

# 2010/11

The KAEFER magazine  
Issue 28

**Latest News!**  
On 1<sup>st</sup> of January 2011,  
KAEFER Aerospace GmbH was sold  
to Hutchinson SA. Articles referring  
to this company are out of date.

# K | WERT

**KAEFER** Change of location after 38 years

**INDUSTRY** Joint venture starts with record contract

**OFFSHORE** Gjøa platform is launched

**SHIPBUILDING** Spanish navy relies on KAEFER

**CONSTRUCTION** BBI – an airport for Berlin

**AEROSPACE** Supremely quiet comfort

The semi-submersible Gjøa platform at its  
final destination in the North Sea off the  
coast of Norway.





## Energy from the desert to combat climate change

Power planned for generation from renewable sources in the Middle East and North Africa should cover some 15 per cent of Europe's energy requirement by 2050.

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## More countries on the way to Complete Insulation Solutions

The combination of insulation and closely related services such as scaffolding and surface protection is a central element of the KAEFER strategy.

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## Starting large aircraft quietly

Starter units normally make a lot of noise. The sound experts from KAEFER were asked to carry out modifications to the existing insulated units, but not to exceed certain external dimensions.

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## Statoil framework agreement: KAEFER ENERGY victorious against tough competition

The framework agreement is an important milestone for the Offshore division. It is one of the most comprehensive maintenance contracts in the history of the KAEFER Group and shows that the customers appreciate quality.

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## Big, bigger, Oasis of the Seas

"We build the incredible" was the tenet of Royal Caribbean Cruise Line for the Oasis of the Seas that was built between late 2007 and late 2009 at the STX Europe shipyard in Turku. The solarium on decks 15 and 16 is a completely new departure for the shipping company.

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# Gallery of cultures

**PHOTO COMPETITION** The result of our international photo competition forms an impressive kaleidoscope of cultural diversity. KAEFER staff from all around the world have captured people, animals, culture and nature in pictures. A colourful array of multicultural impressions offers viewers moving insights and fascinating perspectives.

Here and on the last page you can see a small selection – the entire photo album can be admired at [www.kaefer.com/All\\_photos.html](http://www.kaefer.com/All_photos.html).

More about the photo competition on page 14.







**Dear colleagues, dear friends of KAEFER,**

The year 2010 was very eventful for all of us. In March this year we had to say farewell to our senior shareholder and former managing director Mrs Annelotte Koch. She died peacefully in her sleep at the age of 93 after a full and satisfying life. We will honour her memory as a unique individual.

We began the year 2010 full of hope that the financial and economic crisis would at least subside. Based on all the available predictions an end to the crisis was not in sight, but as a global company we were also able to report positive developments in many regional markets. Today, we can say that the scorecard for the past year has been largely positive. We have been able to get back to the level we were at before the crisis and even report the largest volume of new orders in our history. The consistent application of our business definition, "Complete Insulation Solutions", has bolstered our position. This is visible in our new-customer business but also in maintenance, and our thanks go to all our customers who have demonstrated their confidence in our performance and capabilities by placing their orders with us.

The move to the new KAEFER company headquarters in early October represented another important step. Recent years' growth and the change in the Group's profile made the relocation necessary. The search for a long-term solution finally settled on the Börsenhof "B" and Petrihof properties in the centre of Bremen, where as future tenants we were able to contribute our ideas right at the start of the refurbishment phase. This site is not only intended to be the workplace for the staff who go there every day, but also a kind of home base for all the employees in the KAEFER Group. Everyone visiting head office should feel at home there.

We are pleased to see so many of the networking activities gaining traction and that exchanges between employees, and especially mutual support for one another, are increasing all the time. We consider the diversity of cultures to be an enriching opportunity and can truly speak of a KAEFER family that is not only growing in quantitative terms, but above all at a human level.

New activities in countries like Chile, Brazil, New Caledonia, Algeria and Tunisia, to name but a few, reinforce our strategic portfolio and our claim to global market leadership.

The commitment and trust of the staff, for which we would like to express our thanks – also on behalf of the shareholders and the advisory committee – enable us to look to the future with confidence.

We wish you and your families happy Christmas holidays and a healthy, successful New Year 2011!

Peter Hoedemaker

Robert Skrobisz

Jörn M. Fetkötter

Philipp Dalheimer

Interview with  
Peter Hoedemaker (l.)  
and Philipp Dalheimer



## “We are emerging from the crisis even stronger”

**INTERVIEW** KAEFER has overcome difficult and turbulent times relatively intact. In K-WERT the Group Executive Committee (GEC) members Peter Hoedemaker and Philipp Dalheimer discuss strategies, challenges and opportunities.

**K-WERT:** Is the crisis already over and how did KAEFER deal with the challenges?

**Hoedemaker:** Looking at the new orders you might think the crisis is really over. That isn't quite the case, however. For one thing our margins are still suffering the impact of the crisis and for another the local markets have not stabilised everywhere yet. But generally, the trends are positive. Our sales have performed well and overall 2010 has been a decent year for us.

**Dalheimer:** We didn't lose that much ground, and today we're back where we were before the crisis. That is thanks to our good market positioning and our broad footprint with the five divisions Industry, Offshore, Shipbuilding, Construction and Aerospace.

**K-WERT:** What helped KAEFER to weather the crisis?

**Hoedemaker:** It was helpful that especially in our core European countries we have a very high volume of maintenance work. That mitigates the effects of the crisis. Incoming orders are now picking up again as well, and some of them are unprecedented in terms of volume. They include offshore maintenance contracts in Norway and Australia for instance, but also major orders from Aerospace like those for air-conditioning ducts and door insulation for the Airbus A350 XWB. In short, 2010 is set to be the year with the largest new orders in KAEFER's history.

**K-WERT:** But you had to change track in some areas as well?

**Hoedemaker:** Yes, of course. We had to carry out some restructuring in individual areas and in a number of countries. That affected the Shipbuilding Division in particular, as well as Construction, where we have now given up the general contracting business altogether.

**K-WERT:** Where are the growth markets of the future geographically speaking, and how can KAEFER be successful there?

**Hoedemaker:** For some time now we have been building and gradually extending our operations in what are known as the BRIC countries (Brazil, Russia, India and China). The acquisition of Isobrasil in Brazil marks a further step in this direction. We have

also intensified our existing activities in India, Russia and the countries in the former Soviet Union. With good success, as the companies there are performing well.

**Dalheimer:** We also anticipate substantial growth in regions like Oceania. Recently we won a large-scale maintenance contract there. We also see promising potential in LNG, the Pluto project is just one I could mention. In addition there are very good development opportunities in Asia, the Middle East and North Africa.

**K-WERT:** Talking about North Africa. What is the situation with the DESERTEC project?

**Hoedemaker:** We were the first Associated Partner of the Dii (DESERTEC Industrial Initiative) and intend to stay closely involved with this project. That's why we are active in a number of initiatives and working groups. For the next two years the main objective is to lay the political foundations for realising the project.

**K-WERT:** This year a strategy and sustainability workshop took place before the International Management Meeting (IMM). What was the purpose of that?

**Dalheimer:** As an insulation company, sustainability has an enormously high priority for us by definition. It is the bedrock on which our strategy is based and in future it is to pervade every aspect of our business. At the workshop we discussed this in detail with 50 top managers.

**Hoedemaker:** We didn't just talk about it in the abstract, however, but also developed concrete activities. The managers have committed themselves to taking concrete action in their respective countries.

**Dalheimer:** We also wanted to develop a common understanding of what sustainability means at KAEFER. Because sustainability doesn't have to be the same in Norway as in India.

**K-WERT:** Can you be more specific?

**Hoedemaker:** Sustainability has many dimensions. KAEFER sells sustainability by offering Complete Insulation Solutions. We have also started drawing up an analysis of the carbon footprint of our

own company, in order to measure and evaluate our CO<sub>2</sub> emissions. Vietnam and Austria were the pilot countries a year ago, now the analysis is being carried out in Germany and France. We are using the results to drive specific activities – there are lots of variables, both large and small. One small one is paper consumption in our offices. We are now implementing a sustainable printing policy at the new headquarters in Bremen, where e.g. staff are asked to use only double-sided printing whenever possible. We are also looking to make larger changes, however, and our green car policy is an example of that.

**K-WERT:** Even the new headquarters in Bremen are setting new standards in this regard?

**Hoedemaker:** Yes, we moved because our old head office was bursting at the seams. Now we finally have enough space for our staff and sufficient meeting rooms. The design of the new building represents attractive architecture, both inside and out. It also assumes its responsibilities in terms of sustainability. We deliberately ensured that the insulation is of very high quality, we put a photovoltaic system on the roof, two combined heat and power plants in the cellar and installed a solar-thermal system for providing hot water on the fifth floor.

**K-WERT:** What are the prospects for the years ahead?

**Hoedemaker:** We used the recent crisis to consolidate and take a breather; we carried out market research and invested very heavily in vocational and professional training for our staff. That means that we are stronger today than we were before the crisis.

**Dalheimer:** Even though the core of our activities remains in Europe, we are thinking about future growth outside Europe. We intend to further build up our offshore operations for example; there is a great deal of potential there. We will strengthen our networks and intensify our knowledge transfer. This won't be a one-way street, but will also open up opportunities for our original countries, for example in the fields of surface protection and refractory linings.

**K-WERT:** What can the employees contribute to this strategy?

**Hoedemaker:** Let me be clear about one thing: the growth of our Group before the crisis made great demands on our staff. They put in a terrific performance. During the crisis we had a little more time to get our breath back, but we still had to ask some staff to make sacrifices in this period. Which they did magnificently, and so for that and for the way we have all stood together in the crisis we are very grateful. Now we are looking ahead and looking forward to taking the company to the next stage together.

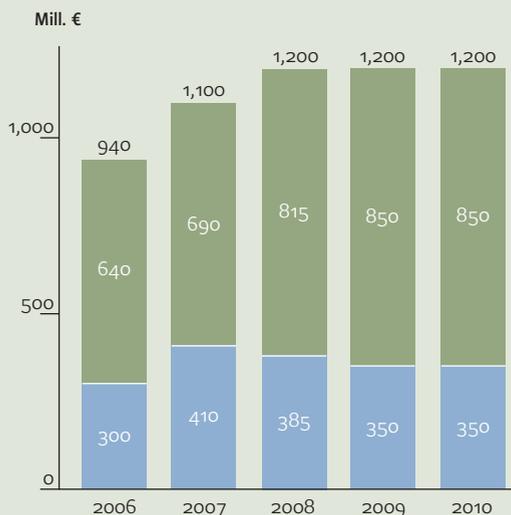
**Dalheimer:** That's why we didn't let up during the recession and have continued to qualify our staff. We put on a lot of training programmes for all hierarchical levels in the framework of the KAEFER Academy and will continue to do so.

**K-WERT:** That means the subject of Corporate Responsibility and Sustainability won't be forgotten?

**Hoedemaker:** On the contrary – we have pursued it during the crisis and it will continue to be a high priority in the future. We are launching new projects, building centres of excellence and looking forward to new initiatives. We are fostering a sense of family community with projects like the KAEFER International Soccer Cup, and for our staff in India, South Africa, the Middle East and Australia/Oceania we are planning a similar event in 2011, the KAEFER International Cricket Cup.

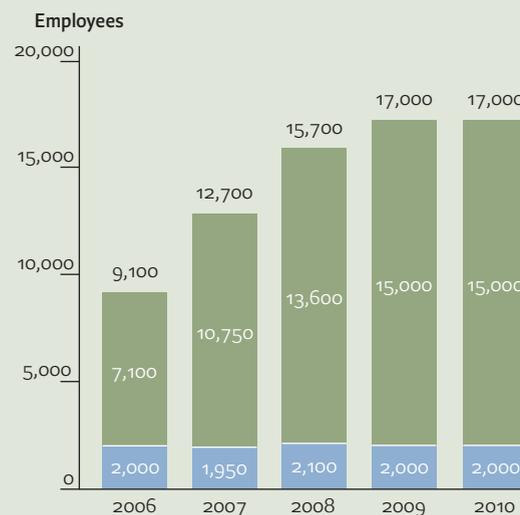
Thank you for the interview.

## Group sales 2010



### >> KAEFER GROUP REVENUE

The revenue for 2010 amounted to 1.2 billion euros. In some regions the economic crisis was still clearly felt, but countries such as Australia and Norway were able to increase their revenue.



### >> KAEFER GROUP WORKFORCE

In comparison to the pre-year period, the number of employees in the KAEFER Group has not changed.

## Managers discuss strategy

**WORKSHOP IN WARSAW** What does sustainability have to do with the KAEFER strategy? This and other questions were debated by 50 managers from almost all the countries in the KAEFER Group ahead of this year's International Management Meeting (IMM) in Warsaw.

The core of the company strategy is well known: KAEFER offers its customers the best Complete Insulation Solutions. To do so we work in accordance with four principles that are defined by cultural, social, economic and ecological dimensions. The workshop focused on

putting the strategy and these core principles into practice in our everyday working lives.

Working in small groups, the managers defined what they understood personally by sustainability in particular commercial situations. Suitable approaches were then identified based on business cases, i.e. realistic practical situations. As an example: a KAEFER company is given an order to use insulation material that is cheap to obtain but is problematic from an environmental perspective. The aim was to find a solution to this and other dilemmas.

It clearly proofed sustainability to be the basis of our strategy. That means staff must be qualified and development opportunities in new markets must be seized. It is also vital to strengthen relations with customers and suppliers. The managers concluded the workshop with the self-imposed undertaking to apply the potential solutions discussed to their everyday business and to report on the results next year.

# Change of location after 38 years

**NEW KAEFER HEADQUARTERS** On 11 October 2010 the big day had finally arrived. 18 months after the lease was signed and construction work began, the employees were finally able to move into their new offices. As the long-term lease was signed at an early stage of the proceedings KAEFER was able to influence the plans and the design for the refurbishment of the historical building right from the start. It was a long process, with all the usual surprises one expects when working on an existing building.

Once they were convinced by the new conceptual draft, the core project team led by Beate Bemmert put in a great deal of commitment, creativity and patience to see it come to fruition.

The reward for their hard work is there for all to see. A modern new working environment has been created in the historical premises Börsenhof "B" and Petrihof on the principle of "open offices, open minds". The company philosophy is reflected in the architecture and the interior design: clear structures, simple lines, transparency and light as well as the appropriate fixtures and fittings in sustainable, high-quality materials.

The company took the change of location as an opportunity to reinforce the organisational structure with a flexible office concept. Work spaces are therefore standardised in the interests of flexibility, whereby work spaces for different tasks have been developed by varying a basic module (single office). The desks have been placed parallel to

the facade, where they receive natural light, and alongside a central communication area. This separates areas where people need to concentrate from areas where they communicate.

Processes within the company and therefore the way that the space is used are subject to permanent change. In future more areas will be available for community functions and communication. Spaces for informal meetings, lounges instead of the usual tearoom for instance, are also intended to foster the free exchange of ideas.

This is not only to encourage contacts within head office, but also to facilitate knowledge transfer among KAEFER companies in more than 50 countries. There are two Live Communi-

cation Rooms for straightforward telephone or video conferences between global sites. Meeting and training rooms have also been included, so that future training programmes can take place at Group headquarters.

Altogether it is a sound basis for continuing our successful work and fruitful collaboration, and what is more, it is a home base for the KAEFER Group, where all the staff can feel at home when they visit head office.



## A very special guest at the IMM 2010

**AWARDS** Once a year KAEFER's senior managers come together to discuss facts and figures for the current financial year, company strategies and future prospects in round tables, presentations and workshops. This year the meeting took place in Warsaw. Around 100 participants from 50 countries gathered in the Polish capital.

Alongside numerous presentations on subjects such as solar energy, DESERTEC, LNG and innovations, one particular focus was on the latest refinements to the KAEFER strategy.

As in prior years prizes were given to individual companies for outstanding performance. This year, KAEFER Awards went to:

- KAEFER Spain (Best Performing Business)
- KAEFER Qatar (Best Development)
- KAEFER Finland (Exceptional Performance)
- PARKER KAEFER (Best Turnaround)
- C&D Industrial Services (CFI Award: Best Supporter of KAEFER Finance Strategy 2009/2010)

The absolute highlight of the supporting programme was a visit from the Nobel Peace Prize winner, former Polish presi-

dent and founder of Solidarność, Lech Wałęsa. His appearance and speech during the gala dinner was enthusiastically applauded by the 100 participants.

Wałęsa proved to be a brilliant speaker, reflecting broadly on the current state of the world, touching on the economic crisis as well as on the future of the global community of nations. Wałęsa's theme was that the world is getting smaller and its people everywhere must work together closely and in trust. He expressed his hope that the unfolding 21st century would become an era of solidarity.



Lech Wałęsa,  
guest of honour



## EXPO 2010: one million visitors to KAEFER

**WORLD FAIR IN CHINA** Around one million pairs of eyes have seen KAEFER at EXPO 2010 in Shanghai – that's how many visitors have been to the joint Bremen stand where the Group was present with its exhibits. The stand was extremely popular with the EXPO guests: in one survey 97 per cent said they would recommend Bremen's presentation to other people. They gave the stand an average of 9.27 points out of a maximum of 10 – an absolute top performance. The media coverage was also extensive.

The KAEFER exhibits contributed a great deal to this success. Right at the beginning of the Bremen stand there was a large touch screen showing an interactive presentation entitled Energy Efficiency with KAEFER. It focussed on solar-thermal projects in Spain, which give a foretaste of the huge DESERTEC project that is to come. This venture, in which KAEFER is involved as an Associated Partner of Dii GmbH, is intended to generate some 15 per cent of Europe's energy requirements in the deserts of North Africa and the Middle East by 2050.

Visitors to EXPO could also examine a detailed scale model of a solar power plant. Here too, interactive explana-

tions were on offer for every different section. It wasn't just the exhibits that made an impression on the guests at this world fair, which took place from 1 May to 31 October 2010, however. The design of the Bremen stand was praised frequently. "The red-gold combination is very popular with the Chinese and in comparison with some others the stand is really nice and bright," reported Dr Klaus Sondergeld, Bremen's marketing director, from his talks with visitors.

The EXPO and its motto "Better Cities. Better Life." offered KAEFER an ideal opportunity to demonstrate insulation's valuable contribution to climate protection. The enormous crowds ensured the presentation was a complete success.



# Energy from the desert to help combat climate change

**DESERTEC PROJECT** The deserts of the Earth receive more energy from the sun in six hours than the human population consumes in a year. This immense energy source is now to be tapped, in order to save the climate and ensure lasting access to affordable electricity – and KAEFER is part of it.

The fundamental idea is encapsulated in the DESERTEC concept, which was developed many years ago by scientists and industrialists at the distinguished Club of Rome. By 2050, electricity generated from renewable sources in the Middle East and North Africa is intended to cover around 15 per cent of Europe's energy requirements. The plans mainly foresee solar-thermal power plants and wind farms in desert areas. The populations of these mostly poor countries would also gain from the creation of new jobs and infrastructure.

The idea is revolutionary and strewn with challenges. It was initially refined by the DESERTEC Foundation and ultimately led to the establishment of Dii GmbH by twelve major international companies in July 2009. This powerful combination of expertise and market power should help to provide the stamina necessary to realise this ambitious project.

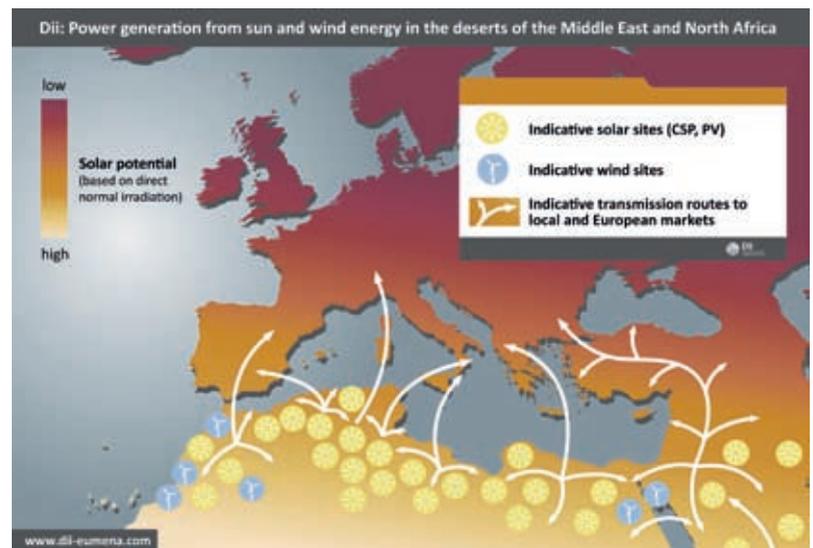
It was clear from the outset that the Dii shareholders would have to bring additional know-how on board in order to

resolve the technical challenges. The first company to be named an Associated Partner was KAEFER. Insulation will make a vital contribution to the success of the entire concept – KAEFER's expertise can ensure that heat loss in the solar thermal power plants is kept to a minimum. It also makes sense to call on KAEFER's competence for transporting the electricity over thousands of kilometres, as superconductors mostly only work at cryogenic temperatures.

Nevertheless, a number of technical and political obstacles still have to be overcome in order to turn the DESERTEC vision into reality. Dii is negotiating

vigorously at international level to secure the indispensable legal framework. Scientists are working in parallel to resolve the remaining technical issues. These include reducing the energy lost when transporting electricity over long distances.

In the opinion of most experts these challenges can be solved. Moreover, KAEFER's commitment "to eliminate the energy waste" is the ideal match for the company's vision. In future, the energy of the desert should no longer go to waste.



## Focus on North American nuclear market

**30 POWER PLANTS PLANNED** Energy losses affect nuclear power plants the same way as other types of power station, while security, safety and quality concerns are even higher. KAEFER offers insulation solutions that meet all these standards – and is now starting to push into the world's most important nuclear energy market: North America. More than 120 nuclear power plants are in operation in the United States and Canada combined. That is about one-quarter of the world's total. More than 30 new plants are currently being planned.

With this in mind, KAEFER Canada is currently positioning itself to increase its footprint in the market. One of the first steps was PARKER KAEFER's acquisition of C. A. PARKS, a New Brunswick company that already has references in the nuclear business. Also, PARKER KAEFER Western Ltd. was set up with two branches in Edmonton and Calgary.

Meanwhile, KAEFER Canada – the holding company behind ALBRICO KAEFER and PARKER KAEFER – is planning another acquisition in Ontario, Canada's centre of nuclear activity. To round it all off, a joint venture has been founded with a U.S. company to set the first foot south of the border.

With this capacity in place, KAEFER plans to grow into the market with backing from Corporate Competence Center Nuclear (CCCN). Many power plants will need refurbishment over the years ahead, providing an opportunity to display KAEFER's strengths on a smaller scale. When the proposed new plants are built, KAEFER will be able to use these local references and secure a serious share of the market.

## Chile doubles its sales

**ON A GROWTH PATH** With the acquisition in December 2009 of Souyet, the Chilean market leader, South America is for the first time officially represented on KAEFER's map of the world. Within just one year, KAEFER SOUYET has now grown even stronger, doubling its sales revenues.

The takeover was in line with KAEFER's growth strategy, which includes entering promising new markets. With several large-scale projects planned, industry in Chile is set for an expansion phase. That not only paves the way for KAEFER's first steps in Chile, but also lays the foundations for further business development in other regions of South America.

The Pacific country offers very good opportunities for Complete Insulation Solutions that go beyond individual disciplines. A key step in this direction is the largest insulation project ever executed in Chile, which KAEFER SOUYET is currently carrying out in Mejillones. The contract started with the scaffolding. Passive fire protection was prepared over the course of 2010 as a service for future projects and surface protection should be on offer from 2011.

With 400 employees and forecast revenue of 10 million euros in 2010, KAEFER SOUYET is already Chile's largest insulation company. By acquiring large-scale, multi-disciplinary contracts the Santiago-based subsidiary aims to defend its market leadership. The next steps are to expand operations in northern Chile and to win the first orders from neighbouring countries.



Insulation project in Concepción (Chile)

## Brazil prepares for the Olympic Games and an oil boom

**KAEFER ISOBRASIL** The football World Cup is to take place in Brazil in 2014 and the Olympic Games in 2016 – two clear signs that the country wants to play a greater role in the international community. Its population is already the fifth largest in the world and its gross domestic product is in eighth place – ahead of countries such as Spain, Canada, India and Russia.

An estimated 350 billion dollars is to be invested in its growing industrial infrastructure over the next ten years, which will generate a corresponding demand for insulation. Following its acquisition of a 51 per cent stake in Isobrasil, KAEFER is well placed to benefit from these developments. The company, which changed its name to KAEFER ISOBRASIL in September 2010, has considerable experience of the market.

At present many international investors are concentrating on the great potential offered by offshore oil in Brazil. Reserves of more than 50 billion barrels have yet to be tapped. Until now exploitation of the oilfield has been too complicated and too expensive. It lies 7,000 metres below sea level and is covered by a layer of salt 2,000 metres thick. Now, the global oil industry wants to start drilling, however, because the technology has improved and oil is more expensive.

Isobrasil was already active in the offshore industry before the takeover. The company was founded in 1956, is headquartered in Belo Horizonte and has branches in Macaé (near Rio) and Vitória. Around 400 employees generate annual sales of more than 15 million euros.



Pedro Vazquez (l.) and Alfonso Prado (r.)  
signing the contract on 9 July 2010

## Turkmenistan is set for an investment boom

**NEW OPPORTUNITIES** Turkmenistan's significance for the global economy has so far been limited: around five million inhabitants generated a GDP of US\$26 billion. Now, the country is in the sights of multinational energy companies such as Chevron, RWE, DEA and Eni. In the years ahead they are planning to invest a lot of money in the country to develop the production of its oil and gas. Turkmenistan has the fourth largest gas reserves in the world – around 4.4 per

cent of the total. The investment costs for just the seven most important energy projects currently planned will add up to more than US\$11 billion.

Many of KAEFER's international customers are already on the ground, whereas the market for insulation services is still in its infancy. This means KAEFER has the chance of opening up the market early and benefiting from the upcoming boom. A local company has been set up to exploit this opportunity.



## KAEFER Poland happy with new member WIEZAT

**RAPID INTEGRATION** It is small, but highly successful: just one year after its integration into the KAEFER Group, WIEZAT has already become an important part of KAEFER SA in Poland. The 93 experienced workers have assimilated the new corporate culture and different processes very quickly. The first major project in cooperation with KAEFER SA has already been completed – a maintenance contract for pipeline insulation at Azoty Tarnów, one of the country's largest chemical plants. WIEZAT's team was responsible for scaffolding and for removing the old insulation, while the new insulation was installed by KAEFER SA.

In July 2010, KAEFER Poland's youngest member won another tender from Azoty Tarnów, which remains WIEZAT's main client. This contract involves insulation of pipelines and equipment on a caprolactam production plant. The plant is

to be modernised and its capacity expanded to about 100,000 tons per year. Works on an ammonium nitrite facility are also included.

With these and other projects, CEO Andrzej Gacon expects WIEZAT to keep growing. Recruiting qualified personnel is made easier with the help of the KAEFER Group: four apprentices from the KAEFER SA Vocational School recently joined the organisation.



**WIEZAT**

## Norway: new headquarters facilitate collaboration

**ROOM FOR GROWTH** Usually, KAEFER ENERGY in Norway focuses on eliminating the energy waste for its clients. With its new headquarters in Stavanger, though, the Norwegian company has taken huge strides to save its own energy – literally and figuratively. While the building has been planned and erected with an emphasis on environmental concerns and employee safety, it also provides lots of opportunities to streamline work processes and make communication easier.

Previously, KAEFER ENERGY had occupied three different offices and workshop buildings in Stavanger. In May 2010, all 100 employees moved into one new head office that was built specifically to meet their demands. The facili-

ty even provides room for more growth too, as another 50 staff members are expected to join the team in the future.

Training and skills development are always very high on KAEFER ENERGY's agenda for all employees. The head office therefore has its own training centre. In the basement, a modern production workshop provides ideal conditions for insulation and interior outfitting activities. Measuring 800 square metres, the workshop is equipped with several computer-controlled machines and optimised logistics features.

To improve interaction and reduce travel costs, more conference rooms have been provided, featuring the best of modern communication technology.

This makes staying in close contact with clients and project teams much easier. The environment benefits – and so does the company's bottom line.



## New head office secures the “home advantage”

**HEADQUARTERS IN JUBAIL** Two of Saudi Arabia’s largest infrastructure projects are being built in the Jubail Industrial Area. The construction of a new head office there means both sites are practically “home games” for KAEFER. The hub for all KAEFER’s activities in the region was inaugurated on 19 May 2010. It is situated just 13 kilometres from the Jubail Export Refinery, which is already under construction, and six kilometres from the planned site of the Jubail Petrochemical Complex.

The KAEFER headquarters in Saudi Arabia provide office space, warehouses, accommodation, and training facilities. More accommodation will be added in 2011. This investment not only facilitates the execution of existing orders, it also supports expansion into fields such as painting, scaffolding, fire protection and refractory, which are in great demand. To provide the best-possible work environment for these jobs, the new company hub features a blasting and painting yard, an insulation fabrication shop and a scaffolding laydown area.

KAEFER’s Jubail facilities were inaugurated by Marwan Gholmieh, CEO of our joint venture partner Nesma Trading, and KAEFER GEC member Philipp Dalheimer. In their speeches, they thanked the staff for the huge progress that had been made in Saudi Arabia and looked ahead to future opportunities. The current workforce of 400 painting, insulation and scaffolding technicians is due to grow to more than 1,000 by the third quarter of 2011. And that is not expected to be the end of the expansion.



## New headquarters for KAEFER WANNER

**MOVE IN NOVEMBER 2010** KAEFER and WANNER: After the merger in 2001 the new Franco-German company set up its head office in Puteaux, a suburb of Paris. It is primarily known for its modernist new business district La Défense.

At that time the company headquarters had a staff of 40. Over the years the demands made on head office have grown; there are now 70 employees here and the offices are bursting at the seams. There was no choice but to look for somewhere else. So in November the colleagues packed their computers and files and moved to the neighbouring suburb of Suresnes.

The new address is: 31-35 rue Gambetta, 92150 Suresnes.

The telephone and fax numbers have not changed.

## More countries on the way towards Complete Insulation Solutions

**THREEFOLD SURFACE PROTECTION** Bundling insulation with other closely related services is at the core of KAEFER’s corporate strategy. One important component of these Complete Insulation Solutions is surface protection. Between May and August 2010 three companies with a strong focus on this area joined the KAEFER Group: Tecpiq Pintura Industrial Quimica (Tecpiq) in Spain, Novacoat in Australia and C. A. Parks in Canada.

Tecpiq was founded in the 1970s and has strong roots in the region of Catalonia. It also has an excellent reputation in the chemical industry. With its 45 qualified employees and high-grade technical equipment, Tecpiq is now part of KAEFER Aislamientos, Spain.

Novacoat is based in Kwinana, 44 kilometres south of Perth at the heart of Western Australia’s heavy industry and close to the key port of Fremantle. The almost 20-year-old company’s core business is blasting and anticorrosive painting of structural and mechanical components. Its clients stem mainly from heavy industry as well as from the construction sector. With a workforce of 25 employees

and a state-of-the-art workshop, Novacoat will allow KAEFER Integrated Services in Australia to provide a new range of services to its existing clients. KAEFER will also have access to a new client base in the mining sector.

The third new arrival is C. A. Parks, which was acquired by PARKER KAEFER. C. A. Parks specialises in high-pressure cleaning, sandblasting and anticorrosive industrial painting. Despite being established only three years ago, the company already has experience in large projects in the Canadian power sector. With its highly qualified employees and specialist equipment, C. A. Parks will make an excellent addition to KAEFER’s business in Eastern Canada.

These new additions to the KAEFER Group have once again created a whole that is larger than the sum of its parts. The new colleagues have brought in knowledge and know-how that allows KAEFER to deliver top-quality Complete Insulation Solutions as promised in even more locations.

# Sustainability – a broad topic with many dimensions

**SUSTAINABILITY IS A MINDSET FOR KAEFER** – an undertaking that should determine our work and the way we think and act. The worldwide fight against energy waste is an important issue and one which increasingly captures the public interest. In this respect we are in the fortunate position that our traditional core business is in exactly this area. Beyond this, we see sustainability covering a much wider range of aspects, which are expressed in our core principles of corporate responsibility:

- We care for people and their health and safety
- We respect cultural differences and promote value-based leadership
- We take environmental responsibility
- The quality of our work forms the basis for excellent longevity of relationships with our customers and partners

To follow these principles KAEFER supports all its employees and businesses to develop sustainable strategies in their respective areas of activity. Ecologically, socially, culturally and economically responsible ways of thinking and acting are reflected in the implementation and support of numerous projects for the benefit of the environment and society – but also for KAEFER. The central management and all-round coordination of these activities is the task of the Corporate Responsibility and Sustainability (CRS) department in Bremen, led by Francisca Gorgodian.

The current projects vary in focus and scope and certainly do not all originate in the head office. Many ideas and initiatives stem from KAEFER sites around the world. As the following small selection shows, commitment and personal dedication can be found everywhere and in highly diverse forms.

This broad range of activities was also the inspiration that led to the development of the label shown on the right, hand side. The green symbol represents people and the Earth,

whilst the blue circle symbolises not only the oceans and the atmosphere, but also cultures, societies and economic considerations. It is about a more comprehensive whole that is worthy of our protection and is increasingly associated worldwide with the colour blue. The segments of the circle symbolise the four dimensions of our CRS strategy. They show that we not only think about the environment, but also take social, cultural and economic aspects into account.



Francisca Gorgodian at the orphanage "Fountain of Love" in South Africa



The Deutsche Kammerphilharmonie Bremen and the secondary school, Gesamtschule Ost, perform "Melodie des Lebens" (Melody of Life)

## Colleagues show solidarity for colleagues in Chile

**HELP FOR EARTHQUAKE VICTIMS** It is hard to imagine the forces that cause an earthquake strong enough to be felt in large parts of South America and produce damaging tsunamis as far away as California and Japan. Many KAEFER SOUYET employees and their families were directly exposed to these forces on 27 February 2010, destroying their homes and cutting off electricity. More than 500 people died in Chile on that day.

KAEFER SOUYET responded immediately by organising the delivery of food supplies for the workers and their families in the most affected regions. Help

also arrived from various other countries where KAEFER employees collected a five-digit amount to support their colleagues.

As winter was approaching in the southern hemisphere, repairing substantial damage to the houses of KAEFER employees was the top priority. Vouchers for building materials were distributed to the most affected workers, allowing them to repair their homes themselves. Another ongoing task is helping severely damaged schools in the most affected regions.

The employees and management of KAEFER SOUYET thank everybody who

has already helped them overcome this devastating catastrophe.



### Eliminate the energy waste

In India one contribution to eliminating the energy waste comes from “Moving India’s SMEs towards Energy Efficiency” (MovIEE), a project supported by the German Ministry for Economic Cooperation and Development as part of its develoPPP programme. This project is a collaboration with the German Society for Technical Cooperation (Deutsche Gesellschaft für Technische Zusammenarbeit) and with the support of Rockwool International (Denmark). Small and medium-sized enterprises are informed about the benefits of industrial insulation and the potential energy-saving effects. Training, advice and financial support are offered to these companies, helping these firms “to eliminate the energy waste”, as defined in KAEFER’s vision.

Young managers at KAEFER are also getting to grips with these topics: a group from the Junior Leadership Programme (JLP) has developed an environmental reporting system as a research project in order to measure consumption of material and energy in a wide range of activities. This system enables the identification of opportunities to improve sustainability. The project is to be continued and rolled out worldwide.

### Social commitments

The KAEFER AIDS Relief Programme (KARP) in South Africa has been running since 2007. In addition to providing advice on prevention and medical treatment for HIV-positive employees since 2009, KAEFER Thermal Contracting Services has supported the Fountain of Love, an orphanage for children who have lost their parents to AIDS or are themselves HIV-positive. This project was one of the beneficiaries of the donations collected at the Children’s Day 2010 in Bremen.

In Poland, KAEFER SA organised a blood-donation campaign among its staff in February 2010 and intends to repeat it again regularly in future. Presents were also given to children in need in Zabrze as part of two charity events. KAEFER in Munich uses its annual Christmas party to run a tombola; the proceeds of which go to buy presents for the young patients of the children’s hospital in Harlaching. One very special event is the annual Day of Caring in Bremen, for which dozens

of KAEFER employees swap their suits for a pair of overalls. Summoning up all their practical skills, they set to work to renovate and refurbish a social institution in the area. A similar event takes place in Canada, where the staff of PARKER KAEFER also put their painting and decorating skills to good use as part of the Novia Scotia Day of Caring.

### Emergency aid

Natural disasters require spontaneous assistance. Earthquakes or floods cause dreadful damage from one moment to the next, depriving the victims of their livelihoods without warning. In circumstances such as these, KAEFER staff have repeatedly taken swift action to help.

In Chile, for example, KAEFER SOUYET organised emergency aid after the severe earthquake in Concepción on 27 February 2010.

Haiti suffered a similar blow on 21 January 2010. The massive earthquake devastated the Caribbean state, making it completely dependent on outside assistance. Many international aid organisations arrived on the ground straight away, but needed financial support. KAEFER Engineering Thailand and KAEFER Aislamientos from Spain provided spontaneous help.

In Germany, a campaign was launched in August 2010 for donations to help the Oder flood victims. Many KAEFER employees from OLUTEX in the Upper Lusatia region suffered damage to their possessions from the flooding and were very grateful for the support.

### Preserving our cultural heritage

A number of projects are also being carried out at our home base in Bremen. The Bremen Art Museum is currently closed for a couple of years in order to carry out repairs. During this time KAEFER is providing a vehicle to visit schools and other local organisations and show children and adults the collection “virtually” by means of presentations and painting sessions. KAEFER is also one of the main sponsors of the Deutsche Kammerphilharmonie Bremen, which takes its own social responsibility very seriously.

## Day of Caring 2010

**KAEFER AT WORK ON THE CITY DISTRICT FARM IN HUCHTING** **Good teamwork for a good cause:** at 8 o’clock in the morning on Friday, 13 August a total of 73 colleagues from all divisions met at the city district farm in Huchting, Bremen, to start the fifth Day of Caring.

The weather was excellent, and after a short welcome speech from managers of KAEFER and the farm, nine highly motivated teams spread out across the farmyard to dig, lay paving, move equipment, hammer and paint.

The farm had drawn up a long wish list. The roof of the sheep pen needed

reseeding, as well as a new gutter and drainage. The goats were to get a new hay rack, a freshly paved yard and fully refurbished outside enclosure. The ducks were treated to a new pond, and a fresh mud bath was mixed for the miniature pigs. The feed area in the horses’ stables was completely worn out and so it was replaced with a wipe-down work-surface made of stainless steel and aluminium. A spacious new log cabin was also planned for the spot where an old caravan used to stand and after the hard winter there were plenty of wooden shingles and other woodwork on the farm that needed sprucing up. New toys

for the kids included basketball nets, a wooden beam and a slackline for them to balance on.

The staff of the city district farm kept everyone well fed and watered all day and were very impressed by the final results of all the teamwork. Judging by their smiling, satisfied faces, the colleagues were also very pleased with what they had achieved when they left the farm at the end of a long day for a well-deserved weekend rest.

# The diverse world of KAEFER

**PHOTO COMPETITION** It was the first time that KAEFER staff from all around the world had ever been invited to take part in a joint project; and what a response! In early 2010 Corporate Communications (CCM) had asked all the colleagues at KAEFER to send in their best photos to illustrate the KAEFER motto “common spirit – local diversity”. The assignment for the international amateur photographers was entitled: “Give the world a personal impression of your culture.”

Between 1 June and 31 August 2010 a total of 178 KAEFER employees from 25 countries were out and about with their cameras. Nearly 500 photos were received in Bremen. The motifs were as diverse as the company itself: from a wedding ceremony in Thailand to breathtaking natural wonders in Canada and Australia.

The international jury, which included a professional photographer, selected the best photos in an anonymous process and awarded the prizes. The winners have since been announced and personally notified. The best 20 pictures each won an iPod touch. Twelve photos that show the cultural diversity of the KAEFER world are now also part of a KAEFER calendar. Because the number of high-quality photographs that were received was so high, however, they will soon be available for viewing on other media, such as a screen saver. CCM is also thinking about organising a second round next year. You can find a selection of the best photos on the cover of this edition.



## Winners chosen in the 2010 ideas competition in Germany

**PRACTICAL IDEAS** Rolf-Dieter Bonkatz, Jörg Mayer and Lothar Himpel from KAEFER Industrie GmbH in Schwedt had a brilliant idea. They developed an Excel-based program to manage the prefabrication of folded sheet-metal parts on construction sites. This suggestion earned the three KAEFER colleagues first place in the 2010 ideas competition. They received their prize money of 3,000 euros at a celebratory breakfast in Bremen given for them and the 13 other contributors of the 15 best ideas.

The competition was open between 26 April and 25 June for the staff at all German companies and sites to send in their ideas. Altogether the jury members

Britta Krüger (Works Council), Marin Schouten (Corporate Technology & Research) and Ralf König (Human Resources Germany) examined 57 suggestions. Second place, with prize money of 2,000 euros, went to Angela Braun (Human Resources Germany, Bremen). She suggested paying a flat rate of tax on taxable travel expenses, which benefits both the company and the employees. In third place (1,000 euros) was Heiner Lippert (KAEFER Industrie GmbH in Bremerhaven) with his idea for simplifying 90-degree multi-section folds.

So that these ideas can really be put into practice, all the suggestions considered feasible by the jury were sent

to the people responsible. All the participants will be kept informed of the result of the feasibility review. The ideas competition was a great success all round: it showed the potential for new ideas that exists at KAEFER and that the search for better solutions really is a KAEFER speciality. There is in fact no reason why it shouldn't be repeated – maybe even at another company in the KAEFER Group as well.

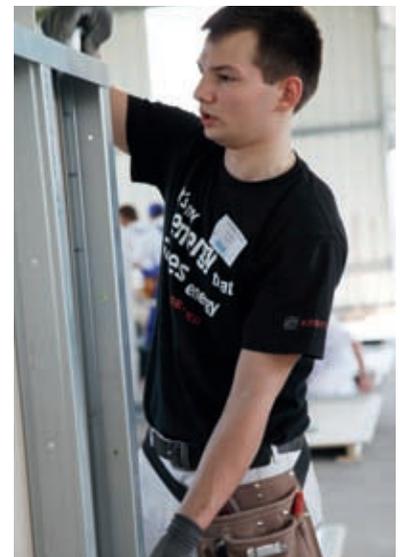
## 5th Knauf Junior Trophy in Vienna: 1st place for Team Austria II with Gabrijel Colic

**FRESH MOTIVATION** As an Austrian team came in first in 2009, this year's Knauf Junior Trophy took place from 9 to 11 June 2010 in Vienna. Last time Tomas Sklenar, a KAEFER apprentice, was part of the winning two-man team. So it was not such a surprise that in 2010 another junior technician from our company was able to demonstrate his professional talent as well as our obviously good training with an outstanding performance.

The team made up of Matteo Vitus Kohler and Gabrijel Colic put their practical skills and theoretical knowledge to the test in the Building Academy at the training centre Lehrbauhof Ost in Vienna. There were 60 multiple-choice questions to answer in 30 minutes, followed by a free-standing stud partition wall that had

to be built precisely to scale in three hours. The quality of the work was paramount despite the time pressure, and tools and workspace had to be kept clean and tidy as well. When it was all over the jury came to the conclusion that no one had done it better than them.

The award ceremony at the Adria on the Danube canal in Vienna was a well-deserved reward for all the participants, whose work was generally of a very high standard, with often only minor differences between them. This was followed by a Viennese Day, with a visit to the Prater park and fairground, a Segway trip and other attractions, making it a fine event to refresh their professional motivation and qualifications and to enjoy the fruits of what they had already learnt.



## KAEFER image film wins design prize

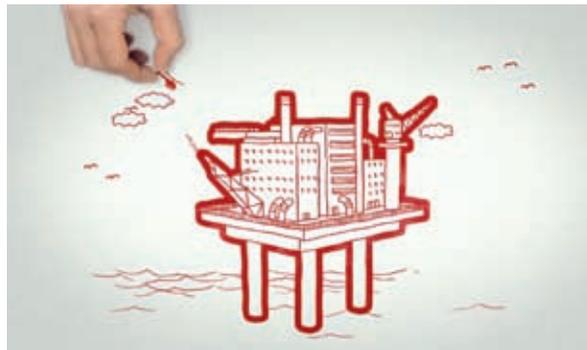
**POPULAR COMPANY PRESENTATION** The new KAEFER image film has met with an overwhelming response. Customers and staff were all very enthusiastic and this has now been followed by one of the highest accolades in the advertising and communications business: the red dot design award. The prize is one of the largest design competitions in the world, with more than 6,000 entries from many countries.



### reddot design award winner 2010

The two-minute film gets such a good reception from everyone because it deals with the abstract topic of insulation in an entertaining way that makes it easy to understand. With the help of animated graphics a narrator explains in a relaxed tone why KAEFER makes an important contribution to companies' profitability – and to climate protection. The protagonists are characters that everyone recognises: a shivering sheep shows why it needs its wool for instance, a melting snowman is pleased to get some protection from the sun. In the film the graphic elements are moved by real hands that can be attributed to different places of origin, genders and occupations. This symbolises the broad cultural diversity and global collaboration at KAEFER.

"The film offers a great introduction to the subject of insulation without sounding patronising," says Romy Budnik, project manager in Corporate Communications (CCM). "It appeals to viewers of all age groups and nationalities and that makes it a good ambassador for our company."



## A KAEFER man wins the European Insulation Championship 2010

**FIRST-CLASS PERFORMANCE** Christian Seyfarth is Europe's best young insulation technician! The championship is organised by the European Insulation Federation (FESI) and this year it took place in Stavanger, Norway, bringing together a total of 23 young insulators, one of whom was female, from twelve countries. Over a period of two days the up-and-coming fitters had to insulate a sample of piping with the materials provided and partially encase it with sheet steel.

Finally, Christian Seyfarth from Germany was declared the winner. "All the participants worked to a very high standard. Christian's performance is particularly remarkable as he also beat colleagues with much more experience,"

commented Marc-André Kujau, the trainer accompanying the competition. Christian Seyfarth received his trophy from FESI President Peter Hoedemaker.

The 21-year-old winner completed his three-year apprenticeship as an industrial insulation technician in Bremen in July and now works for KAEFER at the Leipzig site.

Altogether, three of the 23 competitors came from KAEFER – proof that the company's vocational training is of very high quality. The participants in Stavanger were Christian Seyfarth from Germany, Eric Schibotto from France and Wojciech Skróch from Poland.



Robert Skrobisz (l.) and Peter Hoedemaker (r.) with the winner Christian Seyfarth

## Sun, fun, sport and sustainability

**SOCCER CUP IN BUDAPEST** Tackles, dribbling, cheering crowds – football is dynamic, exciting and brings people of different nationalities and backgrounds together. The KAEFER International Soccer Cup held this year for the fifth time again provided a great demonstration of the beautiful game. This time it was hosted by last year's winners, KAEFER HEIBL from Hungary. A total of 280 KAEFER colleagues from 14 countries were invited to Budapest on Friday, 17 September 2010. Besides the football the two days were dedicated to having fun and getting to know each other.

The first qualification matches started on Friday lunch-time. In the evening the teams went on a wonderful boat trip to admire the Danube by night. During the KAEFER's Got Talent competition on board many of the teams showed that they not only had impressive ball skills, but also a flair for show business: the songs, dancing and sketches had the spectators rolling in the aisles. One highlight of the evening was the Bobby the Rabbit show put on by KAEFER staff from Luxembourg. The cuddly bunny tried his best to predict the winners of the tournament, but unlike the octopus who shot to fame in Germany during the World Cup, his tips were way off the mark, as the next day revealed.

The tournament itself continued on Saturday with a succession of thrilling matches. A spirit of fair play was again much in evidence and the FIFA referees were there to make sure it stayed that way. The special Fair Play Cup went to Shipbuilding Connect, an international invitational team made up of staff from different companies. Third place went to the Poland 2 team, which beat France 1 in the final of the plate competition. The prestigious KAEFER Cup was taken home by the Construction Czech Republic team after a nail-biting penalty shoot-out against the hosts and defending champions, Hungary. Prizes were also awarded to individual players: Jakub Wajdzik (Poland 2) and Kotic Frano (Netherlands-Belgium) were voted best goalkeepers and Nijaz Hadzic, the number 9 from Construction Czech Republic, won the goal-scorer's crown with a total of ten goals.

The pitches weren't the only green thing at the event either. Environmental awareness, in the form of avoiding and separating waste, were also on the programme. Instead of more than 1,000 plastic water bottles, the participants were given reusable drinking bottles that they could refill at a large water tank throughout the tournament. That reduced the amount of waste enormously and brought the spirit of sustainability to the sports arena as well.



## Premiere for joint purchasing strategy

**CROSS-BORDER ACTIVITIES** According to an old merchants' saying, profit comes from purchasing. Even though times may have changed, the nub of the adage remains true today. Exploiting the potential of purchasing is a vital factor for ensuring a company's profitability. A purchasing department that thinks along these lines is not only procuring goods, but shaping business relationships. "KAEFER is good at buying. Now, the aim is to achieve further synergies by means of joint strategies. That means we need a standardised system, which we are now introducing in selected countries," says Andreas Kamradt, head of Corporate Supply Management (CSM).

Since 2008 he has been working with the purchasing experts from several national KAEFER companies to harmonise the purchasing systems at KAEFER across borders. In the spring of 2009 a meeting was held with 18 purchasers from several countries who agreed on standards, uniform IT systems and interfaces. This was followed by a lot of work, which resulted in the creation of the Purchasing Information System,

PlnS for short. PlnS is due to be launched in Norway, Spain, the Middle East and India in the New Year 2011.

"We have taken the first step towards a purchasing methodology for the entire Group," explains Kamradt and promises to provide further reports on progress and next steps in the future.



## The training portfolio is complete

**SEMINARS OF AN INTERNATIONAL STANDARD** The KAEFER Academy offers programmes for acquiring professional qualifications as well as for systematic management development. The latter is divided into four sections and, with the AMP (Advanced Management Programme) that began in July 2010, is now complete. The JLP (Junior Leadership Programme) is aimed at younger staff at team-leader level and the new AMP is for middle management. The EDP (Executive Development Programme) has been developed for managing directors and other key positions, while regional directors and heads of central divisions have the TMP (Top Management Programme).

The JLP and AMP programmes are carried out by Coverdale, an international specialist, and focus on developing management skills. EDP and TMP on the other hand are run in cooperation with Henley Business School in the UK and also cover strategic issues and finance in addition to leadership topics.

The structure of all programmes is the same: four three-day seminar modules, all in English, are divided over one year. During this period the participants, a maximum of 16 deliberately brought together from diverse divisions and regions, also work on a project of current relevance to the company. This very hands-on assignment is proposed by KAEFER divisions with suitable topics and is also remunerated, making it an exciting challenge for the participants and a source of valuable information for the company. The results are finally presented to the Group Executive Committee (GEC).

The unanimous opinion of everyone who was able to take part so far is that the knowledge gained, the experiences shared and the integral networking opportunities are very rewarding, making it an enjoyable team experience.



## PMQ programme builds bridges to “real world”

**NO UNPLEASANT SURPRISES** Following its launch in a number of test countries, KAEFER’s Project Management Qualification (PMQ) programme is now spreading rapidly across the globe.

More than 220 employees in 16 countries had taken part up to September 2010. This year alone, seven new countries joined: Australia, Malaysia, Thailand, India, Canada, Mexico and Brazil.

“Everybody says the programme is interesting and they are learning a lot,” reports PMQ manager Paul Worrall.

“Now we have to make sure that the tools are actually used.” Implementation workshops – and complete support from managers and peers – are therefore an important part of the concept.

Many KAEFER units take additional steps to apply their PMQ know-how in “real life”. For example, in Victoria, Australia, it is now mandatory to use the forms from the programme. While there was significant scepticism in the beginning, the feedback is now very positive. “Everyone now understands that these forms help us to avoid unpleasant

surprises in a project,” explains contract coordinator Sue Smith, who is participating in the programme.

Paul Worrall also points out that implementation of the new methods may require some organisational adjustments and a bit of “getting used to”. It pays off quickly, though, he says. “It’s easier to use the project management tools than not to use them.”

## New HR development programme in Germany ready for launch

**FEEDBACK AND OPEN DIALOGUE** We aim permanently to support and motivate our employees, as they are our most valuable resource. Human Resources Germany has now developed a new staff development programme for KAEFER Aerospace GmbH based on annual performance reviews.

At the centre of this open dialogue between manager and employee are feedback on performance and conduct and a joint agreement on the targets for the coming year. At the request of the employee or the manager this can then

be followed by a personnel development discussion in order to reconcile individual career goals and prospects within the company. The responsible member of the Human Resources department also takes part in this meeting. This can lead to a development plan to prepare the employee for taking on additional or new responsibilities within KAEFER Aerospace.

The concept also provides for department managers to share information once a year on their need for specialists and managers. This entails

defining professional training for employees and any new recruitment that may be necessary.

All these steps to motivate employees and to support managers are due to be launched in spring 2011.

## An important impetus for fire protection

**KNOWLEDGE TRANSFER AND NETWORKING** Passive fire protection is an integral part of the KAEFER strategy. Numerous organisations and experts within the KAEFER Group are deeply involved with the topic and apply it in their local markets. In order to pool their expertise and foster an exchange between fire-protection experts, KAEFER Corporate Technology & Research, Fire Protection department (CTR-F), initiated and organised a Fire Protection Conference for the first time this year. The response was very gratifying: 29 fire-protection specialists from ten countries met in Bremen.

The organiser Thomas Heuermann had divided the two-day meeting into two parts. First off was an in-house trade fair, where some key system suppliers such as Hilti, Rütgers, Grace, Ditec, Promat and HWS, maker of the PYROMAN software for documenting fire-protection, all presented their products. The next day several participants reported on their local projects: PARKER KAEFER (Canada), KAEFER Construction (Norway), KAEFER WANNER (France), KAEFER Engineering (Vietnam) and Thomas Heuermann for CTR-F. "We quickly established that there is a very high level of fire-protection knowledge everywhere in the global KAEFER organisation, including some very specialised expertise," says Heuermann. "We want to share this knowledge around. CTR-F in Bremen can play the role of an intermediary between the different worlds," he adds. The fire protection professional has another objective too; he wants KAEFER to become more independent of system

suppliers, to develop its own systems and to improve global communications in order to meet the demands of local markets swiftly and efficiently.

The first step towards a worldwide knowledge transfer has already been taken. There is now an intranet forum for fire protection. "Anyone who is interested in the subject can put forward comments and questions for discussion," suggests Heuermann.

The organiser's conclusion is positive, "The conference provided an important impetus for fire protection. We are planning a sequel in 2011."

A prime example of the kind of cooperation he has in mind is a fire-protection system to seal a pipe penetration for the first European pressurised water reactor (EPR) in Finland. With the support of the Corporate Competence Center Nuclear (CCCN), CTR-F planned and costed the entire system and accompanied the fire-testing at the Materials Testing Office for North-Rhine Westphalia. The challenge was that the whole system had to comply with the new European EN 1366-3 standards. The joint project lasted for 15 months and was a great success, as in four large-scale fire tests the systems withstood the two-hour exposure without exception. Now the system still has to be approved by the Finnish classification authority VTT, which by the way was involved in the project from the beginning. Installation can then begin in 2011, hopes Heuermann.



# Starting large aircraft quietly

**PRACTICAL NOISE PROTECTION** Just turn the ignition key and the engine is up and running? That's not the way the jet engines on modern wide-bodied aircraft work, however. They need a lot of power and air pressure to get started. Normally "starter units" are responsible for getting the turbines spinning. These are gas-turbine compressor units, which blow pressurised air into the jet engine using a compressor. The starter units usually make a terrible din; noise levels measured a metre away of 100 db(A) are quite common, even on insulated units. On behalf of their client Rheinmetall the engineers at the Corporate Technology & Research/Acoustics (CTR-A) department in Bremen, working closely with the Technical Noise Protection team at KAEFER Industrie GmbH, have now modified a starter unit for the Airbus A380 engines in such a way that the noise emissions can be cut by a total of 15 db(A).

The main challenge of the project, which lasted for two and a half years, lay in the construction design of the already heavily insulated unit. The KAEFER experts were allowed to make modifications but could not exceed certain external dimensions. Hans-Joachim Rennecke, head of the Acoustics department, explains, "We definitely couldn't make it wider or higher, because the unit is transported in pairs on a small truck at the airport and must meet specific safety standards".

First of all, a large number of noise and vibration measurements were taken of the complete unit and many of its component parts on the client's premises. This was followed by modifications and repeated measurements at the Technical Noise Protection workshop in Delmenhorst. The exhaust gases that are blown out at 600 degrees Celsius and tight flow patterns in combination with the overall design made it very difficult to find ways of reducing the noise footprint. "We identified weak spots and eliminated them, built different systems, took more measurements, including with the infrared camera, tried lots of different things and so gradually got down to the specified noise level," says Rennecke. Amongst other things the unit's housing was altered, air intake apertures modified and the exhaust system was redesigned.



It worked: the specified reduction of 15 db(A) was achieved. This is a considerable amount if you recall that a reduction of 10 db(A) represents a 50 per cent cut in the perceived noise level.

The first prototype of the new quieter starter unit has now been delivered to the client and is already in service. It even has a VIP role, as Hans-Joachim Rennecke confides proudly, because the A380 that took the German football team to South Africa was started using that very unit.

## Quieter by customer request

**AFTER SALES** If you thought that aircraft built for passenger services spend their whole lives in that area, you'd be mistaken. On the contrary, it's not unusual for old single-aisle planes to be converted into freighters, or indeed into VIP private jets. That is just the kind of assignment that was awarded to AMAC Aerospace.

The Swiss conversion specialist was asked to refurbish an Airbus A319 for a client from Qatar, who intends to use it for private travel and for transporting medical patients. The customer wanted the plane to be made much quieter, so AMAC approached KAEFER Aerospace for support. "Together with the Corporate Technology & Research department (CTR), we designed a concept that satisfied the client 100 per cent", says sales director Thorsten Schmidt.

At the heart of the design is improved sound insulation. "CTR has years of experience in measuring noise levels on

board ships and that enabled us to develop a customised primary insulation for the client that made the plane much quieter," explains Schmidt. The KAEFER solution was to use heavier glass wool that provides better insulation against sound. The new mats were tested using computer modelling in the in-house sound laboratory.

KAEFER Aerospace had another trump card to play when it came to the installation. As the plane was already insulated with KAEFER mats, swapping the old ones for new ones was as quick as a flash. "The fitters were amazed at the amount that took off the installation time," grins Schmidt.

The next joint project with AMAC is already in the starting blocks: the refurbishment of a Boeing 777.

## KAEFER SOUYET: energetic debut with power plant project



Thermal power station with a capacity of 165 megawatt

**MEJILLONES IN CHILE** KAEFER SOUYET has made a flying start to its first year. Soon after the takeover by KAEFER in December 2009 the new company began work on the largest conventional thermal insulation project ever carried out in Chile. The new thermal power plant in Mejillones, consisting of two identical coal-fired plants, needs more than 60,000 m<sup>2</sup> of insulation. The client is the Spanish company Cobra.

In the years ahead KAEFER SOUYET would mainly like to acquire large-scale projects which require the use of different disciplines. In Mejillones in northern Chile the work includes the complete thermal insulation of pipes and appliances as well as scaffolding. At peak

times up to 450 employees will be busy on the project.

For KAEFER SOUYET the size of the contract means that it poses a certain number of challenges. The logistics in particular require excellent planning, as staff and materials have to be transported over hundreds of kilometres in some cases. To start with there was not even any accommodation in the area. The terrible earthquake that occurred during work on the first block also caused great difficulties. Despite this KAEFER SOUYET was able to overcome all the challenges successfully and has thereby established a strong starting position for other major projects in the energy market.

## Oilsands Project at Foster Creek completed

**DIFFICULT TERRAIN** New technologies that allow the economical extraction of oil from tar sands have moved Canada into second place on the list of countries with the world's largest oil reserves – right behind Saudi Arabia. These methods require large quantities of hot steam and therefore rely heavily on effective insulation to minimise energy losses. ALBRICO KAEFER has established itself as an important player in this market and continues to strengthen its reputation and experience with challenging projects.

In the summer of 2010, the KAEFER company completed insulation on three

major parallel pipelines at the Foster Creek production facilities in Alberta, Canada, within just three months. A total of 2,800 linear metres had to be insulated on the West Trunk Line, a series of pipelines traversing heavily forested muskeg that will bring steam from the generators to various well pads for injection into the oil formations. The pipelines will also bring the produced emulsion and casing gas back to the central processing facility of the SAGD (Steam-Assisted Gravity Drainage) plant.

The work was particularly demanding due to the short timeline and the difficult terrain. Coordinating the man-

power to move and install very large quantities of material along the pipeline was a significant challenge. The work also got very complicated at some points, as the correct insulation of valves and other components with internal diameters of up to 90 centimetres requires a great deal of technical and manual skill.

Foster Creek is a joint venture of ConocoPhillips and Cenovus Energy. The project builds on KAEFER's presence in the heavy oil industry of north-eastern Alberta and provides an opportunity to look at other large-scale assignments in the future. ALBRICO KAEFER was also able to collect data on production figures for large-bore, above-ground pipelines. This will bolster the ability of the estimating group to bid on these types of jobs and increase their accuracy in determining costs for future projects.

Insulation of pipelines and outlets



# Record Esso contract boosts joint venture

**EXTENSIVE FRAMEWORK AGREEMENT** KAEFER Integrated Services Australia is setting new standards in the country's offshore industry. A new maintenance contract with Esso covers all mechanical and services subcontracts for three onshore and more than 20 offshore platforms. The agreement has increased KAEFER's visibility in Australia considerably and caused many companies within the maintenance industry to watch the cooperation with Esso closely.

The scope of work comprises insulation, fire protection, scaffolding and surface protection as well as other tasks such as electrical and planning services. It also covers the logistics of moving men and materials to offshore facilities. That includes supplying the workforce to operate the Barry Beach Marine terminal, the hub where all materials are loaded on ships and moved to the offshore rigs.

Before awarding the contract, Esso subjected about 30 potential contractors to an extensive pre-qualification exercise. Only five passed this test.

KAEFER will perform all these tasks in a joint venture with UGL Limited. UGL, which is listed on the Australian stock exchange, is a leading provider of project delivery and asset services in industries such as mining and mineral processing, oil and gas, chemicals and industrial processing. The 50:50 joint venture is valued at approximately 345 million euros in total. KAEFER Australia plans to employ between 200 and 300 additional staff for this maintenance work on a continuous basis.

Winning the contract provides a long-term oil and gas base in the Victoria area. If the works progress as planned, Esso wants to extend the maintenance agreement to other sites and additional tasks. More and bigger opportunities may be ahead for the joint venture of KAEFER and UGL.

## Australia meets France in the South Pacific

**NICKEL REFINERY** New Caledonia is located off the north-eastern coast of Australia, but it strongly resembles regions in Southern France. The official language is French, too, since the island still belongs to France and its head of state is the European country's president. Therefore, when KAEFER Australia was awarded a scaffolding contract for a nickel mine in New Caledonia, it cooperated with KAEFER WANNER to move the project along swiftly.

KAEFER's units in France assisted by providing French-speaking supervision at the start of the two-year works for Koniambo Nickel SAS. French nationals do not need visas to work in New Caledonia, so they can be deployed immediately. The scaffold system – Plettac – was also brought in from France, while the plant itself was built in China and is being

transported to the site in modular form. However, due to the site's remoteness, the project requires thorough logistical preparation. Materials are difficult to get delivered, and the entire infrastructure – including brand-new roads and port facilities – had to be built first.

Having acquired its first large-scale contract in New Caledonia, KAEFER Australia cements its position as a major scaffold provider in the region. The works are focused mainly on the nickel refinery, but they also involve a new power station to supply energy for the plant. More than 200 scaffolders will be employed at the peak – the majority of whom will come from outside the country and live in a purpose-built camp on site. Accommodation is provided here for up to 2,000 employees.



## Remedy for South Africa's energy woes

**SCAFFOLDING** South Africa is the economic heart of the continent, and continuous GDP growth rates between two and eight per cent over the past 15 years have caused the energy demand to soar. With capacities nearing exhaustion and nationwide rolling blackouts looming, the government has made it a priority to build new power stations – and KAEFER Thermal Contracting Services South Africa is playing a significant role in the process.

The national energy utility, Eskom, is currently building the largest dry-cooled power plant in the world. Medupi Power Station will comprise six units with a total capacity of 4,800 megawatts. Murray & Roberts, one of the country's leading building companies, has appointed KAEFER to carry out extensive scaffolding work there.

The coal-fired power station will be located near Lephalale in Limpopo province. This project is of historical significance because the last power station to be built in South Africa was completed almost ten years ago. It will be Eskom's first new coal-fired power station in more than 20 years and the most advanced of the utility's new projects. The first unit is scheduled to be commissioned by mid-2012, with the last unit scheduled for March 2016.

KAEFER's contract is set to run for about 48 months. Approximately 3,500 tons of scaffolding will have to be mobilised for the site at peak times. Murray & Roberts is an important KAEFER client who will play a major role in constructing South Africa's future energy supply infrastructure. In addition to Medupi, the company has also been awarded work on the Kusile power station project in Witbank, Mpumalanga Province.

## New camp enables growth in Abu Dhabi

**NEW ACCOMMODATION FOR STAFF** The United Arab Emirates are at the centre of many important oil and gas projects over the next five to seven years. The majority of these are located in the western region of the country, including the Ruwais Refinery expansion, the petrochemical plant Borouge 3, the fertiliser plant Fertil-2, power projects S-2 and S-3 in Shuwaihat, and a nuclear power plant.

To prepare for upcoming projects, KAEFER L.L.C. in Abu Dhabi embarked on an ambitious project in December 2009 and constructed its own housing for staff in Ruwais, just ten kilometres from the nearest project. By July 2010 a total of 500 workers had already moved in.

In addition to the housing and a huge canteen, the facility provides a TV room and a well-equipped gym, with an Internet café to follow. Outdoor activities include basketball and badminton. To make life even more pleasant, a lot of open space is reserved for lawn and plants.

However, the facility is also about work. The area of office will soon be located here, including a fully equipped conference room. A warehouse for scaffolding has also been constructed on the same premises. The entire facility

covers an area of 25,000 square metres and is surrounded by other big camps. Together, all the camps in the area are expected to house more than 20,000 workers when they are fully occupied.

KAEFER Abu Dhabi sees the Ruwais facility as an investment in employee welfare – by providing a clean and healthy environment. The facility also becomes a credential and enables KAEFER to offer better services to regional clients.



# Immaculate safety record at SAPREF oil refinery

## NINE MILLION ACCIDENT-FREE HOURS

The employees at KAEFER Thermal Contracting Services in South Africa are in safe hands. Even when erecting scaffolding at heights of more than 20 metres or installing insulation in difficult locations, injuries are extremely rare. On 4 February 2010, KAEFER South Africa achieved a remarkable total of nine million safe man-hours worked without a Lost Time Injury (LTI). The team set a new safety record at SAPREF, South Africa's largest oil refinery, which is located in the coastal city of Durban.

This impressive feat was accomplished in a record time of nine months, soon after achieving eight million safe man-hours in May 2009. A large number of KAEFER personnel had been on site between June and December 2009: personnel peaked at 810 in July when the CUI project (Corrosion Under Insulation) and the scaffold erection came into full swing.

SAPREF's Engineering Services Manager, Franco Forno, congratulated KAEFER on their outstanding milestone. "This was a tremendous team effort by all KAEFER employees," he said. "The KAEFER team has demonstrated that they are able to take action and continually adjust their work methods and practices to maintain their noteworthy safety record." Between May 2009 and 4 February 2010, KAEFER reported only two Medical Treatment Cases (MTCs). Forno complimented KAEFER on this accomplishment. "This is an exceptional achievement, especially if one considers KAEFER's activity level."

KAEFER's emphasis on training and developing industry-specific skills is one of the factors that have led to its remarkable safety record as well as its continued presence at SAPREF. Scaffolding training is undertaken by the in-house Sizani Training Centre across all skill levels. More than 1,600 employees have



been trained there over the last five years.

KAEFER's Regional Director Rob Ross also congratulated everyone heartily for this tremendous accomplishment and thanked the team for their hard work and commitment. KAEFER South Africa's next target at the SAPREF oil refinery is to achieve ten million safe man-hours.

## Two accreditations at once for KAEFER South Africa

**ENVIRONMENT AND SAFETY** When clients do business with KAEFER, they expect quality in every regard. KAEFER Thermal Contracting Services provides this quality consistently, and it can prove it, too: in addition to the quality management certification ISO 9001 it has now been awarded the accreditations ISO 14001 for high environmental standards and OHSAS 18001 for excellent occupational health and safety procedures. The latter two were achieved within a very short timeframe.

Faiza Salie, certification manager at the South African Bureau of Standards (SABS), presented the certificates at KAEFER South Africa's Johannesburg head office. She emphasised that very few companies achieve accreditation of both standards at the same time on the

first attempt. KAEFER is the first local company operating in the insulation, scaffolding and painting fields to achieve accreditation in all three categories.

The purpose of the two new accreditations is to provide a quality-based management system which encourages continuous improvement in the prevention of pollution and reduction of safety risks. Achieving these standards required a change in mindset, extensive training of personnel and a financial commitment to get the basic infrastructure in place.

Several practices were particularly well received by the KAEFER staff, especially the implementation of waste separation to encourage recycling. All sites have participated enthusiastically.



The proud KAEFER employees show their certificates.

From left to right: Steven Maletle, Renata Twigg and Barbara Proudfoot

## Stone wool factory secures access to high-quality materials

**JOINT VENTURE** Stone wool has many useful properties. Besides being one of the most important materials for thermal insulation, it also absorbs sounds and is relatively fire-resistant. In Southern Asia and the Middle East demand for this insulation product is continuing to grow as many international corporations are investing in major industrial construction projects. More mega projects are lined up. KAEFER Punj Lloyd, India, and Rockwool International, Denmark, have now set up a joint venture to address the potential shortage of high-quality stone wool.

The new joint venture, Roxul-Rockwool India, is building a stone wool factory in the state of Gujarat on the west coast of India. Rockwool is the majority share-

holder of the joint venture with a 75 per cent stake. The plant will have a capacity of 30,000 tonnes per year and produce mineral wool products like mattresses, slabs and pipe sections. About 200 people will be employed when the plant is fully operational in January 2011. To make this project an even better contribution to the local community, the plant will adhere to Western European environmental standards.

The products will also meet the highest international standards in terms of grading and quality. By co-founding this joint venture, KAEFER secures access to excellent insulation materials.

## KPLL enters the Indian energy market

**GROWING DEMAND** India's energy sector is poised for huge growth.

A government programme supporting power plant development has added 22,000 megawatts during the last five years alone. And that was only the start: over the next five years, projects providing an additional capacity of 78,000 megawatts are planned. India will have to add an additional 18,000 to 20,000 megawatts every year to keep up with the country's growing demand.

In this highly dynamic environment, KAEFER Punj Lloyd (KPLL) has entered the power plant market with a contract from SEPCO Electric Power Construction Corporation. The work involves the supply and installation of thermal insulation as well as refractory services. SEPCO is constructing a 1,200-megawatt power plant for Bharat

Aluminium Company in Chhattisgarh State. KPLL is responsible for one of the four 300-megawatt plants.

The next contract was signed with Lanco Infratech Limited shortly afterwards. KPLL provides refractory and insulation for two boiler units at the Anpara-C Thermal Power Project in the state of Uttar Pradesh. The first nuclear power project has also been secured recently: in June 2010 KPLL was appointed by the Nuclear Power Corporation of India to carry out thermal insulation on piping, equipment and other parts at the Kudankulam plant. KPLL expects more business to come from this industry as India's government plans to generate 30,000 megawatts from nuclear power by 2030.

## Painting division thrives from the start

**OPTIMISING ITS MARKET POSITION** Scorching heat, sandy winds, salty seawater – industrial sites face many climatic challenges in the Middle East. Accordingly, the demand for surface protection rises rapidly as the region continues to invest in new plants and businesses. KAEFER Saudi Arabia is taking advantage of this development and building up its new painting division quickly. The first contract involved surface protection on a large number of pipes, which were delivered to the client's satisfaction and approval. The division now has more than 100,000 square metres of painting jobs lined up and expects to finalise contracts on another 300,000 square metres by the end of 2010.

Being able to offer painting services in addition to insulation increases KAEFER's opportunities in the Saudi market significantly. It is also an important step towards providing Complete Insulation Solutions. KAEFER's large new facility in Jubail serves as a springboard for new activities. It has motivated the team to diversify its business and move into the painting market swiftly.

The clients represent all major industries such as oil and gas, power and desalination plants, the petrochemical industry, fertilisers and gas processing. Saudi Arabia is planning several major construction projects in these fields and KAEFER hopes to get involved in each of them. It will also expand its

business activities to the Western Region – especially Yanbu and Jeddah – in 2011. Smaller projects in neighbouring countries are also in the works.

The goal is to make KAEFER a benchmark company in Saudi Arabia for the provided services. The company has already made a name for itself here and is expected to keep growing fast – the painting activities will be an important part of that.



Sandblasting demonstration

# Qatar Gas loading facilities completed ahead of schedule

**LNG PIPELINE READY** When large infrastructure projects are built, delays are pretty much par for the course. For KAEFER, though, adherence to schedules is a top priority. KAEFER L.L.C. Qatar recently even completed a major project far ahead of schedule: Berth 6 of the Qatar Gas Common Lean LNG Loading Facilities was finished within just seven months instead of the scheduled nine months.

The works included the insulation of an LNG pipeline with a diameter of 80 centi-

metres over a length of 16 kilometres. The main challenge faced during the execution of the project was the logistics – feeding various insulation materials to different locations along the huge pipeline. Also, debris from the site as well as from cutting facilities had to be removed. More than 500 workers were involved at peak times. Systematic planning and incentive programmes made it possible to complete the works in record time.

KAEFER Qatar celebrated the achievement with a get-together for everyone in-

volved, including the clients. Medgulf Construction Company was very pleased with KAEFER's work. Representatives of Fluor Corporation, the EPC contractor, and Qatar Gas also attended the event. Moreover, KAEFER Qatar's exceptional performance was also noted by many other companies in the region.



## Mega projects bolster market position in Saudi Arabia

**REFINERY FACILITIES** Saudi Aramco is the most prestigious organisation in the Kingdom of Saudi Arabia and one of the biggest names in the international oil and gas sector. Its new export refinery in Jubail will be built with significant involvement from KAEFER: several work packages covering insulation, painting, fire-proofing and scaffolding have already been assigned, and more are expected to come by year's end 2010.

When finished, the refinery will process 400,000 barrels of heavy crude oil per day. Saudi Aramco owns 62.5 per cent of the 12.8-billion-dollar facility, the rest belongs to Total from France. Together they have founded a new company, SATORP, to develop and operate the plant.

KAEFER's work packages at the refinery are expected to last for 24 to 30 months. Successful execution of the

assignments will help KAEFER to become recognised in Saudi Arabia as a qualified supplier of various services beyond insulation. Most EPC contractors prefer engaging a single supplier who is capable of various disciplines. The project with SATORP is therefore expected to elevate KAEFER to a more prominent and desirable position in the market.

This may already come into play when another mega project in the Jubail industrial area is realised: the Jubail Petrochemical Complex, which is expected to bring investments of another 10 billion dollars. KAEFER will be well-positioned when the assignments are handed out.

# Stellar year for KAEFER Thailand

**THREE MAJOR PROJECTS** Growth can come in many shapes and forms: increased profits, new services, greater market visibility, or any other sign of progress. KAEFER Engineering in Thailand grew in almost every conceivable way in the year 2009, which became the best year in company history.

The turnover skyrocketed due to major projects that were executed between 2008 and 2010. The volume and complexity of work also reached new levels over the same period. The Pluto project, which required insulation of more than 160 modules of an LNG train before they were shipped to Australia, was the first LNG insulation ever to be executed in Thailand by any company. Being carried out in a joint venture with KAEFER Integrated Services Australia, this project initiated various other "firsts". Among the most important: a training facility was set up to educate the workforce regarding cryogenic insulation.

Another milestone was the MOC project, where MOC stands for Map Ta Phut Olefins Company. KAEFER Thailand executed contracts

from five different companies at this petrochemical plant and invested 1.3 million man-hours. The project resulted in repeat orders directly from the owner of MOC, Siam Cement Group, which is a very important client for KAEFER Thailand.

The third major project was completed for Samsung at a new ethane separation plant owned by PTT Public Company Limited. The facility will produce 550,000 tons of ethane gas per year – the world's largest capacity. In 2009 KAEFER recorded over four million man hours without any LTI (Lost Time Incident).

KAEFER Thailand is currently working on several projects for PTT Asahi Chemical and Glow Energy, the country's largest private power company. Along with these contracts, the focus is on upcoming modular projects such as the Pluto LNG 2 project because the company has acquired extensive experience in this area.



Transport of a pre-insulated module for the Pluto LNG plant



Petrochemical plant belonging to the Map Ta Phut Olefins Company (MOC)

## Taiwan blossoms in a growing market

**GOLDEN YEARS** Only three years after KAEFER Insulation Technology Co. was registered in Taiwan, it has become one of the top players in this market. The future continues to look bright. Taiwan's gross domestic product is expected to rise by 8.2 per cent this year. In addition, the Taiwanese government has proclaimed the start of the "Ten Golden Years", which are expected to bring a larger number of foreign investments into the country. More public-sector projects are planned as well.

Since China and Taiwan signed their "Economic Cooperation Framework Agreement" in June 2010, Taiwan has become an important platform for foreign investors who want to enter

the Chinese market. A widely publicised study recently ranked Taiwan's investment climate fifth in the world, trailing only Switzerland, Singapore, the Netherlands and Norway.

In these favourable market conditions, KAEFER Taiwan is building its business on the foundation that was laid by the successful work of the first three years. Three projects stood out so far: sealing penetration works in a nuclear power plant, online insulation in an LNG facility and whole-plant insulation works at a polysilicon plant.

Currently, several major projects are lined up in the areas of nuclear power plants, thermal power plants and petrochemical plants. KAEFER

Taiwan provides the full scale of insulation services, including engineering. Cooperation with business partners will be continued to acquire greater shares of the insulation works. Further growth can be expected in the next three years.

## Kazakhstan sets its sights on growth

**INCREASING ORDERS** The region around the Caspian Sea is rich in natural resources: 4.8 per cent of the world's natural gas reserves and 2.7 per cent of its oil reserves are buried under the surface here. Almost all the major oil companies have staked their claims, and the Kazakh government together with the state oil corporation are also on board.

Initially many projects were delayed interminably due to the complex tangle of interests, but KAEFER LLP in Kazakhstan is now reporting a sharp rise in business. In March 2010 the first contract was signed with a Kazakh customer, KazStroyService (KSS). It relates to insulation work on a gas purification plant for a total of some 2.5 million euros. Since 2008 KAEFER ENERGY from Norway and KAEFER LLP have been successfully offering scaffolding services from a joint

venture, mainly for the client Aker Solutions. This has brought the total number of KAEFER employees in Kazakhstan to 15 white-collar and 80 blue-collar staff.

KAEFER LLP has now also bought a site in the town of Aktau in order to deal with larger contracts rapidly and to offer Complete Insulation Solutions. The necessary storage space and workshops are being built there at the moment. The location is ideal for making swift deliveries to the drilling rigs on the Kashagan oilfield and to the offshore shipyards.

In addition, promising negotiations are currently under way on acquiring an equity stake in a local company. This would enable customers in other areas of the country to be served from sites near their facilities and so to deepen the contacts to potential Kazakh clients.



The port of Aktau on the Caspian Sea

## KAEFER CCCM shows its colours at POWER-GEN Europe in Amsterdam

**TURBINE EXHIBITION** High society couldn't do without high fashion. You are what you wear. A similar rule applies to hightech, at least in the world of turbine construction. These high-performance engines, without which no jet would stay in the air and power stations would produce no energy, also like to be dressed nicely – individually, with cuts tailored by computer.

Our Corporate Competence Center Mattresses (CCCM) has the know-how, the construction engineers and the connections to cater to this special area of industrial insulation worldwide and in KAEFER quality, drawing on production facilities in Abu Dhabi, China and Germany.

For anyone around the world involved with turbines – whether as a manufacturer of jetengines, power-plant fitters, suppliers or service providers – the annual POWER-GEN exhibition in June is a must. People meet there to showcase their latest developments, listen to technical presentations – there were more than 240 in Amsterdam alone in

2010 – and last but not least, to network. So it's only natural that CCCM is also there to present products and projects, to demonstrate software-based construction design for complete applications and, with the help of simple models, to show how even the most complicated contours can be precisely clad

to achieve the required insulation specifications.

The fair was bustling with 12,000 visitors and the feedback was good, so plans are already being made for POWER-GEN 2011 that takes place in Milan.



## Three natural gas projects at once in Vienna

**REAL ARTISTRY** In order to supply natural gas as needed you need intermediate storage space – enormous underground caverns into which the gas is pumped under high pressure. In 2010 KAEFER Industry Vienna won an order from its long-time framework contract partner RAG Austria Energie for the full insulation of five compressor stations in one go on the parallel projects 7 Fields and UGS Haidach II. They are between ten and 30 kilometres away from one another and had to be dealt with in five workshops simultaneously. That meant all KAEFER's capacities were needed for parallel logistics and to provide up to 80 fitters at peak times. The second part required real artistry, because labour law in Austria is extremely restrictive, but it also demonstrated the competitive advantage of our global

organisation, because staff could be seconded from KAEFER Shipbuilding in Romania. Together with our detailed pre-planning this enabled us to secure the demanding contract worth over 1.3 million euros.

The third project puts a new waste-heat recycling technology into practice. Alongside a gas pipeline compressor station in Weitendorf a regular customer of ours, OMV, is building a hot-steam generator unit that will generate enough power to supply 28,000 households – just with the waste heat from the pipeline compressors! Our job is to insulate the 80 metres long flue gas duct connecting the two buildings. At a mighty 20 metres in height and with a diameter of 4.2 x 4.2 metres it is almost as big as a road tunnel!

## Great atmosphere in the Emporio Tower



**HIGH RISE** It is one of Hamburg's prime locations, between Caffamacherreihe, Dammtorwall and Valentinskamp, and the site of the Emporio Tower currently under construction. This involves renovating the entire central core of the former Unilever headquarters, which is now a listed building, and adding two storeys on top. On completion, the Emporio Tower is to be used for offices, apartments and a hotel.

KAEFER Technik und Service GmbH from Munich is responsible for installing the entire ventilation system on behalf of Hochtief, the general contractor. Between December 2009 and May 2011 a total of 19 ventilation units with heat recovery, an air-conditioning plant and a forced ventilation unit for the entire skyscraper are to be fitted in the 24-storey building. Among other things the KAEFER technicians are installing 1,100 fire dampers, more than 4,000 flow regulators and 14,000 square metres of galvanised piping.

If all goes according to plan, the building, hotel, underground car park and grounds are to be finished by November 2011.

## Environmentally friendly thanks to combined heat and power

**ENERGY FOR PAPER FACTORIES** One of Germany's largest and most modern combined heat and power plants was built between 2008 and 2010 in Plattling in Lower Bavaria. The energy utility E.ON erected a gas and steam-turbine power plant with an installed capacity of 110 megawatts to supply gas and steam to the paper factories MD Plattling and Plattling Papier. KAEFER Industrie GmbH from Munich was assigned the extensive insulation work on all the steam, condensate and heating pipes. They were insulated conventionally with mineral wool mats and galvanised or aluminium sheet-metal casings.

Outside the plant the pipe ran along a supply line twelve metres high. This meant KAEFER's expertise was particularly

in demand, because as well as the insulating aspects, added acoustic specifications also had to be taken into consideration. The solution was to carry out the insulation on the supply line with highly resistant mineral wool, 200 millimetres thick, with a higher volumetric weight, encased in galvanised sheet steel with a lining of muffler foil. By using a special mineral fibre, it was possible to do without a supporting construction which improved the noise-reducing properties even further.

A total of 15 KAEFER fitters were at work on the building site between August 2009 and April 2010. They insulated a surface area of some 6,500 square metres.

## MiRO – a refinery is put through its paces

**MAJOR OVERHAUL** The tough winter of 2010 made life very hard for the fitters on the site of the oil refinery in Oberrhein (MiRO). They were nevertheless still able to make good use of the shutdown to carry out extensive insulation work to the highest safety standards.

In 2009 KAEFER Industrie GmbH signed a long-term framework agreement with MiRO. It covered insulation work during maintenance and project periods as well as specific activities to take place when the refinery was shut down. As a result KAEFER rented new rooms in Karlsruhe with a workshop and storeroom. The move was delayed, however, as the scheduled major overhaul still had to be completed.

In February 2010 MiRO shut down all the processing facilities. They were emptied, cleaned, inspected, repaired and certified by TÜV. Replacing the column head of a crude oil distillation plant turned out to be quite a challenge. The new column head is six metres in diameter, 23 metres high, weighs 200 tonnes and can only be fitted with a special heavyweight crane that lowers it into place millimetre by millimetre. The insulation work was carried out by KAEFER technicians who also had a lot of other things to do. At times there were more than 100 of them on the site. The weather didn't help matters, because when the overhaul began the scaffolding work was accompanied by falling snow and ice formation.

Safety at work had top priority. A special safety concept with safety instructions and safety officers ensured that the overhaul was accident free. When it was finished KAEFER was finally able to move into its new workrooms in August.



## tripower consortium works

**STRENGTH IN NUMBERS** The name tripower stands for a successful strategy for carrying out large-scale projects at power plants. In 2007 KAEFER Industrie GmbH bolstered its capacities with strategic partners in order to meet market demands. The reason was that several major tenders were launched simultaneously for power plant projects in that year.

Since then the tripower consortium has been very successful. It is made up of BOHLE Isoliertechnik GmbH, ThyssenKrupp Xervon GmbH and KAEFER Industrie GmbH and so far has completed projects at the power plants in Walsum and Boxberg with a total of 150,000 square metres m of insulation. All the assembly work was performed by KAEFER SA from Poland, which at peak times had more than 400 fitters on the two projects.

In 2010 it was the turn of the power plant in Datteln. The twin blocks in Moorburg along with the electrofilter plant are coming up soon. Altogether, total project volume for the tripower consortium is well above 80 million euros.

By entering this market segment KAEFER Industrie GmbH has been able to secure an excellent position in the market, both within the joint venture and on its own.

According to managing director Helmut Hecht, the future for KAEFER Industrie GmbH lies both in continuing the tripower consortium and in cooperating with BOHLE. He also has plans for expanding the business in the Central Europe area, i.e. Norway, Finland, Austria, Benelux, Germany, Denmark and Switzerland. An additional focus is on equipment to cut CO<sub>2</sub> emissions.

## Yara Sluiskil: intelligent projects preserve the environment

**LESS CLIMATE GAS** Waste heat from fertiliser production used to be just lost; now it's used to heat greenhouses. This means less climate gas is discharged into the atmosphere and it saves money at the same time.



This is all possible thanks to an exemplary environmental protection project by the Norwegian Yara Group, one of the world's leading producers of fertiliser. For more than 80 years it has operated a production plant not far from the town of Terneuzen in the Netherlands. Now, as part of a large environmental protection project, waste heat from the fertiliser production is being used to heat greenhouses in the immediate vicinity. This means that annual emissions of around 70,000 tonnes of CO<sub>2</sub> can be avoided. The greenhouse operators also save 52 million cubic metres of natural gas that would otherwise have been required to heat their facilities. KAEFER Nederland B.V. was part of the team building the district heating pipes and supplied the scaffolding.

Another contract being carried out under the leadership of KAEFER Industrie GmbH, Bremen, includes extensive insulation work for the construction of a turnkey urea plant. The new facility will be one of the largest of its kind, producing 3,500 tonnes of urea solution per day. It is due to commence operations in 2011.

## Framework agreement renewed

**SUCCESSFUL COOPERATION** Good performance pays off. Four years ago KAEFER Belgium was able to report the signing of a framework agreement with the energy utility Electrabel. It covered scaffolding and insulation for the nuclear power plants at Tihange and Doel as well as conventional power plants elsewhere in the country. Now the good cooperation between KAEFER België N.V. and KAEFER WANNER has resulted in another great catch: after a nationwide tender for the

maintenance contract the framework agreement has been renewed.

It is the high safety requirements that pose the greatest challenge for staff on a daily basis. KAEFER Belgium and KAEFER WANNER have trained their employees specially and prepared them thoroughly for their deployment in the power plants. For the client Electrabel this customised solution also forms the basis for a stable, long-term business relationship with KAEFER.

## Greater efficiency for nuclear power plants

**KAEFER TEAMS WORKING NON-STOP** France covers 75 per cent of its energy requirement with nuclear power. That is by far the highest figure in the world – with the exception of Lithuania, which has around the same proportion. Optimising the insulation and repairing weak spots where energy is lost are among the most important factors for the profitability of nuclear power plants. KAEFER WANNER continues to increase its share of this market. Electricité de France (EDF), the largest electricity utility in the world, recently awarded the second integrated-service contract to a consortium made up of KAEFER WANNER, ORYS, Eiffel and AREVA NP.

The project includes the replacement of steam generators at the Bugey nuclear power plant near Lyon. Symptoms of old age in components of the steam generator cause energy

losses, which have an adverse effect on the factory's efficiency. KAEFER WANNER's role is in insulation, scaffolding and radiation protection. The project is the largest maintenance contract in France: it includes 100 tonnes of scaffolding material, 100 tonnes of lead mats for the biological protection, 1,300 square metres of new insulation, 20,000 hours of prefabrication and 30,000 hours of on-site installation. Around 100 technicians were mobilised to cover three shifts a day – from Monday to Sunday.

The whole procedure enables EDF to make substantial efficiency gains at its nuclear plants. Its involvement in the project allows KAEFER WANNER to demonstrate the expertise that differentiates it from the competition.

# Gjøa platform ready for start-up



**A TOUGH WINTER** 82 million barrels of oil under its hull: after more than two years of work and 1.2 million man-hours, KAEFER ENERGY saw one of its largest projects come to life when the Gjøa platform was towed out to sea in June 2010. With Gjøa, a new part of the North Sea has been opened up for oil and gas production by means of a semi-submersible production platform and five sub-sea wells. Gjøa's recoverable reserves are 82 million barrels of oil and condensate and roughly 40 billion standard cubic metres of gas.

The gas will be transported to St Fergus in Scotland and oil will be piped to the Statoil-operated Mongstad refinery in Norway. Statoil is to operate Gjøa during the development phase and will hand the platform over to GDF Suez E&P Norge once production starts, which is expected by the end of 2010.

KAEFER ENERGY began the work in the winter of 2008 and finished most of it by June 2010, one day before the platform left the Aker Solutions shipyard in Stord. Despite the early start, most of the work could only be carried out last

winter. The project included a wide range of tasks: engineering services, planning, purchasing, scaffolding, surface protection, fire protection, architecture and insulation. Even when the platform is out at sea, KAEFER ENERGY will continue to provide maintenance services in the areas of insulation, surface protection and access.

The work on Gjøa has not been without unexpected obstacles. An unusually long and snow-laden winter created various challenges for the project. When spring finally arrived, the platform tow had to be postponed. "We have tackled a number of unforeseen hitches on the Gjøa project", reported Statoil. "So far we have solved all the challenges without delaying the planned start-up in the fourth quarter of 2010. This says a lot about what our project people are made of and it also speaks volumes about the need for having access to a competent specialist network, both in Statoil and at our suppliers."

## Offshore Division prepares for growth in new markets

**FUTURE BUSINESS DEVELOPMENT** It is getting more and more difficult to find new sources of energy on land. The oil and gas industry is therefore increasingly shifting the focus of its operations to offshore locations. Work is tougher under these conditions, but growing energy requirements and rising prices make it worth the effort.

In recent years KAEFER has become an important player in this market. To take full advantage of the opportunities that lie ahead, the Offshore Division was founded last year and Craig Rose, a highly regarded industry expert, was recruited as managing director. Within twelve months, many new initiatives have been started and in some cases already implemented.

So far, KAEFER's offshore operations were primarily located in five countries: the UK, Australia, Canada, Norway and Spain. KAEFER ENERGY in Norway, for example, recently secured an offshore maintenance contract with Statoil that is worth 600 million euros.

However, Rose is not primarily concerned with those countries that are already well established in the industry. "Our focus is on the future development of the business," he says. The goal is to market KAEFER's offshore expertise in additional countries where the market potential is high.

One step in this direction has been the recent acquisition of Isobrasil, as Rose is expecting significant international investment in Brazil's offshore industry within the next few years. KAEFER is now well positioned to become a major part of this growth market. In other countries, KAEFER has begun signing cooperation agreements and starting joint ventures with local companies.

Rose and his staff are based in Teesside, UK. In September 2010, a regional office was also opened in Aberdeen to provide services for Scotland's offshore industry. The structure of the Offshore Division may be changed in the future to accommodate the expected growth.

## When ear protection is no longer enough



**NOISE & WELDING HABITAT** Maximising safety and productivity at the same time can be difficult on offshore platforms. KAEFER ENERGY from Norway now offers two products that improve efficiency without compromising HSE: a noise habitat and a welding habitat.

The noise habitat "ENERGY Sonic Barrier P" provides relief when normal ear protection is no longer enough. At certain noise levels, health and safety regulations in many countries allow workers to spend only a limited time each day in that stressful environment. "ENERGY Sonic Barrier P" reduces the decibel levels considerably. It consists of sound cushions which are easily assembled to protect against surrounding noise sources. The flexible solution can be used as a fully enclosed habitat or as an individual noise wall wherever temporary noise reduction may be needed. The habitat can be opened anywhere for easy access

or exit. The system received Statoil's HSE award at the Statfjord Late Life Project and has been in regular use since.

A welding habitat provides a cost-effective solution to allow hazardous operations like welding, burning, grinding or sandblasting in restricted areas where this kind of work normally requires production to be shut down for safety reasons. It is also an excellent solution for maintaining ambient temperatures for coatings and insulation work. The habitat is easily installed and can even be equipped with a gas detector.

Both are available for purchase by other KAEFER units and external companies.

## Statoil frame agreement: KAEFER ENERGY prevails against tough competition

**OFFSHORE MAINTENANCE CONTRACT** When Statoil decided to award new contracts for insulation, scaffolding, fire protection and surface treatment worth a total of 1.5 billion euros, the competition was fierce. In order to diversify its supplier base and set quality incentives, Statoil finally handed its assignments to four different suppliers. KAEFER ENERGY, Norway, received the largest share: a contract worth more than 600 million euros over eight years. The first four years are fixed, followed by two options

of two years each. To handle the workload, KAEFER ENERGY plans to create more than 400 new jobs over the years ahead.

Statoil's maintenance work will be carried out on nine different drilling platforms – Statfjord A/B/C, Troll A/B/C, Kristin and Åsgard A/B – and at the refinery in Mongstad. In addition, management, planning, and engineering activities will be provided by the different KAEFER ENERGY offices in Norway.

The agreement is an important milestone for KAEFER's Offshore Division. It ranks among the most extensive maintenance contracts in the history of the KAEFER Group and shows that clients value the quality they are receiving. At the same time it fits in perfectly with the company strategy of focussing on Complete Insulation Solutions.

# Dolphin Energy praises surface protection

**PUNCTUAL PERFECTION** Time pressure was high when KAEFER Qatar started surface protection work at Dolphin Energy's DOL 1 and DOL 2 platforms on 17 March 2010. The staff had only 82 days to complete the entire project. Even though production continued throughout the works, the contract's tight milestones made it feel like a shut-down environment.

KAEFER was responsible for the entire re-blasting and painting work on the platform structures, including the helicopter deck and various critical production facilities. For rope access services, an experienced subcontractor was hired: Megarme, the same company that has been entrusted with cleaning the highest tower in the world, "Burj Khalifa" in Dubai.

The works, which covered a total area of 13,000 square metres, were finished on time. KAEFER Qatar's main achievement on this project has been the punctual and flawless mobilisation of resources, including equipment, machinery, spare parts, consumables and scaffolding materials. Although it marked the first time that a job of this type was



accepted, all challenges were met successfully. The client, Dolphin Energy, praised KAEFER's reliability, quality and safety record.

The platforms DOL 1 and 2 pump gas from the wells to onshore plants for further processing. Dolphin Energy continues to rely on KAEFER for keeping its offshore platforms in excellent shape.

Once painting was completed, the annual maintenance work was carried out soon after. In 2011 a major shutdown is expected to be ordered for an extensive overhaul.

## Interior outfitting taken to the next level

**ARCHITECTURE AND HVAC** Renovating a facility where lots of people live and work together in a tight space is always a challenge, but it is even more difficult when the renovation is performed at sea. KAEFER ENERGY in Norway has already proven that it has the necessary expertise for major offshore renovation and refurbishment projects. Now the company also performs architectural studies and HVAC works (heating, ventilation and air conditioning), rounding off its range of interior outfitting services for the oil and gas industry.

KAEFER ENERGY's largest single architectural assignment is currently under way on the platform Snorre A. During the summer of 2010, 60 KAEFER ENERGY architectural outfitters, plumbers and electricians worked on the platform. By October they had installed 90

new bathrooms, 16 new single cabins, and 400 square metres of new flooring.

To support the platform's new maximum lifetime until 2028, the freshwater system was upgraded from copper to more durable materials. Sewage pipes below the living quarters were renovated using an inner liner system. This method helped to avoid difficult and dangerous work above the open sea. It is a new technology in the offshore field and has proven its efficiency at Snorre A. Another accommodation module is to be renovated with a similar workload in the summer of 2011.

In addition to renovation and refurbishment, KAEFER ENERGY has entered the market for architectural studies. Over the last two years a highly motivated team has been established to promote and execute this service. This year,

KAEFER ENERGY has provided a study and reports for projects on the Oseberg A, Njord B, Sleipner A, Snorre A and Petrojarl Foinaven offshore installations.

The latest business area within the architectural department is HVAC, which was officially launched in the autumn of 2010. This offer will initially be marketed as part of KAEFER ENERGY's multidisciplinary architectural services, but will be developed further according to market needs.

## Concentrated expertise in surface protection

**TAKEOVER PAYS OFF** KAEFER Energy's surface protection department is fast becoming a major asset for its clients and for the KAEFER Group. The staff in Verdal and Trondelag, Norway, played a key role in the recent acquisition of a multi-million euro contract with Statoil. KAEFER ENERGY has been awarded significant ISS works (insulation, scaffolding and surface protection) on offshore platforms and onshore facilities.



The surface protection department will help to execute and coordinate the tasks.

This success has its roots in the 2007 acquisition of the company Chriger AS in Trondelag, which was merged into KAEFER ENERGY. The main clients are located in Verdal, where a new production facility was opened in December 2006. The facility consists of a 600 square metre production area as well as a 250 square metre service area dedicated to surface protection and passive fire-proofing.

KAEFER ENERGY's Verdal unit delivers services to companies all over the middle and northern parts of Norway. Other clients are located in the north-western parts of Russia. Approximately 30 employees are currently based in Verdal.

For the future, the department is looking to take KAEFER ENERGY and the whole Group to a new level of surface protection. A business plan has been prepared and the goal is to invest in a facility for the application of advanced coatings in early 2011.

## International cooperation presented at Houston conference

**FIRST TIME AT THE OTC** In Texas, everything is bigger. This cliché was reflected by the number of industry representatives at the Offshore Technology Conference in Houston (OTC).

Launched in 1969, OTC is the world's foremost conference for the development of offshore resources in the fields of drilling, exploration, production and environmental protection. The host city, Houston, has long been recognised as the unofficial offshore headquarters of the world. Each year, the conference attracts more than 60,000 attendees and 2,000 exhibiting companies representing over 110 countries. The 2010 event was no exception: almost 73,000 confirmed attendees were counted from 3 to 6 May.

The conference took place at a sobering time for the offshore energy industry: although it was a record year for OTC, the drilling accident in the Gulf of Mexico affected the mood and the tone of the

event. However, everyone was determined to prevent similar occurrences in the future. The technical programme offered sessions on renewable energy sources, including offshore wind and wave energy, to serve as future alternatives.

For the first time, KAEFER participated as an exhibitor this year. The Offshore Division was very well represented with experts Norway, Canada, Mexico and the UK. The goal was to generate business and strengthen contacts to clients and potential clients. KAEFER presented its new Offshore Division and its extensive international cooperation in the offshore sector.

The efforts paid off: after the last visitors had left, everyone agreed the show was a worthwhile investment and a great success. KAEFER Offshore has already booked a larger stand for next year's OTC. Even more countries may participate then.

## Cooperation agreements promise high potential

**KNOWLEDGE TRANSFER** Many KAEFER regions have a lot of potential in the offshore oil and gas industry. What is holding them back is the difficulty of building up the required know-how and experience in this highly sensitive market. KAEFER's new Offshore Division is now providing a solution that allows a relatively quick entry into this promising business area: cooperation agreements and joint ventures with regional partners.

The joint ventures are usually based on a model where KAEFER Offshore holds 51 per cent and the local company 49 per cent. "We provide the marketing, experience, technology and qualified

people," explains Craig Rose, head of the Offshore Division. "Our partners provide their company as a platform for the business. They also supply local resources and local workers."

The first cooperation agreement was with Mexico, where KAEFER Offshore just provides support for local activities and KAEFER Mexico therefore holds 70 per cent of the shares. The first development agreement on a 51/49 basis was signed on 1 September 2010 with KAEFER Middle East. There are plans to extend this to other regions including the Caspian area. The acquisition of Isobrasil in South America also involves a strong focus on offshore

activities.

Cooperation agreements will include a variety of activities. In addition to insulation services, KAEFER Offshore options include labour secondment and equipping accommodation. Close cooperation with the Shipbuilding Division is also a possibility where there is an overlap between client groups. Craig Rose is looking forward to increased activity in these fields over the next years.



## Big, bigger, Oasis of the Seas

**A SUPERSIZED SHIP** “We build the incredible,” was the tenet of the Royal Caribbean Cruise Line for the Oasis of the Seas that was built between late 2007 and late 2009 at the STX Europe shipyard in Turku. When it went into service the vessel was the largest, most expensive cruise ship in the world. The christening was also a great extravaganza: no fewer than seven American celebrities from the world of film, show business and sport acted as godmothers and gave the ship its name.

One of the most important interior specialists working at the shipyard was KAEFER Oy. The Finnish shipbuilders and fitters came on board as turnkey

service providers. Their tasks included work on several cafés and restaurants, the Parkside Gallery and a shop. Work on the 4,500 square metres solarium turned out to be a real highlight.

The solarium on decks 15 and 16 is a completely new departure for the shipping company. From here, the passengers can look out onto the ship’s bridge below them. Several whirlpools, an enormous swimming pool, a bar and a food area were built and installed on time by KAEFER Oy. The most sophisticated passengers looking for unsurpassable comfort and well-being will enjoy spending time in this oasis of peace and relaxation.

### „Oasis of the Seas“

Registry:	Bahamas
Built at:	STX Europe, Turku, Finland
Maiden voyage	5 December, 2009
Weight:	225,282 GRT (gross register tonnes)
Length:	360 metres
Width:	65 metres
Draft:	9.1 metres
Speed:	22.6 knots cruising speed
Passenger decks:	16
Passenger elevators:	24
Bow thrusters	with 7,500
horse power each:	4
Passengers:	6,296
Crew:	2,165 (from more than 65 countries)
State rooms:	2,706

## Two Ropax ferries: steel to steel and a hammer blow

**WISMAR/WARNEMÜNDE** The unusually forthright tag line refers to a very unusual order in many regards. The two Ropax ships for Stena Line set a world record as the largest ferries ever built. And an order like the one given to us in 2008 for “steel to steel” interior outfitting is also unique in one piece and for this volume. However, the trouble that this enormous project then caused us in 2009 when Wadan Yards, our client at the time, went bankrupt, was a hammer blow harder than anything the actually pretty tough guys from KAEFER ship outfitting had ever experienced.

Fortunately, happy ends are not just for the cinema, but sometimes also occur in real life. After four stressful months the insolvency administrator confirmed the order in October 2009. We and our five subcontractors hand-picked for this exceptional contract, a total of 150 workers, were then able to continue the work, of which 20 per cent had already been completed before the “shipwreck”. The docks where the work was carried out had been renamed Nordic Yards in the interim.

Both ships were finished in 2010 and handed over in May and September respectively. Each is 240 metres long with 5,500

linear metres of trailer parking and space for 1,200 passengers, all of which represents new records. The previous record-holder could accommodate just 900 guests. The 600 cabins supplied from Finland had been installed, all the connections made, the restaurants completed and corridors and staircases fitted, as was deck 9 with its public areas. Our project manager is the first to admit they were not only proud when the two vessels were handed over, but also relieved. Now both ferries are on an even keel and settling the financial aspects should be plain sailing from here on.

## A superlative ship – the Norwegian Epic

### LUXURY AND INNOVATION AT SEA

**It is a superlative vessel: the new and largest cruise ship from Norwegian Cruise Lines, NCL.** The Norwegian Epic currently takes second place in the world ranking of luxury cruise liners with accommodation for 4,100 passengers, a length of 320 metres and 19 decks high. One of its attractions is a creative cabin concept, with real single cabins, spacious family cabins and lots of other innovations. There is no more main dining room for instance, but rather 20 small restaurants catering to every taste.

The Norwegian Epic was built between October 2007 and June 2010 at

the STX Europe yards in St Nazaire in France. KAEFER WANNER Shipbuilding started to work in summer 2008 and was on board with three extensive work sections. An average of 20 fitters were kept busy installing stainless steel walls and ceilings, hoods and canopies and tiled floors in the 4,500 square metres of catering areas. The French colleagues were trained and supported by experts from KAEFER Schiffsausbau GmbH in Bremerhaven, who designed the paneling system. The fitters from KAEFER WANNER Shipbuilding were also responsible for the heating, ventilation and air-conditioning insulation as well as for structural insulation of the aft part of

the ship. From October 2008 to June 2010 between 30 and 40 staff fitted the different insulation systems.

And last but not least we also made a major contribution to the interior outfitting in passenger cabins and crew quarters.



## Highlights from KAEFER at the shipbuilding fair 2010

**EMINENT VISITORS AND NEW PRODUCTS** It was a distinguished start to 24th shipbuilding, machinery & marine technology, international trade fair hamburg (SMM): secretary of state Hans-Joachim Otto from the German Federal Economics Ministry paid KAEFER a visit on the very first day and was visibly impressed by the diversity and overall structure of the KAEFER Group and its shipbuilding activities. Two days later Martin Günthner, the Economics Senator from Bremen, and Jörg Schulz, Mayor of Bremerhaven, did us the honour.

More than 2,000 exhibitors were represented, who welcomed over 50,000 visitors, making it the leading global trade fair for the maritime industry. We presented the full range of services for KAEFER Schiffsausbau GmbH and its overseas subsidiaries as well as their latest developments.

A fire-protection curtain for example; the result of a fruitful collaboration with our partner Effertz-Tore has already received its international certification for shipbuilding. The glass cloth/stainless-steel fabric is only 0.7 millimetre thick but withstands a 90-minute fire test at 945 degrees Celsius! Or our AmbiMar® lighting system developed in cooperation with BonHora: based on a 230/115 V dual-voltage supply, it uses electronics components to process switch and control signals at the same time and so enables reductions of up to 50 per cent in the wiring. Cost-savings and improved ease of use!

Technical highlights like these, the clear, accessible exhibition stand and continuous presentations on three large flatscreens gave our staff in hall 5 ample opportunities for in-depth discussions, socialising with clients and making new contacts. KAEFER Schiffsausbau was therefore delighted with its participation in the exhibition.





## Spanish Armada relies on KAEFER

**MARITIME VARIETY** Whether it's for fire protection, insulating bulkheads, decks, piping and exhaust systems or acoustic insulation – KAEFER Aislamientos is involved in numerous shipbuilding projects for the Spanish navy, as well as the navies of other countries. And KAEFER's service range continues to grow. Alongside conventional insulation work the Group offers more and more services in the field of interior outfitting.

For more than 40 years KAEFER staff have been active at the naval dockyards Navantia Puerto Real, Navantia San Fernando and Navantia Cadiz in the Bay of Cadiz. They are currently carrying out extensive insulation and interior construction work on four navy ships. The vessels in the Buque de Acción Marítima (BAM) class are 94 metres long, which is slightly smaller than a classical corvette, but larger than a normal patrol boat. They have a helicopter landing pad and are to be deployed among other things as offshore patrol vessels. KAEFER Aislamientos has been working on the new builds since mid-2009 and they are due for delivery between 2011 and late 2012. The extensive interior construction work covering some 1,400 square metres is particularly demanding, especially the acoustic insulation. The crew quarters are close to the machine room and therefore have to be insulated correspondingly well. Weight restrictions also make working difficult. This means KAEFER is always faced with tough decisions when it comes to choosing insulation material.

At the Navantia Puerto Real dockyards four offshore patrol vessels and four coastal protection vessels are being built for the Venezuelan navy. KAEFER is providing insulation for the exhaust systems and piping on the offshore patrol boats as well as cold insulation on the smaller coastal protection vessels. Extensive insulation work has already been completed on the Cantabria, a supply ship for the Spanish navy. At 174 metres in length it is the second largest ship in the navy. KAEFER Aislamientos insulated bulkheads, decks, cold stores and storerooms.

In addition the shipbuilding experts were involved in refurbishing the frigates Santa Maria and Reina Sofia, as well as in removing asbestos from the aircraft carrier Principe de Asturias.

KAEFER is not only busy at the dockyards in the Bay of Cadiz, but also at the Navantia yard in Ferrol, Galicia. Insulation work was carried out for around 4 million euros on the Juan Carlos I, a multi-purpose assault ship for the Spanish navy. The Spanish fitters are currently working on two vessels of the same design intended for the Australian navy.

Last but not least, KAEFER Aislamientos is working on four submarines under construction at the Navantia dockyards in Cartagena on the Mediterranean. KAEFER is responsible for the thermal insulation and for building cold stores. The four S-80 class subs are the pride of the Spanish navy and are due to be delivered between 2011 and 2014.

### New team member at the KAEFER Shipbuilding Division: Bernd Verhoeven

**WELCOME** His knowledge of the region and the people is surpassed only by his shipbuilding know-how: Bernd Verhoeven has worked in shipbuilding in the Middle East since 2003. As part of his studies, the engineering graduate specialised in ships' engines and power plants, so he is as skilled in the technical aspects of the business as he is in developing new commercial relationships. The 42-year-old has been part of our team since February 2010 – but stayed right where he was in the United Arab Emirates (UAE).

We welcome Mr Verhoeven on board and are delighted to have attracted not only a highly expert new colleague, but also someone familiar with the economy and culture of the Arabian peninsula. As is now well known, a high priority is given there to developing economic activities outside the oil and gas industry, not least by substantial acquisitions in Europe. This also concerns the shipbuilding industry; UAE has been active in the sector since the mid-1980s, making fast ferries and super yachts, special-purpose and navy vessels.

We have long had a good reputation in the region as an industrial insulation company. In close cooperation with the Offshore Division and with administrative support from the Abu Dhabi site, Bernd Verhoeven will improve the perception of shipbuilding as a core KAEFER competence in this important economic area and thereby broaden the basis for our operations in this sector. We wish him much success in doing so and are looking forward to receiving the first successful reports from the Arabian peninsula.



## A better atmosphere thanks to MICROSORBER® foil



**PRESTIGE PROJECT** The European Union Agency for Fundamental Rights resides in a splendid historical building on Schwarzenbergplatz in Vienna. Particularly impressive is the glazed inner courtyard, which rises to a height of 28 metres high over six storeys and is enclosed by sumptuously decorated interior facades. It is beautiful and also ideal for all kinds of events, except for the fact that the acoustics are marred by long echo times.

The only solution that didn't detract from the surroundings in visual terms was MICROSORBER® foil, about 100 square metres of it, double-layered and fitted directly under the glass roof at a lofty height of 28 metres. Following precise on-site measurements and exact prefabrication in Bremen, the acid test took place on the scaffolding. The sections were cut partly at right angles, partly on the bias and they, as well as the eyelets and brackets and the 120 precision boreholes in the supporting framework, all had to match and fit together perfectly. There was no chance for any reworking once the scaffolding had been taken down and the date for the building's inauguration ceremony had been set. This was because the atmosphere had to be as dust-free as possible and the assembly of the foils took place at the very last moment, after all the other construction work had been completed.

"I had a few butterflies," admitted the project manager Silvester Biro. The careful preparation in Vienna and the proven collaboration and coordination with Bremen made sure that this perfectly tailored prestige project has now also become a showpiece. We can only hope that although the echo has been eliminated, this reference will still create a positive resonance.

## Viewed with insulation, climate protection is very simple

**WE ARE ACTING NOW** The world is searching for ways of combating climate change and the rising cost of energy. However, one of the most effective means of tackling both problems at the same time is often overlooked: insulation. As Hans Bjørn Paulsrud from KAEFER Construction AS in Norway emphasised at the International Management Meeting 2010, insulating a flat surface can reduce its heat loss (or gain) by 90 to 95 per cent. Good insulation often pays for itself within just a few months. These financial advantages make it one of the cheapest technologies for the avoidance of greenhouse gases.

KAEFER's industrial customers derive huge benefits from modern insulation solutions. Industry consumes 26 per cent of the energy produced worldwide and is responsible for 50 per cent of CO<sub>2</sub> emissions. The potential for reducing both these figures is enormous. Professional insulation of plant and machinery is always both economically and environmentally sensible at the same time.

For KAEFER that means a lot of work. Fossil sources of energy and nuclear power will be needed for a long while yet. It is KAEFER's job to ensure that using them is as clean and as cheap as possible. At the same time new sources of energy are rapidly appearing on the market. Biogas, wind, solar and geothermal energy all need good insulation. Furthermore, many countries are experimenting with carbon capture and storage (CSS) projects to sequester CO<sub>2</sub> and they need insulation as well. Another interesting concept is the "zero-emission building" that makes extensive use of functional materials to regulate the temperature. The EU intends to promote the construction of these buildings with a new directive.

This all adds up to multiple opportunities for KAEFER to make even greater use of "the power of insulation" in the future. Hans Bjørn Paulsrud's appeal at the IMM was therefore: "Please act now!"



## BBI – an airport for Berlin

**TERMINAL ATTRACTION** The largest building site in Europe is gradually transforming the former East Berlin airstrip Schönefeld into the new Berlin Brandenburg International (BBI) airport for the German capital. The political decision was taken in 1996, the first preliminary work began in 2003, construction started in 2007, and in June 2012 the first passengers are due to check in. But we are primarily interested in the events on the building site in which KAEFER Construction GmbH Berlin had a hand.

The structural work on the passenger terminal is already finished and the interiors are now being fitted in the Main Pier, which has six levels and the North and South Piers, with four levels each. As part of a four-way working group under our commercial management we are responsible for five contract sections: metal ceilings, metal doors, metal construction, including steel staircases, remaining structural work and natural stonework. The first contract began in mid-2009 and the deadline is June 2012.

Our services are concentrated on the passenger terminal. The metal ceiling alone extends for a vast 75,000 square metres. The steel staircases linking all the levels will be used by up to 50,000 passengers a day, which makes them one of the defining structural features of the public area. It is primarily the natural stonework that will have the greatest impact, however, both from its ambit and from its importance for the architecture and the overall impression made on visitors to Berlin. That means the execution has to be perfect.

Gate positions for 85 aircraft give a rough idea of the airport's magnitude, and when the project is completed BBI will be able to handle 27 million passengers a year. Our Berlin colleagues still have a lot more to do before that happens. Fortunately they can rely on one of our special strengths: the ability to pool resources from other KAEFER Construction locations to provide a helping hand.

First-time order comes as a pair:

Rhön Klinikum AG is building in Gießen and Hildesheim

**ASSIGNMENT MASTERED WITH APLOMB** KAEFER Construction GmbH's first order from the new client Rhön Klinikum AG was a double success worth a total of 5.5 million euros. Rhönkliniken is Germany's largest private hospital operator with 53 healthcare facilities in 42 locations, and its portfolio also includes the university clinic in Gießen/Marburg, which is the first university clinic in Germany to have been privatised. A new complex has now been built there to bring all the existing activities in Gießen under one roof, and all its 70,000 square metres of ceilings were supplied and installed by Interior Outfitting in Frankfurt. As the original time-frame of nine months was reduced by a third to make up for a delayed start, the completion date in November 2010 turned out to be something of a challenge. Immune to this kind

of surprise, our project management solved the task with aplomb. They had already worked successfully with the architects responsible three years beforehand on a new building for the German Meteorological Service in Offenbach, and so here too they were able to find a consensual solution to the problems as they arose.

In Hildesheim the work concerned a six-storey new building. Here, Interior Outfitting from Berlin/Hanover received an order for 60,000 square metres of plasterboard partitions, fire and radiation-resistant walls and steel door frames. This new building, erected on the site of former barracks, also replaces an old hospital. The building has 580 beds and 13 operating theatres – work started in August 2009 and was completed on schedule in September 2010.

## A good reputation goes a long way: KAEFER Construction at work in the Sultanate of Oman

**ORIENTAL ORDER** Radio Bremen, NDR Hamburg, RBB Berlin – our expertise in acoustics and dry construction has already proved its worth at a number of radio stations. So when an acoustic designer from Berlin was commissioned to build a new home for the national broadcasting corporation in Muscat, Oman, he recommended KAEFER Construction GmbH from Germany to plan and execute the work.

In August 2009 this resulted in a gratifyingly large contract and since early 2010 one project manager and two site managers from our sites in Bremerhaven, Hamburg and Berlin have been going to work on the Gulf of Oman. They will see in the New Year 2011 there too, because the building is an ambitious project, with more than 3,500 square metres of floor space and 10 radio and television studios. Our role consists of calculating and supplying the material for the insulation, acoustics and dry construction as well as in supervising the assembly work carried out by local companies. We have to ensure both the quality of the construction and that the acoustics meet the defined specifications.

Working conditions on the easternmost point of the Arabian peninsula require much greater precision and preparation than normal work at home. This applies

especially to material, tools and consumables. There is no room for anything “unforeseen”, because a lack of on-site resources means that no help will be forthcoming any time soon. Of course it also sounds obvious that one needs to adjust to the cultural and climatic conditions on the ground, but in reality that is a considerable challenge. The summer temperatures in Muscat are around 40 degrees Celsius and rarely fall below 30 degrees Celsius at night, with a relative humidity of 60-80 per cent. But no matter – working for such an internationally oriented company as KAEFER our “Three Muscateers” got accustomed to the climate in no time and have their project under full control.



## KAEFER Construction GmbH: “Strategy into action”

**STRATEGY WORKSHOP** Sustainability and environmental awareness are the basis for doing business responsibly and therefore form two of the four pillars in KAEFER’s strategy. Both elements are realised in the objective “to eliminate the energy waste”.

As a central focal point for the Group this objective takes on a corresponding significance for the direction of KAEFER Construction in Germany. At a strategy workshop in February 2010 staff from all of its sites met for a weekend of intense debate. These strategic targets were discussed in detail and evaluated for potential opportunities before

steps were subsequently planned to realise them. The objective was approached in three stages, working both in small groups and all together and using graphic presentations and in-depth discussions. The aim was to develop a common understanding of the strategic approach, to infer practical market opportunities from it and to elaborate ways of achieving them. To create the basis for practical feasibility these aspects then had to be incorporated into a sustainable, manageable and verifiable process.

The response was impressive. The 160 participants were extremely

motivated by the market opportunities that can be derived from energy-efficient refurbishment, low-energy solutions and dynamic, professional advice on new technologies and materials.

The atmosphere and the opportunity to meet one another personally took care of the rest: after two days of intense work, animated discussion and relaxed social networking a large number of ideas had been identified, new targets defined and methods agreed on. There was a general consensus that this meeting was the first step on the strategic path for KAEFER Construction GmbH.

## Power plant renovation with KAEFER WANNER

**ASBESTOS REMOVAL** The remediation professionals from KAEFER WANNER have got their hands full. The experts are renovating four sections of a 125 megawatt power plant in Loire-sur-Rhône near Lyon on behalf of EDF, the French electricity utility.

Back in 2005, EDF launched an ambitious programme to dismantle old

thermal power plants powered by coal or gas. Over the following 15 years around 20 sites were to be dismantled and renovated.

In Loire-sur-Rhône the staff of KAEFER WANNER’s asbestos removal department have been joined by colleagues from Poland and scaffolders from Feyzin near Lyon to put up 2,000 tonnes

of scaffolding within 18 months. They are needed to build a hermetic seal around the area to be renovated, consisting of some 50,000 square metres of special sheeting. In total, around 100 fitters are to carry out the contract in some 200,000 work hours.



Fire protection for ventilation ducts



## Sales not ales

**SAFER SHOPPING** The architecture of the shopping centre Liesing Riverside Brewery in Vienna is impressive, snaking its way like a wave along the banks of the River Liesing. 55 shops and more than 500 apartments have been built on the former site of the eponymous brewery and the insulation of the complex heating, ventilation and fire-protection technology – which in malls like this involves thousands of square metres and units of rubber, mineral wool, soft sealing bulkheads, smoke-extraction ducts, etc. – kept both our Industrial Construction and Fire Protection departments in Vienna busy from June 2009 to September 2010.

We were working on behalf of SLA Spenglerei Lüftung und Anlagenbau and Hopferwieser & Steinmayr, two regular customers who again made sure they had KAEFER's expertise in their team. The long-standing business relationship made carrying out this 1 million euros project a real pleasure. It was completed successfully in time for Christmas shopping, ensuring the centre had a flying start onto the market. Now only the name recalls the brewery that once stood here, plus the brewing cellar that was opened up and can now be used for cultural events.

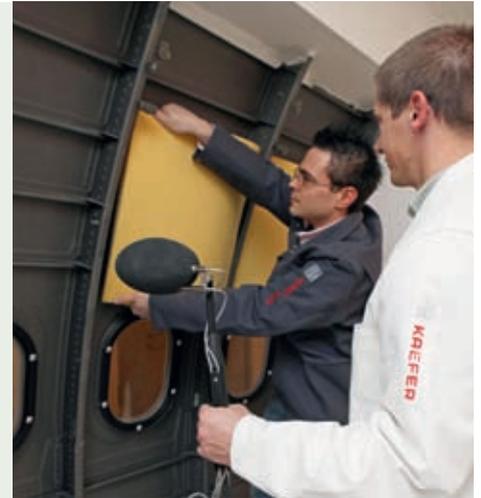
## A cool-headed response to a hot order

**FIRE PROTECTION IN FRANKFURT** "Think big" is the motto for many shopping centres, and it also applies to LOOP5 in Darmstadt-Weiterstadt, situated on the A5 motorway 20 kilometres south of Frankfurt airport. 177 retail outlets have been built over four levels on a 65,000 square metre plot, as well as a car park with space for 3,000 vehicles. Because problems with the groundwater delayed the construction, all the subsequent work had to be completed more quickly. KAEFER Construction GmbH in Frankfurt won the contract for fitting in-house fire protection on 180,000 square metres of floor space directly from Sonae Sierra, the Portuguese investor; accompanied by a request that it should all be completed within 180 days!

And so a "power-site" was set up, where the trick was to organise the permanent replenishment of considerable amounts of material. This was achieved with the help of our local supplier. In addition, up to 25 subcontractors had to be precisely coordinated, because only by working on several sections at once was it possible to fit 2,000 metres of seams for fire dampers into the ventilation ducts and install 5,750 bulkheads on time. The job was completed, and the LOOP5 team then applied the same diligence to the paperwork: 4,140 pages of documentation. Our project manager from Frankfurt said that 180 days in a "24-hour mall" had also put rather a damper on her desire to go shopping.



S90 fire-protection bulkhead for cable tray



## Next-generation insulation and air-conditioning ducts

**TECHNOLOGY LEADERSHIP** Ever more demanding customers, ever more complex products and ever more regulations add up to a formidable set of challenges for today's aircraft manufacturers. Getting to grips with them means continuously optimising their products. In these situations the aviation industry is happy to turn to the expertise of research institutes and specialists such as KAEFER Aerospace.

KAEFER is currently involved in two exciting research projects. The SINTEG project is sponsored by the German Federal Ministry of Economics and Technology and is aimed at simplifying the integration of the cabin. In practical terms this means reducing the cost of adjusting the cabin to new customer specifications. "We are working with Airbus, the TU Hamburg-Harburg and the Fraunhofer Institute for Building Physics to

optimise the primary insulation for performance, weight and installation time," explains Dominik Tappert, who is responsible for the Innovation department at KAEFER Aerospace.

The alliance partners will be pursuing different approaches up to the end of June 2011. Hard foam instead of glass wool is being used for instance to save time on installation. The advantage is that the foam parts interlock and can be fixed with fewer pins. Weight also offers great potential for optimisation. Various foam/foil combinations are being tested to reduce condensation inside the packages. Microporous insulation material can be used to reduce the thickness of the installation. "Ultimately it's about developing an industrial strength solution that is tested for ease of integration," adds Tappert.

Since January 2010 KAEFER Aerospace has also been contributing its expertise in the field of air-conditioning systems to PROTEG, another project funded by the Federal Ministry of Economics and Technology. The joint objective of Airbus, DIEHL Aircabin and KAEFER Aerospace is to develop an integrated air-circulation system by mid 2013. Technologies to optimise production, i.e. simplify the process, are the way forward. The results of patent and process research provide initial indications for a possible concept. "For example the insulation function could be integrated into the ducts during manufacture, by means of textile-based processes for instance. That reduces the weight and number of manual operations required," says Tappert. Alternatively the use of insulation material with a load-bearing or sealing function is also conceivable.



GEC member Jörn M. Fettköter with Jinbaos CEO Liu-Qi Zhang

## KAEFER Aerospace goes China

**NEW MARKETS** Sometimes you need someone to open the door for you, in a foreign country for instance. For KAEFER Aerospace GmbH the Chinese trading company Jinbao is just such a door-opener. Jinbao has close contacts to the Chinese aircraft maker Comac, which intends to bring a new passenger plane to the market in the form of its C919, ideally with insulation from KAEFER.

"We have appointed Jinbao to represent our interests locally in connection with Comac," confirms managing director Dr Alexander Toussaint. Jinbao's general manager, Mr Liu-Qi Zhang, came to Bremen in mid-June for the official signing of the cooperation agreement. This was followed by an initial meeting between KAEFER Aerospace and the president of Comac in China.

In the long term the programme of cooperation with Jinbao, which could also open doors for other KAEFER divisions, is tied firmly to a deal with Comac. "We will only pursue the cooperation with Jinbao if we win the contract for insulating the Comac C919," emphasises Dr Toussaint. The C919 is about the same size as the medium-haul models A320 and Boeing 737. The first plane is to be built shortly and the maiden flight is set for 2014.

# Supremely quiet comfort

**ANOTHER LEAGUE** Wherever it appears it is the star of the show, the Airbus A380. That's no wonder, because with a length of 73 metres, a height of 24 metres and a wingspan of nearly 80 metres you certainly can't miss the new giant of the skies. Developing, manufacturing and installing insulation, air conditioning and interior systems for these dimensions is all part of a day's work for KAEFER Aerospace GmbH.

Since 2006 the staff have been providing supreme comfort on board the world's largest passenger aeroplane with tailored primary and secondary insulation, air-conditioning and interior components. "For every A380 we design

more than 3,000 insulation panels, produce them 'just in sequence' and install them in Hamburg, St Nazaire and Toulouse," explains Patricia Polleit, the programme manager. Fitters on the assembly lines in Toulouse and Hamburg carry out the final adjustments to the mats. Air-conditioning ducts as well as parts of the panelling and the hat racks are made at the production facility in Nobitz.

But the A380 isn't just in another league in terms of its size. The level of its fittings also sets new standards. "Every plane is completed in accordance with individual customer wishes," says Polleit. Lufthansa, which took delivery of four

A380s in 2010, asked for an even quieter First Class. Its wish was the Aerospace team's command. They developed additional insulation packages and installed them behind the wall panels. The first person to benefit from this comfort zone was the pop star Shakira. She accompanied the German national football team from Frankfurt to the World Cup adventure in South Africa on the Lufthansa Super Airbus on 6 June.

At present KAEFER Aerospace is designing, producing and fitting insulation and plastic components for 20 to 25 A380s a year – and the figure is going up all the time.



## A350: giant contract win for Aerospace

**FLYING 2.0** Actually the contract had already been awarded: insulation of the passenger doors on the new A350. But then KAEFER Aerospace GmbH put in its bid. It was successful too: with expertise and innovative solutions the company convinced the customer Eurocopter.

Beforehand KAEFER Aerospace had signed a contract with Diehl Aircabin to manufacture and supply air-conditioning ducts. "This is our biggest contract ever and made it an extremely successful year for us, as well as cementing our partnership with Diehl," enthused Sales Director Thorsten Schmidt. The two contracts have a total value of around 130 million euros, cover 800 aircraft and give KAEFER Aerospace work for nearly ten years.

The package for Diehl Aircabin includes engineering support in addition to the production and supply of some 500

glass-fibre and carbon-fibre reinforced tubes for the air conditioning. And that's not all – the special tools for making the tubes are to be developed and built at the site in Nobitz.

For the door insulation KAEFER Aerospace is acting as design and build partner. Design teams in Donauwörth, working directly with Eurocopter, will develop the insulation that is then tailor-made in Seifhennersdorf. "As the doors are made up of many small areas the insulation will mostly consist of foam pieces," explains Schmidt.

A production site is also planned for development in the Shanghai area in order to manufacture some of the air conditioning ducts in China from 2014. That is also the year in which mass production of the new wide-bodied aircraft is due to start, for which more than 500 orders have already been received.

# Spectacular world premiere: A400M at the ILA



**CHALLENGING** It was an impressive debut. With a powerful thrust the A400M military transport aircraft soared into the sky in Berlin-Schönefeld at the ILA, Germany's largest aviation fair, climbed steeply and banked sharply over the airfield. Not just the military personnel had been waiting for this moment in great suspense but also KAEFER Aerospace GmbH.

As a risk-sharing partner KAEFER Aerospace was involved in the construction of the insulation and air conditioning systems right from the design phase. "We are responsible for the design, production and delivery of the primary insulation and the air conditioning ducts," notes Daniel Max from the A400M programme management. The installation of the primary insulation and component support are also in KAEFER's hands.

In technical terms the A400M is one of the most versatile aircraft ever

developed. So it's no surprise that in the course of its development a number of circles had to be squared and innumerable modifications made. That applies equally to KAEFER Aerospace. "Actually we designed the insulation and air conditioning system twice. We could never have coped with that without the backing of the Group," admits Max. Every subsequent alteration meant the insulation had to be reworked. The staff completed the job with the utmost reliability and enormous flexibility.

The maiden flight for the fourth test plane is due to take place in late 2010. The air conditioning and ramp opening are both to be tested in flight for the first time. That will be a tense time again for the KAEFER engineers. "The vortices that are produced when the ramp is opened are enormously powerful and put an exceptional strain on the primary insulation," explains Max.

## On course for new markets

**A SUCCESSFUL EXHIBITION** Cutting-edge innovations in cabin design, air conditioning, inflight service and passenger entertainment were presented by more than 500 aircraft completion companies at the Aircraft Interiors Expo in May. And of course the world's leading trade fair for aircraft interiors that took place in Hamburg wouldn't be complete without KAEFER Aerospace GmbH.

For three days the KAEFER colleagues on their 60 square metres stand enthralled an international audience of professionals from more than 100 countries. "Our stand was full all the time and we got great feedback from a lot of people," reflects Sales Director Thorsten Schmidt. The core topics of the exhibition – lightweight materials, space-saving design and aircraft modernisation – were all areas where KAEFER had a contribution to make, often with the latest combinations of materials.

In addition the exhibition team presented the visitors with live exhibits including air-conditioning ducts, side panels and an aircraft wall with different insulation mats. Not only existing customers like Airbus but also a large number of potential new clients were fascinated by the wide range of innovative products. "We had talks with lots of companies about new aircraft programmes, but also strengthened and developed our contacts to Airbus," added Schmidt.

KAEFER Aerospace was also able to make good progress in the growing after-sales market, which covers both aircraft maintenance and refitting. "We established a number of contacts to customers in the Middle East, which diversifies our client base substantially," explained the sales head. He sums up the trade fair as follows, "Very successful meetings, lots of new projects, plenty of praise for the stand – we are very satisfied."



# Thank you for 40 years!



**Manfred Wessels**  
(KAEFER Isoliertechnik GmbH & Co. KG, Germany)

Manfred Wessels began his successful career at KAEFER on 1 August 1970 as an apprentice industrial clerk. After qualifying he completed his military service before returning to KAEFER, where he initially worked in the accounts department. Shortly afterwards he moved into the warehouse to work in the purchasing department. As the company grew over the years, so did his responsibilities – he soon was put in charge of the whole field of warehousing, stock-keeping and packaging, as well as logistics and the fleet of vehicles. And this is where he has stayed, a committed professional to this day.



**Denis Linnemann**  
(KAEFER Industrie GmbH, Germany)

Denis Linnemann began his insulation apprenticeship at KAEFER on 1 September 1970 and has been part of the team ever since. Several years as a production technician at the workshop in Bremen were followed by various projects in Germany and abroad. Denis Linnemann is also a trainers' representative and closely involved in vocational and professional training for the insulation workers. His current workplace is a long-term project at a decaffeination plant in Bremen.



**John van Kleef**  
(KAEFER Nederland B. V., Netherlands)

John joined us when he was 19 years old and has been a loyal employee ever since. He is appreciated by his colleagues as a hard-working, capable, friendly man who has worked on many sites in the vicinity of Rotterdam. Unfortunately he suffered a stroke two years ago and will probably not return to work.



**Manuel Gil**  
(KAEFER Aislamientos S. A., Spain)

He started at KAEFER on 11 February 1970 at the Cadiz branch, in the south of Spain. He has spent his entire career as an insulator with this branch office, taking part in numerous large-scale projects. His work was mainly for the Shipbuilding Division at the Cadiz shipyard and also in the sugar industry in Jerez de la Frontera and El Portal (Cadiz). Nowadays he is partially retired.



**Juan Barroso**  
(KAEFER Aislamientos S. A., Spain)

He started as an insulator in the Seville shipyard on 14 December 1970 with projects like the ships Manizales City and Medellín City. He later developed his career at the Cadiz branch where he was promoted to foreman, with responsibility for such important projects as the CEPSA refinery and La Rabida refinery in Huelva. We also want to highlight the fact that the very first scaffolding erected by our scaffolding division in the sugar industry in San Jose de la Rinconada (Azucarera Ebro) was run by Juan Barroso.



**José Celeiro**  
(KAEFER Aislamientos S. A., Spain)

He started work at KAEFER on 10 August 1970 at the head office of KAEFER Spain in Bilbao, where he worked on several projects such as the Euskalduna shipyard and the thermal power station in Almaraz. In 1983 he was assigned to the Tarragona branch as production manager where he also developed major projects such as Planta Imperial and Planta Olimpus for Dow Chemical, several works for REPSOL Tarragona, a concrete company in Sitges and asbestos removal works in Tarragona. Nowadays he is partially retired but continues to carry out project work with the company.

## Thank you for 40 years!



**José Antonio Fernández**  
(KAEFER Aislamientos S. A., Spain)

He started as a metal cladding fitter at the head office of KAEFER Spain on 27 August 1970. Later he was assigned to the Cartagena Branch from where he was appointed to a big project at the refinery in Puertollano. With this project as a starting point he successfully set up a branch office in the area, which he went on to manage. The numerous large-scale projects in this field include an extension to the refinery, the Elcogas project and maintenances, Solis Winery and many combined cycle power plants. He has successfully developed this position throughout his career. Nowadays he is partially retired but he continues cooperating with the company.



**Agustín Manchón**  
(KAEFER Aislamientos S. A., Spain)

He began his career on 23 October 1970 as a metal cladding fitter at the head office of KAEFER Spain and remained there until 1979. From then on he pursued his career in the technical department, mainly in the Construction Division. In this department he has collaborated on many projects for important clients such as Conservas Garavilla in Bermeo, Nestle in different locations in Spain, Miko ice-cream and Raine ice-cream, Metalurgica Marina and Esteban Espuña in Trillos. He continues to work in this area today.



**Wiesław Jamroziewicz**  
(KAEFER SA, Poland)

Wiesław Jamroziewicz has worked at KAEFER SA (formerly IZOKOR Płock SA) since 2 June 1970. He began his career as a painter, retraining as a scaffolding fitter a few years later. In recent years his duties have been as a thermal insulation fitter. He has worked on many contracts abroad, including East and West Germany, Finland, Spain and Lithuania. Within Poland Wiesław Jamroziewicz has worked on sites in Katowice, Bydgoszcz and Gdańsk Foundry.



**Ryszard Więckowski**  
(KAEFER SA, Poland)

Ryszard Więckowski joined our company on 8 July 1970 as a steel constructions painter. Since 29 November 2001 he has worked as a painter-sandblaster and thermal insulation fitter, also acting as a foreman since October 2009. During his long period of employment with KAEFER SA (formerly IZOKOR Płock SA) Ryszard Więckowski has worked on construction sites in many countries, including the Congo, the former GDR, Germany and Russia as well as on projects throughout Poland. Currently he performs his duties at the Płock branch office, working on the PTA Wloclawek project.



**Wiesław Golicz**  
(KAEFER SA, Poland)

Wiesław Golicz joined our company directly after finishing his vocational training school in Rawicz as a sheet-metal worker. At the beginning of his professional career he gained experience under the guidance of Mr Janocha and foreman Mr Bojan. During his long employment at TERMOIZOLACJA SA, and now at KAEFER SA, Wiesław Golicz has had the opportunity to work on construction sites in Germany, Norway, the Czech Republic and Slovakia.

Currently he performs his duties at the Poznań branch office as a foreman and workshop sheet-metal technician.



**Nikolaj Vasilevskij**  
(TERMOIZOLA UAB, Lithuania)

Nikolai Vasilevskij was born on 23 October 1948. He started work as an insulator in the thermal insulation workshop on 7 May 1970 and has remained in this department throughout his career, also following the recent company reorganisation. Nikolaj is a qualified, responsible and competent 6th category thermoinsulator. He has continued to gain additional qualifications all through his time with the company, refining his skills and know-how considerably as a result.



**Aldona Martisauskiene**  
(TERMOIZOLA UAB, Lithuania)

Aldona Martisauskiene was born on 12 July 1945. She started work as an insulator in the thermal insulation workshop on 1 December 1970 and has remained in the job to this day, now with the reorganised company. Throughout her career she has taken part in training courses and is now a qualified 6th category thermoinsulator. Aldona is a responsible, skilful worker, she is familiar with both insulation removal and installation and can also sew mattresses for technical insulation.



**Petrus Methule**  
(KAEFER Thermal Contracting Services, South Africa)

In April 1970 Petrus Methule joined Thermal Insulation Suppliers & Contractors (Pty) Ltd, as a labourer. He soon worked his way up to the position of Sheetmetal Applicator/Cold and Hot Insulator. This quiet, hard worker became a Sheetmetal Developer and worked on many sites around South Africa. He was a very popular choice amongst the contract managers and retired at the end of August 2010.



**Graeme Cayford**  
(KAEFER Integrated Services, Australia)

Graeme commenced working with the company as a 15-year-old sheet-metal apprentice in 1970. Over the years Graeme has worked at numerous maintenance and construction sites throughout the country including BP (WA), CSBP (WA), Muja (WA), Kwinana Power Station (WA), Bass Gas (VIC), QAL (QLD), Qenos (VIC) and the Worsley Alumina Refinery (WA) to name a few.



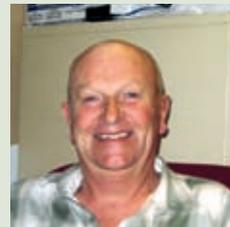
**Hans Dieter Thomann**  
(KAEFER WANNER, France)

Hans Dieter Thomann began his career at KAEFER WANNER on April 7, 1970. He initially carried out a great deal of work on the refinery at Pauliac, especially in scaffolding, also working in the teams installing cold insulation and cement valves (the forerunner of passive fire protection). He participated in the construction of the Braud Saint Louis power plant (scaffolding works), before starting in the nuclear sector in 1987. From 1994 to 2000 he was part of the steam generator replacement team, completing the large-scale project "Michelin Bac RA1" in 1996. From 2000 onwards he alternated between the Braud Saint Louis power plant and the paper mill in Factice. He spent the last 6 months before retirement at the workshop in Pessac. Hans Dieter Thomann enjoys life, is a good team player and is always willing to lend a hand.



**Elphus Mashinini**  
(KAEFER Thermal Contracting Services, South Africa)

In 1970 Elphus Mashinini joined Thermal Insulation Suppliers & Contractors (Pty.) Limited, as a Cold Insulator. He left in 1976 to join KAEFER Insulation (Pty) Limited when the company established itself in South Africa. Elphus has filled many roles in his time with the company but most notably specialising in cold insulation application work on the numerous beer brewery expansion projects around South Africa. Since 1998 he has worked as a Sheetmetal Applicator. He will retire in December 2010.



**Raeigh MacGregor**  
(PARKER KAEFER, Canada)

Raeigh MacGregor learned his profession from the bottom up, starting his career in the summer of 1969 as an apprentice painter at the Shannon Park Military Housing site in Dartmouth, Nova Scotia. He worked as a full-time painter in the field until 1990. At that time he became Coatings Manager for Nova Scotia. His first project as a painter was the Campbellton Bridge and his largest project to date was the construction of the Hibernia Offshore Platform project in 1996. This was the largest construction project in North America at the time with more than 8,000 people employed on site. He enjoys and welcomes the challenges that come with each and every project. He likes the people and the working atmosphere at the company since it was purchased by KAEFER in May 2006. In his spare time he enjoys his family cottage in Prince Edward Island, with his wife and four children.

# KAEFER Anniversaries

## KAEFER Integrated Services Australia

### 40 years with the company

Graeme Cayford 18.02.1970

### 30 years with the company

Phillip Canfell 02.10.1980

## KAEFER Isoliertechnik GmbH Austria

### 30 years with the company

Gerhard Böhm 25.11.1980

Monika Kittinger 05.02.1980

Kurt Zehetbauer 04.08.1980

### 25 years with the company

Kurt Zawrel 09.04.1985

Zoran Denic 07.01.1985

### 20 years with the company

Gerhard Wiesenhofer 15.01.1990

### 10 years with the company

Mithet Jakupovic 28.08.2000

Dragan Saric 23.10.2000

## KAEFER België NV Belgium

### 10 years with the company

Jose Manuel Marcal Calado 31.01.2000

Miguel Gaspar Marques 03.07.2000

Sven Sena 10.07.2000

Philippe Mbala 09.10.2000

## KAEFER ISOBRASIL LTDA Brazil

### 20 years with the company

Ari De Matos Liborio 01.06.1990

### 10 years with the company

Antonio Catarino Pereira 01.01.2000

Charles Gomas da Costa 01.04.2000

Ilsou Januario de Souza 10.08.2000

## ALBRICO KAEFER Services Ltd. Canada

### 25 years with the company

William Stremick 25.03.1985

Mel Hofer 27.03.1985

### 20 years with the company

Patti MacPherson 13.11.1990

### 10 years with the company

Dwayne Holm 18.04.2000

## KAEFER Canada Inc. Canada

### 25 years with the company

Arnaud Lejemble 29.7.1985

## PARKER KAEFER Inc. Canada

### 40 years with the company

Raigh MacGregor 01.06.1969

### 30 years with the company

Vernon MacGregor 01.06.1979

### 25 years with the company

Doucette Blair 01.07.1985

### 10 years with the company

James Hewlett 01.06.1999

## KAEFER Izolacni Technika spol sro Czech Republic

### 10 years with the company

Marketa Hrnčirova 01.03.2000

## KAEFER Oy Finland

### 10 years with the company

Petri Litmanen 01.01.2000

Pirjo Toljander 02.09.2000

Petri Anttila 01.08.2000

Kai Malin 28.02.2000

## KAEFER WANNER SAS France

### 40 years with the company

Hans Dieter Thomann 07.04.1970

### 30 years with the company

Marcel Dentz 21.01.1980

Roland Moginot 30.01.1980

Patrick Braz 04.02.1980

Didier Baguet 06.02.1980

Bernard Brunin 06.02.1980

Salvatore Tedesco 10.03.1980

Bernard Devos 27.03.1980

Bruno Ruchon 05.05.1980

Roland Delisle 05.05.1980

Bruno Sartory 19.05.1980

Jacky Duclos 05.06.1980

Serge Meslard 16.06.1980

Floriano Martins 01.07.1980

Joaquim Da Silva 03.07.1980

Claude Merienne 25.07.1980

Mohamed Brahim 05.08.1980

Rene Trupel 25.08.1980

Jean Paul Filloleau 25.08.1980

Jean Luc Gibeaux 25.08.1980

Patrick Tinel 01.09.1980

Jacky Erbs 01.09.1980

Yannick Guiheneuf 01.09.1980

Jean Luc Mallet 01.09.1980

Jean Louis Perronis 01.09.1980

Emmanuel Djimli 15.09.1980

Dany Metayer 17.09.1980

Jacques Boulet 17.09.1980

Pascal Starck 18.09.1980

Herve Vendeville 30.09.1980

Thierry Deshais 30.09.1980

Pascal Petitjean 07.10.1980

Gilles Olivier 27.10.1980

Mouloud Daamache 19.11.1980

Bruno Barra 24.11.1980

Pascal Dechartre 01.12.1980

Christian Wirtz 01.12.1980

Jean Pierre Fossard 08.12.1980

### 25 years with the company

Joelle Delevoye 02.01.1985

Jean Pierre Capa 07.01.1985

Michel Laupie 18.02.1985

Bruno Lefebvre 12.03.1985

Gilles Briot 01.04.1985

Pascal Senis 20.05.1985

Franck Laurent 28.05.1985

Michel Fossard 03.06.1985

Bernard Oby 03.06.1985

Regis Bernard Imbrasse 17.06.1985

Juan Manuel Lozano Casado 01.08.1985

Jean Michel Dubois 05.08.1985

Christian Guilbert 02.09.1985

Jacques Berranger 09.09.1985

Patrick Pawlonka 25.10.1985

Philippe Martin 02.12.1985

Maurice Loi 09.12.1985

Jacques Alberola 30.12.1985

### 20 years with the company

Marie Rose Lopez 02.01.1990

Bernard Jeanne 02.01.1990

Laurent Lainelle 02.01.1990

Dabiel Lhermitte 08.01.1990

Dominique Gargiulli 01.02.1990

Robert Quardel 21.02.1990

Germain Boquet 21.02.1990

Jean-Marc Glinkowski 21.02.1990

Pascal Poret 06.03.1990

Philippe Dumont 19.03.1990

Orazio Di Dio 02.04.1990

Thierry Dubois 02.04.1990

Jean-Claude Lenoir 02.04.1990

Patrick Bernard 09.04.1990

Gerard Dumont 30.04.1990

Frederic Aucllet 02.05.1990

Xavier Romo 09.05.1990

Patrice Lagorce 21.05.1990

Hubert Loget 01.06.1990

Vincent Stissi 11.06.1990

Virginie Bento 29.06.1990

Dang Xiang Hui 13.07.1990

Vincent Do 13.07.1990

Leopold Dubray 23.07.1990

Jean-Luc Moncheaux 01.08.1990

Laurent Steu 06.08.1990

Jean Claude Lelong 20.08.1990

Thierry Petit 01.09.1990

Eric Guillotin 03.09.1990

Franck Avenel 17.09.1990

Franck Lambert 17.09.1990

Thierry Merel 01.10.1990

Abdelaziz Bouatba 01.10.1990

Patrick Georgeon 01.10.1990

Andre Lefebvre 01.10.1990

Philippe Lefebvre 01.10.1990

Stephane Masuez 01.10.1990

Nino Porrelli 15.10.1990

Lionel Tardivieux 22.10.1990

Franck Martin-Gries 22.10.1990

Hubert Evin 05.11.1990

Olivier Gagneuil 12.11.1990

Pascal Reveillac 27.11.1990

Jean Pierre Maquaire 10.12.1990

Francesco Furci 10.12.1990

### 10 years with the company

Philippe Bequet 17.01.2000

Dany Metayer 18.01.2000

Luc Henquinet 01.02.2000

Yann Dumontier 07.02.2000

Thierry Cauchois 14.02.2000

Franck Revez 28.02.2000

Patrick Dumont 13.03.2000

Sebastien Matusz 03.04.2000

Christian Huan 03.04.2000

Stanislas Lecrocq 03.04.2000

Ricardo Rodriguez 10.04.2000

Jean Langlais 17.04.2000

Arnaud Degos 02.05.2000

Yanik Celebi 02.05.2000

Sebastien Jamin 02.05.2000

Pascal Levillain 15.05.2000

Jean-Jacques Merckel 15.05.2000

Christian Leveque 16.05.2000

Gerard Cate 29.05.2000

Chikri el Miloud 29.05.2000

Emmanuel Feil 05.06.2000

Emmanuel Gautier 07.06.2000

Jordan Sarazin 31.07.2000

Jean-Bernard Hebert 01.08.2000

Roger Soudais 01.08.2000

Franck Vezin 01.08.2000

Thierry Kaufmann 01.08.2000

Abid Benaouda 10.08.2000

Huynh van Chinh 14.08.2000

Yves Alix 28.08.2000

Jean-Noel Manini 18.09.2000

Stephanie Robert 21.09.2000

Julien Nury 01.10.2000

Guiseppa Cucuzzella 02.10.2000

Franck Mauvillain 06.11.2000

Hocine Bachiri 13.11.2000

Sebastien Dassule 01.12.2000

Roland Trupel 04.12.2000

Bruno Le Mat 04.12.2000

Daniel Ancel 15.12.2000

Armand Marchand 15.12.2000

## KAEFER WANNER Shipbuilding France

### 30 years with the company

Jean Luc Rio 01.09.1980

### 10 years with the company

Beugnier Didier 03.01.2000

## KAEFER Aerospace GmbH Germany

### 10 years with the company

Wilfried Kumpfe 01.04.2000

## KAEFER Construction GmbH Germany

### 20 years with the company

Rene Ziegenskie 12.11.1990

## KAEFER Industrie GmbH Germany

### 40 years with the company

Denis Linnemann 01.09.1970

### 30 years with the company

Lothar Frenkler 29.07.1980

Thomas Biedritzki 01.08.1980

Gerald Fankhauser 25.08.1980

Jörg Lemke 25.08.1980

Helmut Korporal 25.08.1980

Thomas Wylegala 01.09.1980

Jörg Blumstengel 01.09.1980

Frank Gesse 01.09.1980

Jens Röttger 01.09.1980

Thomas Wanschura 01.09.1980

Jaroslav Nebrensky 15.09.1980

Heinz-Wilhelm Kluge 20.10.1980

Hans-Helmut Blender 12.11.1980

Horst Tietz 01.12.1980

### 25 years with the company

Rainer Fragel 07.01

Marcus Pielok	01.08.1990
Karl-Heinz Reineke	04.08.1990
Roland Mergner	03.09.1990
Hans-Jürgen Nitsche	03.09.1990
Gerd Stäglin	03.09.1990
Andreas Bertuleit	01.11.1990
Jörg Raugust	08.11.1990
Martina Patze	16.11.1990
Rainer Barthel	03.12.1990

**10 years with the company**

Joao Paulo Teixeira de Moura	01.03.2000
Michael Krajewski	01.04.2000
Uwe Günther	01.05.2000
Adalbert Larisch	08.05.2000
Uwe Dietze	13.06.2000

**KAEFER Isoliertechnik GmbH & Co. KG  
Germany****40 years with the company**

Manfred Wessels	01.08.1970
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**30 years with the company**

Hans-Jürgen Kück	01.11.1980
------------------	------------

**25 years with the company**

Andrea Lindhorst	07.01.1985
Aswin Leo	01.06.1985
Gerd Wolpmann	01.10.1984

**20 years with the company**

Hermann Otten	01.08.1990
Vlasta Kafkova	10.12.1990

**10 years with the company**

Christian Kelch	07.04.2000
Anna Strack	01.05.2000
Tim-Oliver Felsen	16.05.2000
Susanne Mönch	01.09.2000
Hinrich Nolte	01.11.2000
Wolfgang Richter	01.12.2000

**KAEFER-HEIBL Isoliertechnik Kft.  
Hungary****20 years with the company**

Eva Lovasné Lipók	01.03.1990
-------------------	------------

**10 years with the company**

János Dóka	18.07.2000
Bálint Török	01.01.2000

**KAEFER Punj Lloyd LTD.  
India****10 years with the company**

Poonam Chand Jain	07.01.2000
-------------------	------------

**TERMOIZOLA UAB  
Lithuania****40 years with the company**

Aldona Martisauskiene	01.12.1970
Nikolaj Vasilevskij	07.05.1970

**20 years with the company**

Laima Janulioniene	26.11.1990
--------------------	------------

**10 years with the company**

Virignija Uogintiene	23.07.2000
----------------------	------------

**KAEFER Nederland B.V.  
Netherlands****40 years with the company**

John van Kleef	29.06.1970
----------------	------------

**20 years with the company**

Ger Bravenboer	06.08.1990
----------------	------------

**10 years with the company**

Leo Doornhein	01.05.2000
Marisa Tjong-a-Hung	01.09.2000

**KAEFER Construction AS  
Norway****30 years with the company**

Hans Bjørn Paulsrud	01.05.1980
Ronny Løkkevik	22.09.1980

**25 years with the company**

Henning Christensen	14.05.1985
Gudmund Stuerød	12.06.1985
Harald Moen Halvorsen	10.06.1985

**10 years with the company**

Per Otto Blomqvist	05.06.2000
Romuald Mickiewicz	05.06.2000
Ove Edgar Abrahamsen	24.07.2000
Vera Refsnes	31.07.2000
Leif Sixtensson	28.08.2000

**KAEFER ENERGY AS  
Norway****20 years with the company**

Arild Haugland	01.01.1990
Svein Liseth	18.01.1990
Rune Eiane	16.02.1990
Rolf Ingebrigtsen	24.09.1990
Harald Nordeide	20.11.1990

**10 years with the company**

Kjetil Berntsen	01.01.2000
Arne Jörgen Hokstad	10.01.2000
Karl Jakob Sømoe	03.03.2000
Esa Peter Hautamäki	03.04.2000
Inge Orre Haaland	01.07.2000
Mats Mjelde Lidbom	21.08.2000
Torleif Susort	01.11.2000
Christer Langland	01.12.2000
Roger Nordskog	01.12.2000

**KAEFER SA  
Poland****45 years with the company**

Eugeniusz Koziół	10.12.2002
------------------	------------

**40 years with the company**

Wiesław Golicz	05.06.1992
Wiesław Jamroziewicz	02.06.1970
Ryszard Więckowski	08.07.1970

**30 years with the company**

Tadeusz Chamiolo	07.03.1995
Kazimierz Dziegiel	01.07.2002
Kazimierz Iwaniak	09.09.1980
Bogdan Jankowski	02.10.1980
Andrzej Konieczny	26.04.1993
Andrzej Kuta	09.01.1995
Ryszard Lasota	05.02.1980
Edward Pessel	15.10.1979
Marek Pokorski	20.08.1980
Roman Słota	01.05.1993
Jerzy Szymczak	04.09.1980
Wiesław Wach	14.09.2000
Marzanna Banaszewska	01.10.1980
Gabriela Cieślak	02.05.1980
Marian Pawlina	17.03.1980
Janusz Wiśniewski	16.06.1980

**25 years with the company**

Andrzej Brzozowski	01.09.1985
Ireneusz Bugała	01.05.1993
Józef Cwiok	01.01.2003
Jan Dorobek	01.09.1985
Marek Gasza	20.05.1985
Henryk Gołaszewski	29.04.2004
Tadeusz Kasprzak	01.04.1996
Zbigniew Kocharński	06.02.1985
Zbigniew Korman	05.12.1994
Kazimierz Kumorek	01.05.1993
Andrzej Majka	07.03.1995
Bogdan Płaza	01.10.1991
Adam Pokrzyk	20.02.1992
Henryk Sobarnia	01.05.1993
Stanisław Sysło	01.05.1993
Bogusław Wider	01.08.1991
Wojciech Wiśniewski	01.09.1985
Jan Zajac	08.09.1995

**20 years with the company**

Grzegorz Jackowiak	01.07.1992
Zdzisław Klisiewicz	15.09.2007
Ignacy Matras	20.02.1995
Wiesław Pieprz	06.09.2001

Mieczysław Pszczola	10.08.1995
Kazimierz Tarnowski	05.08.1991
Andrzej Ulczok	03.08.1993

**10 years with the company**

Marcin Jamza	14.05.2008
Janusz Juma	02.09.2002
Rafał Kabat	11.05.2004
Paweł Kaczmarek	08.09.2003
Arkadiusz Kamiński	08.05.2000
Jarosław Kępka	07.11.2008
Leszek Kulikowski	07.11.2000
Józef Mastalerz	24.06.2002
Tomasz Stupski	22.07.2002
Robert Wnuk	20.06.2000
Roman Kwapniewski	18.09.2000

**KAEFER LLC  
Doha, Qatar****10 years with the company**

Variyathel Mohideen Shah	28.11.2000
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**KAEFER Thermal Contracting  
Services (Pty) Ltd. South Africa****40 years with the company**

Petrus Methule	15.04.1970
Elphus Mashinini	16.04.1970

**30 years with the company**

Thabo Maboya	21.01.1980
Reuben Mbethe	17.01.1980
Thembile Mzukwa	16.04.1980
Pondo Thukwane	20.05.1980
Hamilton Motloung	07.07.1980
Moshima Skhosana	22.07.1980

**25 years with the company**

Abram Morifi	25.11.1985
Germiston Toti	06.02.1985
Ben Gaseranya	09.02.1985
Absalom Buthelezi	30.09.1985
Phillemon Tau	01.10.1985
Wilson Malinga	05.08.1985
Lefty Motloung	28.08.1985

**20 years with the company**

Poobalan Rajagopol Moodley	05.03.1990
----------------------------	------------

**10 years with the company**

Thokozani Mcineka	29.05.2000
Thomas Liebenberg	06.07.2000

**KAEFER Aislamientos S.A.  
Spain****40 years with the company**

Manuel Gil	11.02.1970
José Celeiro	10.08.1970
José Antonio Fernandez	27.08.1970
Agustín Manchón	23.10.1970
Juan Barroso	14.12.1970

**25 years with the company**

Joaquín Rodríguez	18.02.1985
-------------------	------------

**20 years with the company**

Oscar José Pérez	30.10.1990
Alfonso Rodríguez	05.02.1990

**10 years with the company**

Miguel Ángel Pernás	16.05.2000
Luis María Calvo	23.06.2000
Fernando Noya	31.07.2000
Ramón López	01.08.2000
Íñigo Bujedo	04.12.2000
Alejandro Martín	11.12.2000

**KAEFER L.L.C.  
United Arab Emirates****10 years with the company**

Sanjay Kumar	15.07.2000
--------------	------------

**In memoriam:**

Annelotte Koch, † 10.03.2010

**Burma**

Myo Min Thet Thet, † 30.11.2009

**France**

Ramos Raymond, † 31.03.2010

**Germany**

Klaus Tietjen, † 30.08.2009  
Marko Sesar, † 31.08.2009  
Günter Mißfelder, † 02.09.2009  
Guido Hollbach, † 30.10.2009  
Günter Koch, † 10.11.2009  
Gerhard Hornof, † 17.11.2009  
Siegfried Halacz, † 17.11.2009  
Willy Müller, † 24.11.2009  
Emilie Felz, † 21.12.2009  
Richard Gruen, † 26.12.2009  
Rudolf Bakker, † 28.01.2010  
Walter Ziebarth, † 30.01.2010  
Klaus Schmidt, † 08.02.2010  
Johannes Bevers, † 24.02.2010  
Karl-Heinz Laakes, † 03.03.2010  
Günter Jahnke, † 15.03.2010  
Ulrich Manthey, † 17.03.2010  
Georg Ring, † 26.03.2010  
Alexander Oettel, † 28.03.2010  
Adolf-Karl Amos, † 31.03.2010  
Wolf Münch, † 11.04.2010  
Werner Detering, † 16.04.2010  
Heinz Wehner, † 19.04.2010  
Zdravko Smoljanovic, † 21.04.2010  
Klaus-Dieter Sommer, † 24.04.2010  
Hasan Mehter, † 06.05.2010  
Günter Papajewsky, † 07.05.2010  
Adolf Grunewald, † 11.05.2010  
Rosemarie Iden, † 25.05.2010  
Fred Pettelkau, † 27.05.2010  
Bruno Franzke, † 10.06.2010  
Reinhard Gawehn, † 28.06.2010  
Heinz-Wilhelm Kluge, † 05.07.2010  
Jürgen Zelck, † 08.07.2010  
Dietmar Nickle, † 11.07.2010  
Otto Baufeld, † 15.07.2010  
Franjo Lulic, † 16.07.2010  
Rudolf Beunink, † 16.07.2010  
Hermann Peuß, † 21.07.2010  
Rolf-Dieter Rudnik, † 04.08.2010

**Hungary**

Zoltán Balla, † 17.07.2009

**India**

K Rammohan Rao, † 07.02.2010

**Norway**

Jan Thorbjørnsen, † 06.03.2010

**Poland**

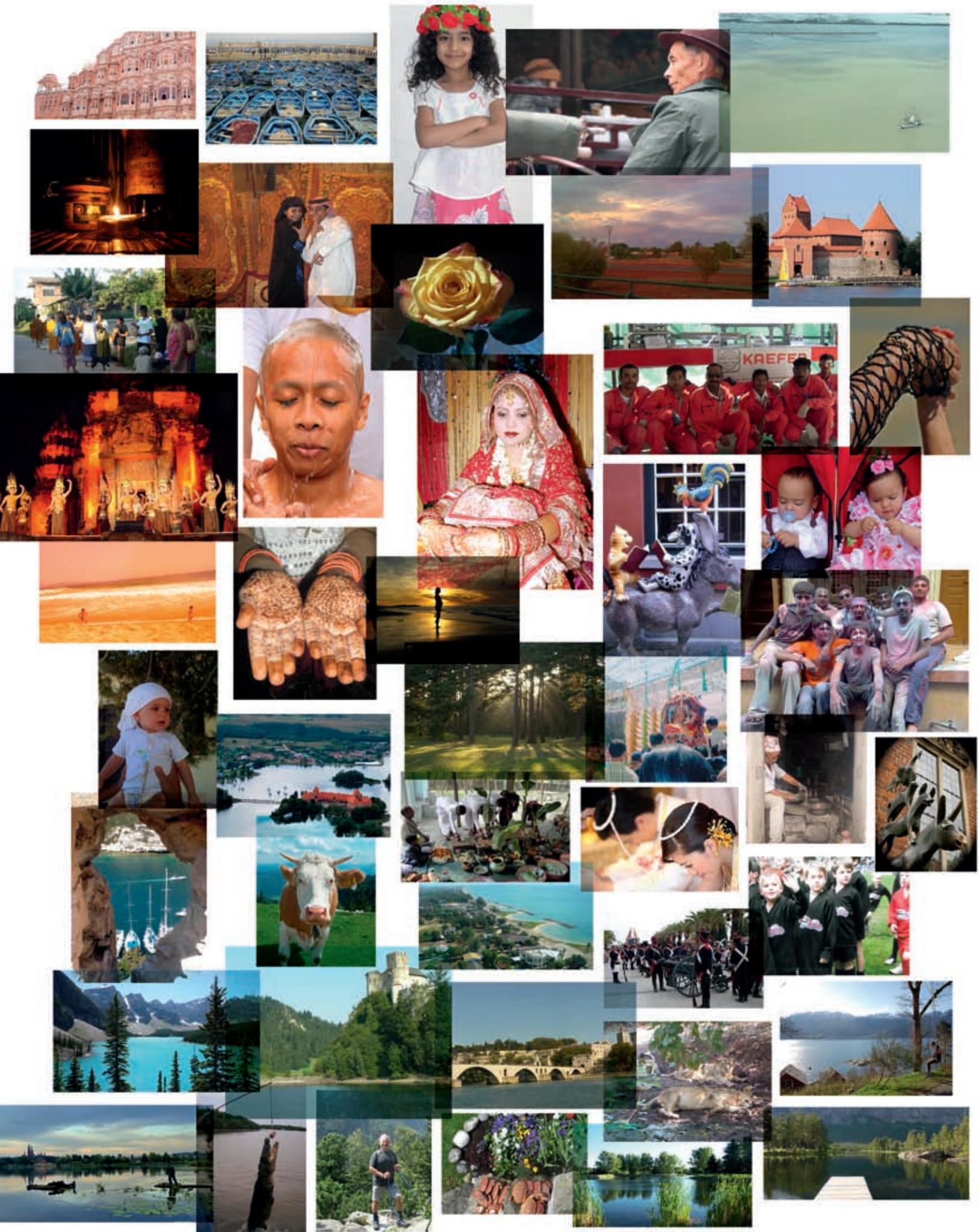
Jerzy Reszczyński, † 13.01.2010  
Jan Kuboń, † 04.03.2010

**South Africa**

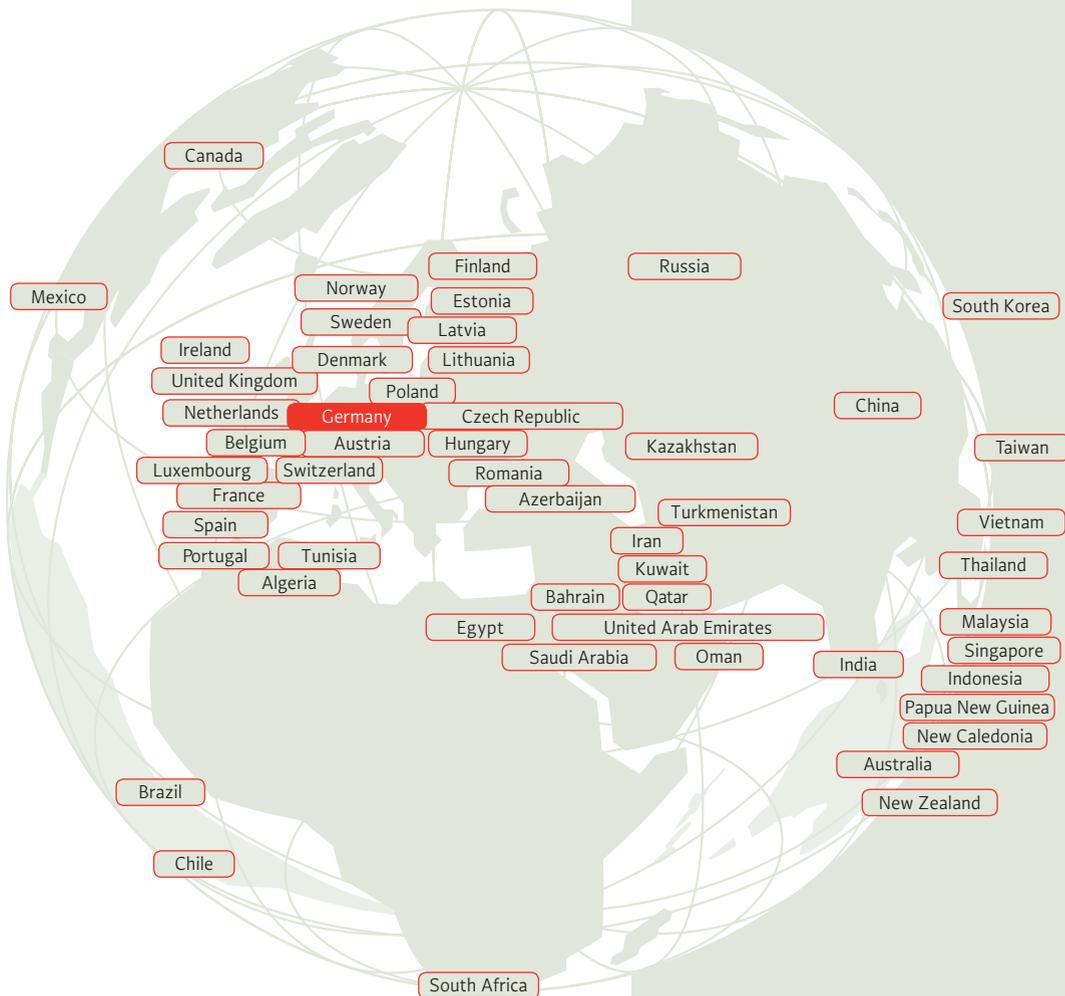
Sipho Mdletshe, † 06.10.2009  
John Lottering, † 02.04.2010  
Marmar Elmon Moeng, † 22.05.2010  
Jabulani Petros Mhlongo, † 26.06.2010

**Spain**

Jesús López, † 18.08.2010







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