annual turnover achieved*



**1995**

*On the way to globalisation*



**1998**

*Stefan Messer becomes a member of the board*

Rudolf's leadership, Messer Griesheim embarked on an aggressive course of globalisation which was ultimately to end in failure. The numerous and, in many cases, highly speculative acquisitions and start-ups of foreign companies and subsidiaries led to a massive deficit which, just before the millennium, would provoke the dismissal of Herbert Rudolf and a sharp correction in the company's overall policy. But that wasn't all: following Hans Messer's departure, practices that had long been regarded as fundamental in the development of the company were now called

a remarkably passive attitude on the part of the Hoechst board towards the spiralling Messer deficit. Early warnings emanating from the Messer family about the imminent collapse of the company were brushed to one side and Herbert Rudolf was given virtual carte blanche. After the stock market flotation failed and the much touted sale to Linde AG fell through at the last minute because of complications arising from anti-trust legislation, the Hoechst/Aventis shares in Messer Griesheim were finally transferred in April 2001 to the two financial investment companies Goldman

a few years later, it was Stefan Messer's sister Andrea Giese who stepped out of line by proposing that her share of the Messer Industrie GmbH holding in Messer Griesheim should also be sold to the financial investors. As Stefan Messer and his management team saw their main priority in successfully restructuring the company, Messer Industrie GmbH made considerable financial sacrifices in December 2001 to acquire part of Andrea Giese's share, although this left the Giese family still holding some of their shares and all of her children's, a situation that threatened to lead to yet another exhausting legal battle in 2003.

In order to resolve the dispute once and for all, the management acceded to their basic demands following the sale of their shares which were acquired by Messer Industrie GmbH in October 2003. When, in the second half of the 1990s, the fate of Messer Griesheim was hanging in the balance, Stefan Messer – second son of Hans Messer, who died in 1997 – had made his view quite clear that the family should continue to retain their long-term influence over the company. In 1999, he repurchased on the family's behalf Messer's Cutting & Welding subsidiary from Messer Griesheim GmbH. One year later under

its ‚slimming down‘ process. When discussions resurfaced after autumn 2003 about the future of Messer, one section of the family led by Stefan Messer resolved to take responsibility for the company once again into their own hands (much to the surprise of the financial investors). They withdrew from operations in Germany, the USA and the UK and acquired the shares held by Goldman Sachs and Allianz Capital Partners. Since May 2004, the former Messer Griesheim Group has once again become an owner-managed industrial gas company operating under the name of Messer Group. Finally, in early 2005, Stefan

In February 2006, working for the Society for Companies' History, Jörg Lesczenki began researching the history of Messer Group GmbH. The result of his endeavours is the 272 page long publication:

**100 per cent Messer –**  
the Return of the Family Enterprise:  
1898 to the Present Day.

Published by Piper Verlag. ISBN: 9783492050852.  
Euro 24.90 [Germany], Euro 25.60 [Austria],  
sFr 43.70 [Switzerland]



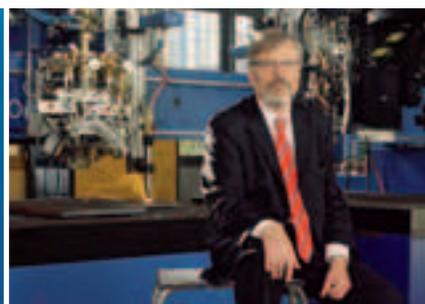
1999

*Sale of the Welding and Cutting Division to the Messer family*



2001

*Use of investment fund to acquire Hoechst's two-thirds shareholding;*



2004

*Messer family repurchase all shares. Stefan Messer becomes CEO.*



2007

*Founding of the German company Gase.de GmbH*



2008

*Founding of Messer Industriegase GmbH in Germany.*

the direction of American financial investors Carlyle, the company's Welding and Cutting Technology division merged with the Swiss company Castolin Eutectic to form the Messer Eutectic Castolin Group – a new company with the Messer family holding 36 percent of the shares. At Messer Griesheim, where control over the far bigger gas side of the business still lay, the financial investors' prime focus after 2000 was on restructuring and debt relief. Messer Griesheim divested itself of a number of its holdings, concentrated on certain core regions and successfully completed

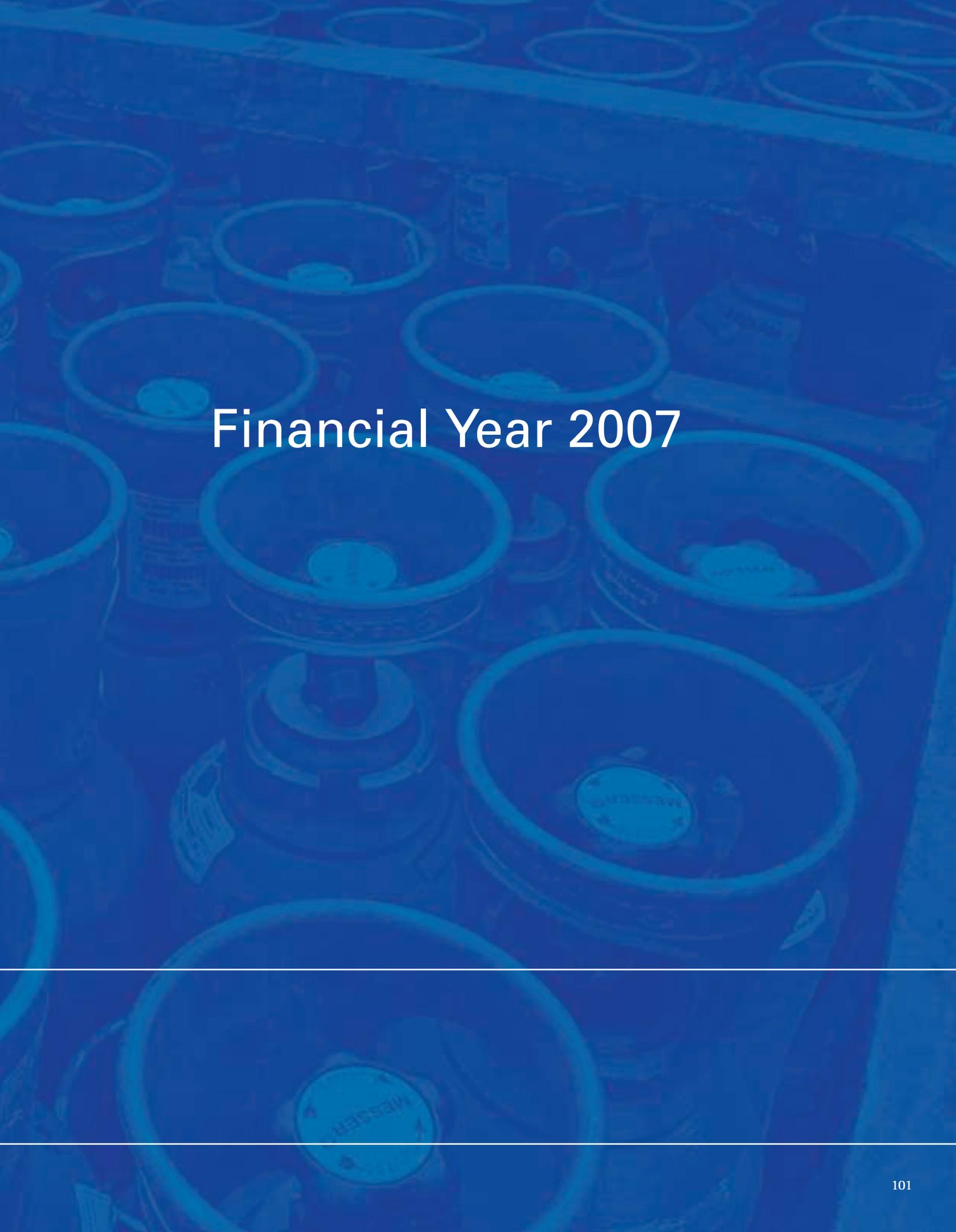
Messer also bought out of financial investor Carlyle's holding in the Messer Eutectic Castolin Group, thus restoring to family control what his grandfather had founded more than a century earlier and what his father Hans Messer had built up after the Second World War – a company with a global reach operating in the industrial gas and cutting&welding technology sectors.

*Dr. Jörg Lesczenki*



Individual or bundled cylinders are suitable for supplying technical gases in small quantities, especially for welding and cutting applications.





# Financial Year 2007

## Financial year 2007 of Messer Group

The consolidated financial statements prepared by the Messer Group GmbH, Sulzbach, Germany, comprising the consolidated balance sheet, the consolidated income statement, the statement of income and expenses recognized directly in equity, consolidated cash flow statement and the notes to the consolidated financial statements, together with the group management report for the fiscal year from 1 January 2007 to 31 December 2007 were audited by the Wirtschaftsprüfungsgesellschaft KPMG Deutsche Treuhand-Gesellschaft AG. The consolidated financial statements and the group management report were prepared according to the International Financial Reporting Standards (IFRS). Dated 26 February 2008 an unrestricted audit opinion was provided.

Below are shown excerpts from the consolidated financial statements 2007. The complete financial statements 2007 can be viewed at anytime in the Bundesanzeiger.

"We have no liabilities arising from the past and are concentrating on our business in our core markets. We are developing this together with our customers. The focus here is on the growth markets of Eastern Europe and China. Our profitable growth has been as a result of our own efforts and we have secured this by means of independent, long-term financing."

**Markus Müller**, Senior Vice President Group Treasury





"Going forward, controlling within the Messer Group is understood as corporate support for management and is characterised by aspects relating to consulting and proposals. Inflexible figures are also to be constantly evaluated in the light of the two-way interplay of that which is achievable on the operative side and what is required there."

**Uwe Bechtolf**, Executive Vice President Finance



"The IFRS are still at an evolutionary stage and are rapidly becoming the accounting standards for use throughout the EU. In the next few years, we shall continue to be equal to the challenge this poses and to provide our investors and customers with worthwhile and meaningful annual company accounts."

**Andrea Lange**, Vice President Corporate Accounting

# Group Management Report for the Financial Year 2007

## 1. Organization of the Messer Group

Messer Group GmbH ("the Company"), which has its registered office in Sulzbach, near Frankfurt am Main, acts as the management holding company of the Messer Group ("the Group"). Products, services and technologies are sold under the proprietary name of „Messer“.

The Messer Group has its own operating facilities in each of the main European markets (with the exception of Germany and Great Britain) as well as in China, Vietnam, Algeria and Peru. During the financial year 2007, the Group expanded its presence in Eastern and Western Europe by founding new companies, purchasing minority shareholder interests and acquiring Asco Kohlensäure AG, Switzerland. The Messer Group's network of Technical Centers of Expertise was also expanded in 2007. In Germany, teams of experts are in place for the various gas technologies. One highly specialized technical center 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 Center for application processes used in the manufacturing, metallurgy, heat treatment and burner engineering sectors is located in Austria. The Technical Center in France specializes in processes used in the food-processing, pharmaceutical and biotechnology sectors

## 2. Review of economic development

### Business environment

According to surveys of the International Monetary Fund IMF and the OECD, the global economy enjoyed a robust state of health in 2007. The consequences on global growth of a number of uncertainties -- the property crisis in the USA, the fall in value of the US dollar and the continued increase in raw material prices -- were still limited in 2007. Based on IMF figures, the growth of the world's gross national product (GNP) slipped only marginally from 5.0% in 2006 to 4.9% in 2007.

Economic growth slowed down perceptibly in the USA, with GNP rising by 2.2% in 2007 (compared with 2.9% in 2006). The economy of the Peoples' Republic of China continued to grow strongly in 2007. The GNP here expanded by 11.4% compared with 11.1% one year earlier. Growth within the euro region was also encouraging. Despite various uncertainties, GNP in this region grew by 2.6% (2006: 2.8%). While most of the Western European economies continued to grow at a moderate pace, most of the Eastern European countries continued to experience dynamic growth.

## Significant developments

In the following section, we describe the main developments and trends affecting the financial year ended December 31, 2007.

### *Change in net operating assets*

Measures were implemented during the year aimed at reducing the Group's working capital (inventories, trade receivables and trade payables). Net operating assets nevertheless increased to K€ 61,969 at the year-end (December 31, 2006: K€ 56,942) with net sales and hence receivables both up on the previous year. The increase was mainly attributable to higher inventory levels (primarily advance payments and project materials). Overall, however, the ratio of working capital to net sales was further reduced from 9.0% at the end of 2006 to 8.8% at December 31, 2007.

### *Financing arrangements*

Thanks to its good performance in recent years, the Messer Group was able to reach an agreement with lending banks in 2007 which resulted in interest margins being reduced and the credit period extended.

### *Capital expenditure*

Our capital expenditure policy is based on very clear principles, namely that we only invest in areas which will enhance the Group's supply capability and which create opportunities for profitable growth. Capital expenditure in 2007 (excluding first-time consolidations) totalled € 173 million and was therefore equivalent to 24.6% of total net sales. As in the previous year, a significant proportion was spent on the construction of air separation plants. In addition, the Group shareholding in a number of companies in Europe was increased to 100%.

One of the main items of capital expenditure in Europe was the construction of a further air separation plant in Spain. This is part of the strategy of securing further growth for the Group within the existing pipe-line system in Tarragona and on the liquefied gases market. The construction of air separation plants for on site customers was also commenced after various long-term supply contracts were signed in 2007. The production facilities are designed in each case to supply the main customer but also to serve the liquefied gases market. This relates specifically to production facilities located in the Swiss Canton of Wallis, in Rumania (Resita) and in Bosnia-Herzegovina (Zenica). The Group also continued to invest in cylinder-filling capacities for industrial gases. As good examples, the first cylinder-filling plant was commissioned in Denmark at the beginning of the year and a further ultra-modern cylinder-filling plant went on line in Folschviller, France, in June. Construction of a new cylinder-filling plant was commenced in Italy in conjunction with the move to a new site. The cylinder-filling plant being constructed in Rumania is Messer's first plant of this kind in this country. The construction of an air separation plant was completed for a large steel factory in Hunan, China, the fifth such plant to be built by Messer in China. Good progress was also made on the construction of a further production facility in Chengdu intended to cover increased requirements of one of our main customers at that location. A long-term contract was signed with a major steel manufacturer in Vietnam and construction of an air separation plant commenced, Messer's first in this country.

### ***Changes in the group reporting entity***

The Messer Group acquired a majority shareholding in Asco Kohlensäure AG, Switzerland, with effect from May 31, 2007. This has enabled the Messer Group to expand its product portfolio for the full range of technologies involving CO<sub>2</sub>, particularly in the area of dry ice production and applications.

The remaining minority interests of Messer Bulgaria EOOD, Bulgaria, OxysphAir S.P.R.L., Belgium, Messer Ibérica de Gases S.A., Spain, and Messer Magnicom Gaz S.R.L., Rumania, were acquired in 2007, so that the Messer Group now holds 100% of the shares of these companies. The Messer Group also acquired 48.05% of the shares of Messer Mostar Plin d.o.o., Bosnia-Herzegovina, from one minority shareholder, thus bringing the Group's shareholding to 99.05% at December 31, 2007.

As a result of the start of business operations of Limes S.A.S., France, -- a production joint venture between the Linde Group and the Messer Group set up to construct and operate an air separation plant in Nantes -- Limes S.A.S. is included in the consolidated financial statements as an associated company with effect from January 1, 2007.

Eloros Sp.z o.o., Poland, was founded in 2006 as a joint venture between Messer Polska Sp.z o.o., Poland, and Cryogenic Engineering GmbH, Germany. Following the start of business operations in 2007, this entity is also included in the consolidated financial statements as an associated company with effect from January 1, 2007. Messer is investing to create a significant production base in Poland for Central Europe. The air separation plant will produce oxygen, nitrogen and argon for the Polish, Slovakian and Czech market.

Messer BH Gas d.o.o., Bosnia-Herzegovina, was founded in 2007 as a 100% subsidiary of Messer Tehnogas AD, Serbia. The new company will construct an air separation plant for a rebuilt steel factory in Bosnia-Herzegovina.

The Messer Group sold 49% of its shares in Messer Gas Products (Zhangjiagang) Co., Ltd., China, to Messer Cutting & Welding Co., Ltd. (Kunshan), China, in 2007. The contract includes a clause requiring Kunshan to give the Messer Group the right to repurchase the 49% share sold. For this reason, no minority interest is reported for this company.

### ***Discontinued operations***

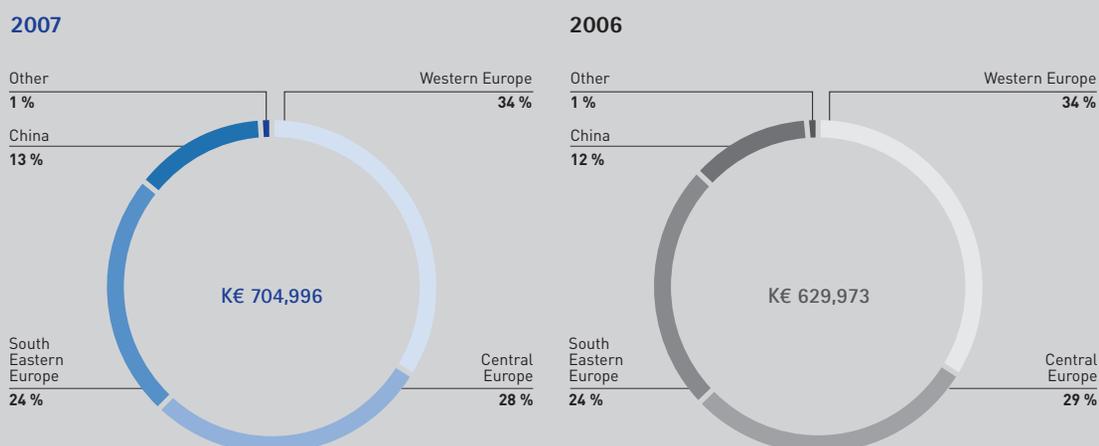
The Messer Group sold the business of Messer Hellas S.A., Greece, to Air Liquide Hellas S.A. by way of asset deal in accordance with a contract signed on July 9, 2007. The transaction did not require approval from the anti-trust authorities. This represents a further step in the consolidation of the investment structure of the Messer Group. Messer Hellas' performance in recent years had fallen short of the targets that it has been set. Strong market competition and the lack of a production plant of its own meant that it was unlikely that Messer Hellas would be able to match the Group's positive trend in the future.

### 3. Review of overall economic position

The general upturn in the global economy, our strong market position in many countries and the boom in China all helped to boost the performance of the Messer Group.

#### Results of operations

Messer Group generated worldwide net sales of K€ 704,996 in 2007, which can be analysed by region as follows:



The financial year 2007 saw an increase in net sales on the one hand, but also significantly higher costs for energy, raw materials and transportation costs. Competition on the industrial gases market remained tough. The Messer Group was nevertheless able to sustain or even expand its market presence in all regions.

Net sales of K€ 237,920 were recorded in **Western Europe**. This represents 34% of total net sales and corresponds to an 11% increase over the previous year. Part of the increase (4%) was due to changes in the group reporting entity. Messer France S.A.S., **France**, recorded a sharp rise in net sales and operating profit in 2007. This was attributable to favourable market conditions, in particular a more stable supply of CO<sub>2</sub>. Messer Italia S.p.A., **Italy**, was able to expand its presence in the medical gases business. Approval was won to produce medical gases for the southern part of the country, thus strengthening the Group's medical gases business network on a sustainable basis. A separate company, Messer Medical S.r.l., Italy, took over the medical gases business of Messer Italia S.p.A., Italy, with effect from January 1, 2008, and will now seek to expand the home care business segment. In May 2007, Messer Schweiz AG, **Switzerland**,

acquired a majority shareholding in Asco Kohlensäure AG, Switzerland. This acquisition will enable the Messer Group to achieve a sustainable increase in market share on the Swiss industrial gases market and to become the second largest provider of carbon dioxide and dry ice. In July 2007, a long-term supply contract was signed with a chemical group based in Visp, thus enabling the construction of an air separation plant. The availability of products from this source will also allow the Messer Group to meet the future needs of the liquefied gas markets in Switzerland and Northern Italy more independently. The company also succeeded in concluding a long-term contract to supply helium to the European Organisation for Nuclear Research. In the **Benelux** countries, the cylinder gases and medical gases lines of business made particularly good progress. Messer Ibérica de Gases S.A., **Spain**, benefited from a good performance with pipe-line business. This will be boosted further by the construction of a new air separation plant which is expected to be commissioned in 2008.

Net sales of K€ 196,158 were generated in **Central Europe**, accounting for 28% of the Messer Group's total net sales. Net sales in this region therefore increased by 7%.

Business developed very encouragingly in **Austria**, particularly in the cylinder gases and helium lines of business. The year in **Poland** was characterized by dynamic growth. Messer Polska Sp.z o.o. was able to build on its already strong position in selected industrial sectors. One of the main highlights of the year was the laying of the foundation stone for the air separation plant in Upper Silesia. This plant will secure independence from external suppliers and serve as the basis for growth in Poland, the Czech Republic and Slovakia. In the **Czech Republic**, the Messer Group was able to maintain its strong market position despite product bottlenecks and ever stiffer competition. This reflects the fact that foreign investors are continuing to penetrate the Czech market, thus resulting in increased capacities in almost all industrial sectors. The financial year 2007 also progressed satisfactorily for the Group's joint venture in the Czech Republic, MG Odra Gas spol.s.r.o. The main event here was the successful extension of the long-term supply contract with the joint venture partner, the largest steel manufacturer in the Czech Republic. Messer Tatragas spol.s.r.o., **Slovakia** was able to win some major new contracts. Measures were implemented to achieve further process improvements and to optimize logistics, all with a view to reducing the cost base. The Group's subsidiaries in the **Baltic region** and in the **Ukraine** continue to report strong growth. A long-term supply contract was signed with a steel factory in the Ukraine towards the end of the year, enabling the Messer Group to construct its first air separation plant in this country.

In the **South Eastern Europe** region, the Messer Group recorded net sales of K€ 166,678 in 2007, representing 24% of total net sales and an increase of 12% over the previous year.

The Group's operations in **Hungary** made good progress, including the installation of new on site generators at the premises of two customers during the financial year 2007. The CO2 line of business also performed well with several new contracts signed. Business in **Croatia** benefited from strong demand in all product segments. In addition, a number of important certifications were received which will enable the Group to supply customers operating in the food-processing and medical gases sectors in accordance with EU regulations. Messer Tehnogas AD, **Serbia**, reported significantly improved figures for all product segments. It also received the "best foreign brand award" in 2007. A number of new projects were started in **Slovenia** in 2007, in particular for the food-processing industry. Messer Slovenija d.o.o. also became the first company in Slovenia to receive authorisation to produce medical oxygen. In 2007, the Messer Group acquired the shares of its joint venture partner or minority shareholders in **Bulgaria** and for one company in **Bosnia-Herzegovina** in order to be able to run the relevant businesses more independently in the future. In Bosnia-Herzegovina, a long-term contract was signed with a steel manufacturer which will involve the construction of the Messer Group's first air separation plant in this country. **Rumania's** accession to the EU has resulted in rapid growth of the Rumanian economy. The Messer Group's three subsidiaries there were all able to participate in this growth, either by winning new contracts or extending/expanding contracts with existing customers. One of the major successes has been to convert liquefied gas supply arrangements with a steel manufacturer into a long-term contract, combined with the construction of the Messer Group's first air separation plant in Rumania. The Messer Group discontinued its operations in **Greece** in conjunction with an asset deal with Air Liquide in July 2007.

The **Chinese** economy continued to grow strongly again in all sectors in 2007. Net sales of K€ 93,698 were generated in China in the financial year 2007, an increase of 24% on a year-on-year basis. In addition to continuing economic growth, this performance was helped by the commissioning of a further air separation plant in Hunan for one of the largest steel manufacturers in China (also a joint venture-partner) and the successful start of an air separation plant in a chemical park in the Shanghai region. Alongside the steel industry, the chemical and electronic industries are now also gaining in significance.

The segment **Other** relates primarily to the Messer Group's business activities in **Peru**. Net sales of K€ 8,074 were generated on this market in the financial year 2007, 17% more than one year earlier. The main contributing factor behind this performance was the expansion of a major on site customer and the resulting higher demand for gases.

Overall the **Messer Group** recorded a net profit before minority interests of K€ 38,801 for the financial year 2007. The gross profit amounted to K€ 374,257 (53% of net sales) and the operating profit amounted to K€ 67,387 (10% of net sales). The operating profit was K€ 14,943 higher than in the previous year, partly as a result of the lower level of impairment losses on goodwill. The operating profit before impairment losses on goodwill, other intangible assets and property, plant and equipment improved by K€ 4,044. The profit before income taxes and minority interests was affected above all by the net interest expense of K€ 16,639, which, unlike in the previous year, was not partially compensated by income from associated companies and other equity investments. Taking into account all of the above factors, the profit attributable to the Group (i.e. after deduction of minority interests) totalled K€ 28,914 and was therefore K€ 5,818 higher than in the previous year.

#### **Net assets**

The balance sheet total (total assets/ total equity and liabilities) as at December 31, 2007 amounts to K€ 1,519,263. As in the previous year, non-current assets account for the largest proportion (82%) of this amount. Tangible and intangible assets represent the largest combined item on the assets side of the balance sheet (78%). The carrying amount of these two items together increased by 6% in 2007 as a result of further capital expenditure. Cash at bank accounts for 5% of the balance sheet total.

The equity ratio is almost unchanged at 59%. Gross debt accounts for 22% of the balance sheet total and increased by K€ 10,325 compared to one year earlier. The repayment of debt and the positive foreign exchange impact on the US\$ denominated USPP were more than offset by new debt raised. Net debt increased by K€ 7,596 to K€ 261,611 (December 31, 2006: K€ 254,015). The negative fair value of cash flow hedges results in an increase in other liabilities compared with the end of the previous year.

#### **Financial position**

The Messer Group's liquidity is adequately secured by stable cash flows, unused credit lines of € 111.2 million and high cash balances.

**Cash flow statement**

	Jan. 1.–Dec. 31, 2007	Jan. 1.–Dec. 31, 2006*
<b>Profit before income taxes</b>	<b>48,551</b>	<b>47,371</b>
Cash flow from operating activities	159,698	126,714
Cash flow from investing activities	(149,681)	(123,230)
Cash flow from financing activities	(5,994)	(24,584)
<b>Change in cash and cash equivalents</b>	<b>4,023</b>	<b>(21,100)</b>
<b>Cash and cash equivalents at the beginning of the period</b>	<b>72,315</b>	<b>92,332</b>
Exchange rate impact on cash and cash equivalents	(1,294)	1,083
<b>at the end of the period</b>	<b>75,044</b>	<b>72,315</b>

\* Figures for the financial year 2006 were restated in accordance with IAS 8.14 (in conjunction with IAS 8.22) in order to provide reliable and more relevant information.

The **cash flow from operating activities**, at K€ 159,698, was K€ 32,984 higher than in the previous year. The profit before income taxes rose by K€ 1,180. The improvement in cash flows was partly due to the higher operating profit, but also due to the repayment of loans granted in the previous year to non-consolidated and related entities. The increase in the cash flow from operating activities was held down by the increased levels of inventories held for numerous projects.

The **cash outflow for investing activities** went up by K€ 26,451, reflecting mainly higher capital expenditure on property, plant and equipment and on other intangible assets totalling K€ 147,853 (2006: K€ 146,719). A total of K€ 25,370 was used to acquire shares of minority shareholders and to purchase shares in other companies. Proceeds from disposals of investments in 2007 totalled K€ 22,371.

The **cash outflow for financing activities** went down by K€ 18,590 to K€ 5,994, a significant decrease compared with the previous year (2006: cash outflow of K€ 24,584). This was largely due to debt raised to finance investment in property, plant and equipment and equity investments. These inflows were higher than the amounts used to make scheduled repayments of debt. As further measures, additional paid-in capital was reduced by K€ 15,120 to pay a dividend to the shareholder and shareholder paid in a contribution of K€ 6,000 to additional paid-in capital.

In 2008, 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. The Messer Group's strong position in the various markets in which it already operates, combined with expansion into new markets, will enable it to maintain its robust financial position.

## 4. Other disclosures

### Logistics and supplies

One of the main priorities of the Messer Group is to optimize costs for gas production and cylinder-filling, whilst at the same time ensuring maximum safety at work with the best use of equipment. With this in mind, the supply chain management ("SCM") department initiated the PRIMUS project (Program for the Improvement of Productivity and Safety) in 2007, which is aimed at establishing uniform technical standards and processes for production and cylinder-filling throughout the Group.

In Europe alone, plans are underway to construct five filling plants that will conform to cost and performance standards defined by PRIMUS. The SHEQ ("Safety Health Environment and Quality") department is also contributing to the project by devising group-wide safety and environment-related rules. Protecting the environment and taking a responsible approach to nature and its resources are important components of our mission statement. We have therefore invested heavily in our ultramodern residual gas recycling facilities at the specialty gases plant, in Gumpoldskirchen, which commenced operations in 2007. Poisonous, inflammable and environmentally dangerous gases are recycled or disposed on behalf of the whole Group at this plant in accordance with state-of-the-art safety standards.

The SCM function is also helping management to optimize the cost and revenue structure by carrying out extensive profitability analyses for specific countries. Significant potential cost savings have been defined for the individual countries and should be realized in 2008.

The Group continued to invest heavily in 2007 in renewing its fleet of vehicles. In total, 21 vehicle units were handed over to Messer Group's various national companies and a further 20 units are in the process of being delivered. A larger fleet enables the Messer Group to optimize the supply chain to its customers.

Global demand for rare gases, such as helium, krypton, xenon and argon increased in 2007, in some instances quite dramatically. The Messer Group was able to secure its own supplies to a large extent with the signature of a host of new contracts, thus ensuring that customers can be supplied reliably. This is also aided by the helium storage tank at the Messer Group's Austrian site which has a capacity of 113,000 liters.

An IT system developed by the Messer Group allows all cylinders to be monitored at the various stages during the filling, transport and delivery process, including the return of empty cylinders. A uniform system is in place across Europe allowing customers to record internal cylinder movements and to access various levels of information.

## Corporate culture

A sustainable approach to running the business is the cornerstone of our corporate strategy and enables us to achieve success on a long-term basis. Our approach considers factors relating to the environment, mankind and society, as well as achieving success in business terms.

The process started back in 2004 to develop a suitable strategy was successfully completed in 2007 with publication of guidelines relating to the Group's overall business strategy. These strategy guidelines were communicated to each company within the Group in the local language. The next step will be to break down objectives and actions relating to business strategy to individual company and organizational levels.

Within the Messer Group, cooperation is based on reliability, honesty, transparency and open communication. We respect and value the different cultural and social customs of all the countries in which we are represented.

Running a business in line with the principles set by the Group also entails social commitment and responsibility. The Messer Group makes financial contributions to various social institutions and projects: as examples, Messer Hungarogáz made a donation to a children's hospital in Budapest in 2007, Messer France supplied helium for the children's event of a charitable organization and Messer Romania Gaz sponsored the Christmas party of an aid organization in a suburb of Bucharest. In China, T-shirts were auctioned and the proceeds donated to a primary school set up in 2006 with Messer's help. The primary objective of the Adolf-Messer Foundation (which is related to the Messer Group) is to promote education and science by funding scientific projects and institutions. The Dr. Hans Messer Sozialstiftung (which is also related to the Messer Group) gives donations to people who are in need or sick.

## Our employees

On average, the Group employed 4,364 members of staff worldwide, compared with a total of 4,208 in 2006. The increase was mainly due to the fast-growing Chinese market, the acquisition of Asco Kohlensäure AG, Switzerland, and increased personnel requirements in Germany.

The success of the Messer Group relies to a large extent on the comprehensive know-how, longstanding experience, high motivation, desire to perform well and the sheer hard work of its employees. 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, career promotion systems and social facilities. This is considered the best way of encouraging qualified and talented employees to remain committed. Management is fully aware that it is difficult to replace staff in key positions at short notice. The promotion of young talent, combined with career planning measures aimed at tying in motivated, talented and ambitious staff in the long-term, are core aspects of our human resources management.

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.

Uniform guidelines for "ideas management" were put in place in 2007. One of the core objectives of these guidelines is to ensure that improvement suggestions are applied throughout the whole of the Group. An ideas management team was set up to investigate whether suggestions from the various group companies can be applied in other countries. In some countries, including Germany, employees have the option to submit suggestions directly using an appropriate IT tool. It is already evident that the number and quality of improvement suggestions has been raised following implementation of the guidelines. Employees submitting suggestions can receive interesting rewards for their ideas.

The international exchange program for employees, initiated in the previous year, was intensified. This has helped to strengthen mutual understanding, particularly as far as cultural differences and differing working methods in the various countries are concerned.

#### **Safety, environmental care and quality**

Safety, environmental protection and quality are firmly embedded within Messer's corporate principles and have a very high priority. Messer is committed to the protection of its employees and to the safe manufacture, use and handling of its products. The working standards employed are designed to ensure the health and well-being of each individual. The environment must always be protected. Work standards are continually being improved in order to avoid any danger 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.

In international terms, the accident rate of 2.1 working accidents per million hours worked is below the average for the gases industry as a whole. Although the accident rate went up slightly compared with the previous year, the number of days lost through accidents and the average severity of accidents diminished. At both the summer and the winter sessions of the European Industrial Gases Association (EIGA) in 2007, the Messer Group was presented with ten safety awards for exemplary work safety. Amongst those awards, Messer Tatragas spol.s.r.o., Slovakia, a site of MG Odra Gas spol.s.r.o., Czech Republic, and Messer France S.A.S., France, each won a gold EIGA Safety Award. Internal SHEQ audits were carried out at five subsidiaries during the course of 2007 and a catalogue of risks drawn up relating to oxygen filling procedures. The Messer Group also invested heavily in controls relating to dangerous materials held in tanks, both in terms of compliance with stringent EU directives and communication with the local population. Further internal SHEQ audits will be carried out in 2008 with the aim of bringing down the accident rate once again and strengthening the sense of responsibility of each and every employee. In addition to drawing up a catalogue of risks for acetylene and inert gas filling procedures, the focus will also be on risk analyses which will be carried out at all of the Messer Group's production sites. We are convinced that safety and environmental care will represent an even greater focal point of industrial activities in the coming years.

Messer's commitment to the environment is reflected in the fact that management systems are certified to ISO 9001, ISO 14000, ISO 14001 and ISO 17025 standard. These systems serve as tools which can be used to develop and enhance relationships with customers, employees and the environment itself.

### **IT environment within the Messer Group**

All IT support work for the Messer Group has been handled since mid-2006 by Messer Information Services GmbH, a joint venture set up together with the MEC Group which is based in Groß-Umstadt. This IT company covers the complete range of requirements of both groups.

The strategic IT project "Server Based Computing Rollout" was systematically continued in 2007. The objective of the project is to make corporate servers and IT applications available to all Messer Group employees via the Messer Information Services computer center based in Germany. The consolidation of databases and tools and the use of a standardized office landscape for the Citrix technologies used by Messer help to save costs whilst at the same time optimising the IT security and infrastructure of the whole Group. Rollouts to the centralized server-farm in Groß-Umstadt were successfully completed for two subsidiaries in 2007. Corporate IT und Messer Information Services carried out partial implementation at four group companies in 2007. In the period since the start of the project in 2005 through to the end of 2007, the number of employees with access to data and IT applications via the new Citrix infrastructure has increased from 300 to 1,300.

A further focus is on the harmonization of SAP applications used throughout the Messer Group. Following completion of a prototype project in March 2007, the process of rolling out the project to the Group's companies has now started. In the meantime, three companies are now working with the new harmonized SAP platform. Implementation of the harmonized SAP system at three further subsidiaries is nearing completion. SAP harmonization will be completed in 2009, at which stage some 22 European Messer Group companies will be working within a single SAP system. Standardizing production and logistics systems creates opportunities to reduce costs on a sustainable basis. It also enables Messer to present itself its customers with a uniform high quality of services across borders, achieving a greater depth of service and helping to increase supply loyalty.

Cooperation between Corporate IT, Messer Information Services and IT manager at the individual companies of the Messer Group was intensified in 2007. The IT managers of three companies assumed responsibility for the running of specific IT modules and applications used by the Messer Group within Europe. Transferring IT tasks to the companies in this way improves coordination across borders, promotes the exchange of experiences and strengthens the transfer of knowledge within the Messer Group.

## 5. Future developments

### Outlook

Most economic forecasts for the coming year generally predict that the global economy will weaken somewhat in 2008. The problems caused on the financial markets in the wake of the US property crisis and the adverse knock-on economic impact, particularly in the USA, are expected to hold down growth. In addition, export prospects for manufacturers based outside the US dollar region have deteriorated as a result of the appreciation in value of their own currencies. Nevertheless, production volumes still appear to be growing steeply. The gross domestic product (GNP) in industrial countries is likely to grow much more slowly than manufacturing capacities. The pace of growth of production volumes in the emerging economies will remain high. High raw material prices will continue to drive economic activities in many countries. There is likely, however, to be some offsetting impact as the pace of growth in demand from industrial countries slows down. According to predictions of economic institutes, it is the Chinese and Indian economies that will become the new engines of growth for the global economy. China's GNP is forecast to grow by ten percent, even though it is probable that the government's efforts to avoid further overheating in the economy and to slow down the pace of investment growth are likely to kick in more effectively. Buoyant levels of investment with the emerging markets, especially by China and India, will have a positive impact on the order-books of European companies and reduce dependence on the USA as the world's economic motor. Taking all of these aspects into consideration, worldwide production is expected to grow in both 2008 and 2009 by approximately 4.5 percent.

As a result of the prevailing favourable economic conditions, the Messer Group will be able to achieve growth in new markets and in the markets where it has already established a strong market position. We will continue to take measures to safeguard product supplies in the future for the European markets and to expand business operations in all relevant markets. Over the next two years, we will therefore be investing substantial sums in air separation plants in France, Spain, Switzerland, Poland, Bosnia-Herzegovina and Rumania. We will also expand our operations in the emerging economies, thus putting the Messer Group in a good position to benefit from the long-term economic growth that these countries are expected to enjoy. This includes above all Turkey, the Ukraine and Vietnam. In these three countries, the first stepping stone is, as elsewhere, to construct the first air separation plant. We are also working flat out to gain further market share in China's growth regions, in particular by working closely with our fast-growing customers and joint venture partners.

The agreement not to use the Messer name in certain regions expires on May 7, 2008. We will therefore be turning our attention to a re-entry into the German market under the Messer name. We will build on the good reputation that this name still has and believe that many excellent opportunities await us. By focusing on quality-driven niche markets and keeping to our well thought-out policy of regional expansion, we are highly optimistic for this future venture. We will begin the process of tapping this potential by opening one cylinder-filling plant and constructing two air separation plants in 2008.

In the medium-term forecasts for 2008 and 2009, we plan further organic sales growth and, above all, a sustainable improvement in profitability. In order to achieve this aim, we will continue to improve operating margins. This includes, amongst other measures, reducing transportation costs, optimizing the supply chain and expanding production capacities on a targeted basis. We also expect to achieve significant reductions in product costs from 2009 onwards following a further expansion of production capacities.

Our forecasts for the Messer Group for the financial years 2008 and 2009 are as follows:

<i>in percent</i>	2008	2009
Net sales growth*	8	9
EBITDA margin	22.0	23.8
CapEx / net sales	27	19
Working capital / net sales	12.7	13.1
Debt / balance sheet total	28.3	27.3

\* Before adjustment for currency impact and changes in group reporting entity.

### Significant opportunities risks affecting the future development of the Group

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. Messer's future results are dependant on the operating performance of its gases business and on economic developments. The main risks which could be significant for the net assets, financial and earnings position of the Messer Group are as follows:

- 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.
- 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 China. A significant reduction in market demand in any one of these key industries or sectors could adversely affect future operating results. However, the Messer Group's revenues are not dependant to any significant degree on any single customer.
- The Messer Group operates globally, making it susceptible to local political, social and economic conditions and to the resulting risks arising in each market.
- 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 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 oil and energy prices will continue to rise with a corresponding impact on supplies and primary products necessary for the Group's business. Although the Messer Group is often able to pass on cost increases partially to its customers, it is possible that price increases for energy could adversely affect Group profitability.
- The Messer Group 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 prospects of a group subsidiary deteriorate significantly compared to the original date of measurement.
- Enterprises are confronted from time to time with allegations that they have infringed industrial rights or legal obligations that defective products have been supplied or that environmental protection laws have not been adhered to. Regardless of their prospects of success, this type of claim can result in very high defense costs. In cases like these, the Messer Group defends itself energetically with the support of both in-house and external experts.
- The importance of information technology for day-to-day work is constantly growing. Our IT center 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 these risks, the IT center has its own IT risk management system.
- The integration of new member states into the EU entails risk in that many previously state-run businesses will need to be privatized and restructured in accordance with EU and International Monetary Fund requirements. The number and scale of state grants could be drastically reduced, culminating in numerous closures and mergers in these countries, and an adverse impact on the Group's net sales. In these circumstances, the downward pressure on selling prices would probably increase.
- 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 2007 shows, however, that the implementation of stricter environmental regulations results in a more efficient production process and a higher quality product.

The risks presented before 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. At present, however, we do not see any significant macro-economic risks for the Messer Group. No risks were identified in 2007, either individually or in aggregate, which could have a material adverse impact on the going concern status of the Messer Group. No such risks are pending in the foreseeable future.

We see opportunities for the Messer Group in the continuing overall favourable climate of the global economy and in the Group's balanced presence in growth industries and dynamic markets. The positive development of the markets on which we operate will generate continued demand for our products. This should enable the Messer Group to continue to make good progress. Through investment, we have the opportunity to respond to tougher competition and to maintain 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. The number of European and even globally valid standards requiring a more environmentally compatible approach is on the rise. The Messer Group supports this by pursuing a strategy of continuously developing new and innovative concepts (e. g. CO2 recycling in conjunction with the current debate on climate change).

### **Risk management**

Risk management is an important component of the decision-taking and business processes of the Messer Group. The management structure and 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 in good time 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 entire group 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 Messer Group 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.

Internal audits were performed at numerous Messer Group entities in Eastern Europe during the financial year 2007. This included testing compliance with corporate guidelines and sample testing of controls applied to vouchers within the various business processes, in order to check the effectiveness and commercial sense of processes as well as the accuracy and reliability of financial reporting. Critical issues 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 entities will again be subject to regular internal audits in 2008.

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. The Messer Group's security concept also includes a detailed emergency plan.

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.

### **Financial risks**

The main financial risks to which the Messer Group is exposed arise from exchange and interest rate changes.

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 and caps (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 interest rates and variable interest rates is settled at specified intervals (computed by reference to an agreed amount). In the case of interest rate caps, amounts are only required to be settled at the specified dates if the cap ceiling has been exceeded. At the balance sheet date, derivative financial instruments had only been entered into with renowned international financial institutions. In view of these measures, a currency or interest rate change risk is regarded as minimal.

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.

### Events after the balance sheet date

With effect from January 1, 2008, Messer Medical S.r.l., Italy, commenced operations on the Italian market. The new company was founded in November 2007 as a 100% subsidiary of Messer Italia S.p.A., Italy. At the beginning of 2008, 30 employees and all relevant licenses, approvals and authorizations were transferred to the new company from Messer Italia.

On February 19/20, 2008, the remaining 45% of the shares of Messer Aligaz Sanayi Gazlari AS, Turkey, were acquired by the Messer Group for a consideration of KUS\$ 540. The consolidation of these additional shares will not have a significant impact on the consolidated balance sheet.

The Business Tax Reform Act reduced the corporation tax rate in Germany from 25% to 15% with effect from the beginning of the financial year 2008. By contrast, the effective trade municipal trade tax rate will increase marginally. In addition, the wider tax measurement base will result in a higher income tax expense for both corporation tax and trade municipal trade tax. The change in the tax rates (pursuant to IAS 12.47) did not have any impact on the deferred taxes for the Group's German companies because of the existing unused tax losses available for carry-forward.

### Our thanks to Messer employees

Management would like to express its gratitude to all employees for their hard work, creative ideas and personnel efforts during the financial year 2007. Your commitment has made a vital contribution to Messer's success in 2007.

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.

Sulzbach, February 26, 2008

MESSER GROUP GMBH

# Financial Statements

## Consolidated Income Statement

<i>in K€</i>	<b>Jan. 1-Dec. 31, 2007</b>	<b>Jan. 1-Dec. 31, 2006</b> <small>restated</small>
Net sales	704,996	629,973
Cost of sales	(330,739)	(287,958)
<b>Gross profit</b>	<b>374,257</b>	<b>342,015</b>
Distribution and selling costs	(239,323)	(212,588)
General and administrative costs	(66,926)	(64,226)
Other operating income	14,475	13,723
Other operating expenses	(9,546)	(10,031)
Impairment losses on intangible assets and property, plant and equipment	(2,994)	(2,889)
Impairment losses on goodwill	(2,556)	(13,560)
<b>Operating profit</b>	<b>67,387</b>	<b>52,444</b>
Result from equity method investments	(12)	3,687
Other investment result, net	(151)	6,288
Interest result, net	(16,639)	(13,624)
Other financial result, net	(2,034)	(1,424)
<b>Financial result, net</b>	<b>(18,836)</b>	<b>(5,073)</b>
<b>Profit before income taxes</b>	<b>48,551</b>	<b>47,371</b>
Income taxes	(9,750)	(13,873)
<b>Profit after income taxes</b>	<b>38,801</b>	<b>33,498</b>
of which attributable to:		
shareholders of the parent company	28,914	23,096
minority interests	9,887	10,402

## Consolidated Balance Sheet

<i>in K€</i>	Dec. 31, 2007	Dec. 31, 2006
<b>Assets</b>		
Intangible assets	522,613	525,364
Property, plant and equipment	664,589	600,591
Equity method investments	24,922	17,143
Investments in other companies and financial investments	8,118	13,391
Deferred tax assets	8,978	7,941
Other non-current receivables and assets	10,669	11,606
<b>Non-current assets</b>	<b>1,239,889</b>	<b>1,176,036</b>
Inventories	32,170	24,132
Trade receivables	135,723	130,313
Non-current assets held for sale	138	261
Income tax assets	3,473	2,842
Other receivables and other assets	32,826	41,152
Cash and cash equivalents	75,044	72,315
<b>Current assets</b>	<b>279,374</b>	<b>271,015</b>
<b>Total assets</b>	<b>1,519,263</b>	<b>1,447,051</b>
<b>Equity and Liabilities</b>		
Share capital and additional paid-in capital	649,305	697,451
Other reserves	5,905	5,905
Retained earnings	119,507	57,385
Profit after income taxes	28,914	23,096
Fair value reserve	8,747	1,050
Currency translation reserve	12,580	13,957
<b>Equity attributable to shareholders of the parent company</b>	<b>824,958</b>	<b>798,844</b>
<b>Minority interests</b>	<b>66,806</b>	<b>69,829</b>
<b>Equity</b>	<b>891,764</b>	<b>868,673</b>
Provisions for employee benefits	17,646	16,632
Other provisions	13,903	13,151
Non-current financial debt	266,741	278,330
Deferred tax liabilities	47,392	46,583
Other non-current liabilities	10,360	378
<b>Non-current liabilities</b>	<b>356,042</b>	<b>355,074</b>
Other provisions	16,465	12,936
Current financial debt	69,914	48,000
Trade payables	105,924	97,503
Income tax liabilities	3,305	4,558
Other current liabilities	75,849	60,307
<b>Current liabilities</b>	<b>271,457</b>	<b>223,304</b>
<b>Total equity and liabilities</b>	<b>1,519,263</b>	<b>1,447,051</b>

## Statement of Income and Expenses recognized directly in Equity

<i>in K€</i>	<b>Jan. 1-Dec. 31, 2007</b>	<b>Jan. 1-Dec. 31, 2006</b>
Translation adjustments relating to foreign subsidiaries	(2,369)	7,259
Change arising from the fair value measurement of hedging instruments used to hedge interest rate and currency risks relating to the US Private Placement	10,989	7,510
Deferred taxes	(3,461)	(2,378)
Unrealized gains/(losses) on held for sale assets	69	(3,883)
Unrealized gains/(losses) on available-for-sale financial assets	100	–
<b>Income and expenses recognized directly in equity</b>	<b>5,328</b>	<b>8,508</b>
Profit after income taxes	38,801	33,498
<b>Total income and expenses recognized in equity</b>	<b>44,129</b>	<b>42,006</b>
of which attributable to minority interests	8,895	10,565
of which attributable to shareholders of the parent company	35,234	31,441

## Consolidated Cash Flow Statement

<i>in K€</i>	<b>Jan. 1-Dec. 31, 2007</b>	<b>Jan. 1-Dec. 31, 2006</b> <i>restated</i>
<b>Profit before income taxes</b>	<b>48,551</b>	<b>47,371</b>
Income taxes paid	(15,544)	(13,236)
Depreciation and amortization of property, plant and equipment and intangible assets	85,938	91,966
Impairment losses on non-current financial assets	225	255
Other non-cash income	(1,948)	(13,627)
Change in investments in equity method investments	400	(2,694)
Interest result, net	15,569	12,851
Other non-cash financial income, net	2,437	1,424
Change in inventories	(5,805)	(1,948)
Change in receivables and other assets	8,613	(24,136)
Change in provisions	3,940	782
Change in trade payables and other liabilities	17,322	27,706
<b>Cash flow from operating activities</b>	<b>159,698</b>	<b>126,714</b>
Purchase of property, plant and equipment and intangible assets	(147,853)	(146,719)
Purchase of investments and other non-current assets	(11,092)	(10,954)
Acquisition of shares of other shareholders	(10,100)	–
Proceeds from disposals of property, plant and equipment and intangible assets	11,057	7,535
Proceeds from disposals of investments and loans	3,994	22,371
Interest and similar income	4,313	4,537
<b>Cash flow from investing activities</b>	<b>(149,681)</b>	<b>(123,230)</b>
Changes in capital by shareholders of the parent company	(9,120)	–
Proceeds from non-current financial debt	14,747	1,160
Proceeds from current financial debt	23,305	6,248
Repayment of current financial debt	(7,229)	(12,013)
Dividends paid to minority shareholders	(9,994)	(5,822)
Contributions by minority shareholders	3,720	3,802
Interest and similar expenses paid	(19,923)	(17,477)
Other financial result, net	(1,500)	(482)
<b>Cash flow from financing activities</b>	<b>(5,994)</b>	<b>(24,584)</b>
<b>Change in cash and cash equivalents</b>	<b>4,023</b>	<b>(21,100)</b>
<b>Cash and cash equivalents at the beginning of the period</b>	<b>72,315</b>	<b>92,332</b>
Exchange rate impact on cash and cash equivalents	(1,294)	1,083
<b>at the end of the period</b>	<b>75,044</b>	<b>72,315</b>

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Messer Group GmbH  
Limespark  
Otto-Volger-Straße 3c  
65843 Sulzbach/Taunus  
Deutschland  
Telefon +49 (0) 61 96 – 77 60-0  
Telefax +49 (0) 61 96 – 77 60-501  
www.messergroup.com

## Contact

Messer Group GmbH  
Diana Buss  
Corporate Communications  
Telefon +49 (0) 61 96 – 77 60-361  
Telefax +49 (0) 61 96 – 77 60-515  
diana.buss@messergroup.com

## Contributors:

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 various departments.

## Design and layout

thema communications ag, Frankfurt am Main  
info@thema-communications.de  
www.thema-communications.de

## Translation

(This report is also available in German)  
Greg Vanes, München  
Context Language and Media Services GmbH, Köln

## Photography

Dipl. Des. Mareike Tocha, Köln  
tocha@online.de

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Messer Group GmbH  
Limespark  
Otto-Volger-Straße 3c  
D-65843 Sulzbach/Taunus

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

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