

**KAEFER GROUP** growth in Eastern Europe – project in Snøhvit Norway enters first winter phase **SHIPBUILDING** sophisticated interiors for river cruise liners **INDUSTRY** cellulose factory in Stendal, scaffolding in Belgium and The Netherlands **BUILDING CONSTRUCTION** interior finishing for quay storehouse, refurbishment projects in Berlin **PRODUCTS/ SYSTEMS** bemo Brandschutzsysteme repositions itself, LOLAMAT paneling for luxury suites

# K | WERT

New philosophy for future success:

## More than good ideas



# KAEFER 2004



**May 2004** <  
IMM in Garmisch-Partenkirchen



**Spring 2004** <  
Storehouse XI in Bremen, a large refurbishment project with interior finishing



> **Spring 2004**  
large project at Total refinery in Leuna



**March 2004** <  
start-up of largest contract in KAEFER's history, the Snøhvit LNG plant in Norway



> **December 2003**  
KAEFER acts as general contractor for shipowners and shipyards; complete interior design for ships



**May 2004** <  
KAEFER Schiffbau GmbH is founded in Bremen



**July 2004**

Jörn M. Fetkötter named new managing director for domestic operations



**September 2004**

Soccer Cup in Bremen

KAEFER-GRUPPE / KAEFER GROUP



**Summer 2004**

extensive interior finishing work at Bad Sauerbrunn health resort in Austria



**October 2004**

renovation projects, Open House, Parc du Bois in Potsdam



**November 2004**

tunnel robot tackles two projects in 2004

BAU / CONSTRUCTION



**June 2004**

new Internet tool: [www.tuerplaner.com](http://www.tuerplaner.com), configurator for door elements and hardware

**October 2004**  
cellulose factory in Stendal ready for operation



**December 2004**

TERMOIZOLACJA project, insulation work in Trzebinia bio diesel plant in Poland

INDUSTRIE / INDUSTRY



**Summer 2004**

scaffolding success for KAEFER WKS/ WKS B in Belgium/The Netherlands



**October 2004**

appearance at world's largest shipbuilding trade fair, the SMM 2004 in Hamburg



**December 2004**

completion of the "Aqualand" swimming complex on super ferry "COLOR FANTASY" in Finland

SCHIFFBAU / SHIPBUILDING

Dear fellow employees,  
dear friends of the KAEFER family!



May we present the 22nd issue of k|wert. It has a revised, modern layout and a special feature, on display in the enclosed brochure as well, which we want you to see first – the new KAEFER logo.

By giving our corporate design a new shape we want to send a clear signal as concerns the year 2005. After two somewhat difficult business years, KAEFER has created the infrastructures necessary to make the coming year a success on the domestic as well as the international market! The company's new logo aims to make KAEFERites aware worldwide that they are part of a successful, modern, international company which goes with the times and is equipped for the future while at the same time putting great store by tradition and continuity.

For Germany, the year 2004 was disappointing in economic terms, particularly considering the many positive prognoses. Hopes for an uptick on the market and more dynamic consumption were raised, a development which was to boost domestic investments and sustain export success. Only logical for KAEFER's executive staff to begin the year 2004 optimistically, particularly since we expected to do well on the foreign market and had had the foresight in 2003 to prepare for a difficult year on the domestic market the following year.

As concerns our international business activities, our expectations were completely fulfilled despite a few isolated financial challenges. This helped us to fortify our strategic position as one of the largest "global players" in the insulation business, a fact which is symbolized by the great progress we have made executing the largest individual contract in the history of the company, the connection of the Norwegian Snøhvit gas fields to a new LNG plant for Statoil.

We would have done tolerably well on the domestic market this past year had we not been forced to finance a massive cost-reduction strategy the year before. On the whole, the negative situation on the domestic market counteracted our concerted efforts to turn things around despite some welcome exceptions, particularly in the renovation and façade business.

We should not belittle the positive aspects of this development, however. Structurally speaking we were relatively well prepared for the very slow business on the domestic market in 2004. We succeeded in strengthening our market position in important individual trades, and this will enable us to tackle the coming year 2005 energetically – with the help of an experienced 'comrade' who will act as the new managing director for the domestic business, Jörn M. Fetkötter, who brings with him promising contacts and ideas

as well as profound expertise in the power plant industry. This industry will be in need of extensive renovation over the next 15–20 years, a fact which spells out growth potential for us.

With our strong international business and restructured domestic operations, our performance on the market of the future will stand out. This calls for relentless efforts to improve communication and collaboration among all of our employees, however. In 2004 one priority was to create the necessary conditions for facilitating such processes. Measures were taken to expand the necessary IT infrastructures and to organize events which aimed to promote networking among KAEFERites from all over.

For over 85 years, KAEFER has been successful time and again when it came to meeting diverse challenges. In 2005 we will take on the challenge as well and shape our market and our business field in a positive way.

For all of the efforts you made in 2004, whether it was at the North Cap, in the sultry heat of Vietnam or at a chemicals plant 'just around the corner', our many thanks go to you! This year we want to expressly convey our gratitude to our construction site and project supervisors, who often get pressure from 'both ends' and without whom the individual projects could not be successful!

In the hopes that courageous solutions will help us to flourish in the future as well, we wish you and your families a peaceful and relaxing holiday season, and health, happiness, and an optimistic outlook in the new year.

Norbert Schmelzle  
Vorsitzender Geschäftsführung

Jörn M. Fetkötter  
Geschäftsführer

Peter Hoedemaker  
Geschäftsführer



## Go East:

Best ratings in on-the-job safety and logistics – not only in the East but Europe-wide!

08



## Spain:

Competencies: gas processing plants, power plants, refineries, gas tanks, airport terminals, new buildings in the foodstuffs industry .....

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## KAEFER – ships – architects:

Shipbuilding's general contracting department offers services from A to Z – from the initial blueprint down to turnkey delivery.

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## Cellulose factory in Stendal:

KAEFER instrumental in creating 1,600 new jobs!

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## bemo:

New name, new boss – company on the way to becoming “the” address for special and systems solutions!

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KAEFER GROUP

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## KAEFER Bremen – Jörn M. Fetkötter new managing director for domestic operations



Managing director  
Jörn M. Fetkötter

On July 1, Jörn M. Fetkötter became a member of the managing board of KAEFER Isolier-technik GmbH & Co. KG, Bremen, being named managing director of the German operative business. He joins Peter Hoedemaker, who will continue to supervise international business activities and Norbert Schmelzle, who as chair-

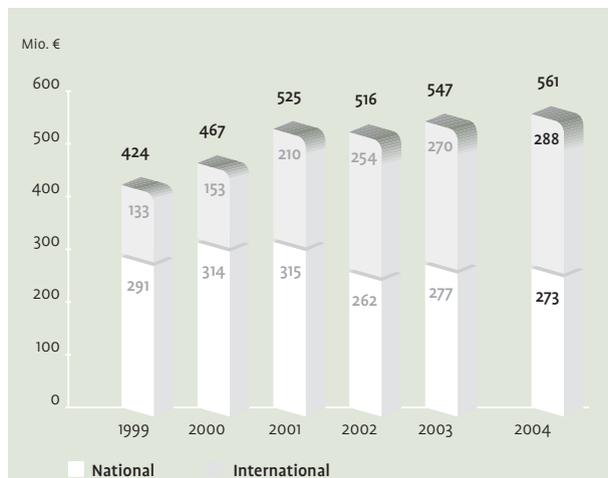
man of the managing board is in charge of all holding functions. The 41-year-old father of three welcomes the move to Bremen on professional as well as private grounds. "Having been born and raised in Hamburg, I have missed my hanseatic roots and the vicinity to the ocean," Fetkötter says.

After completing his studies in Hamburg, the process engineer first worked on international power plant projects for Mannesmann before joining Babcock in Oberhausen to become chairman of the managing board of BBP Service GmbH, where he set up a worldwide service provider business for industrial facilities, in particular power plants and waste incineration plants.

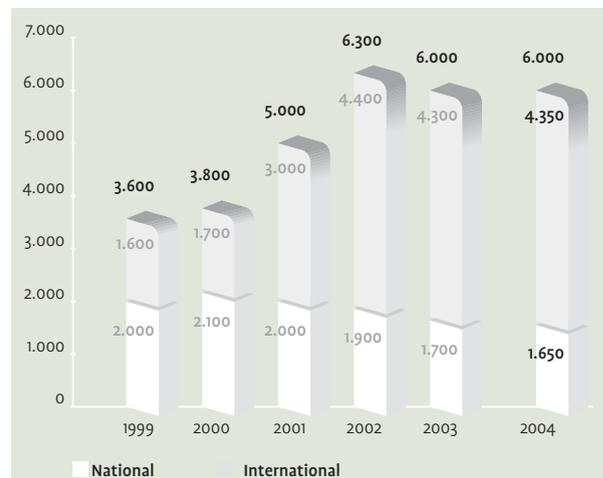
This experience made Fetkötter familiar with two core areas of KAEFER's business activities, and his job as managing director for SITA Deutschland GmbH in Cologne, a subsidiary of the French Suez Group, enabled him to gather comprehensive experience with strategic planning and cost optimization in a company with over 4,000 employees.

The advisory board and managing board of the KAEFER Group are delighted to have found in Jörn M. Fetkötter a man optimally qualified for charting the course for the domestic business in a difficult market, building on past success and giving the company new momentum for the future.

## KAEFER Group 2004



There was a 3 % increase in turnover as compared to the previous year. The strategic goal of yielding more than 50 % of the Group's total turnover on foreign markets was clearly achieved. 2004 – KAEFER generates approx. 55 % of its worldwide turnover in its core industrial business.



There was a slight decrease in jobs at domestic locations and a slight increase in jobs abroad. At the end of 2004, approx. 6,000 employees were working for the KAEFER Group worldwide.



*International Management Team*

## IMM 2004 in Garmisch-Partenkirchen

From May 13th to 15th, managing director Peter Hoedemaker and KAEFER's international management team met in Garmisch-Partenkirchen and made an excursion to Germany's highest peak, the 2,962 m high Zugspitze.

Amidst the snow-covered mountain landscape, the group conferred on the business results of the previous year as well as on guiding ideas for the future. This annual meeting allows the executive staff to discuss issues which are of interest to



the entire company and thus to consolidate the constantly growing Group. This in turn has a positive effect on the individual locations.

On the lighter side, the participants got the chance to enjoy the mountain scenery, going out in teams. As it happened, the German Soccer Championship took place at the same time, with Werder Bremen winning the trophy. To celebrate the occasion, the soccer team's green-and-white flag was hoisted on the mountain peak. One important point on the agenda is always the acknowledgement of exceptional performance. This year representatives of KAEFER Schiffbau GmbH and KAEFER IKM AS (Norway) were delighted to receive the award for "Best National/International Turnaround 2002-2003". It goes to outfits which succeed in substantially improving their business results under difficult conditions. And KAEFER's renovation/facade department and KAEFER L.L.C.



(United Arab Emirates) proudly accepted the "Best National/International Performing Business 2003 Award", which distinguishes those operations with the best general business results!

As always, the evenings were used to make new contacts and cultivate already existing relationships as well as to integrate new managers. This annual meeting is truly an important means of strengthening the Group and initiating an exchange of experience and know how which continues all year long.

## International Controller Committee (ICC)

To control over 30 foreign affiliates with more than 4,350 employees a common reporting and controlling system is a must. This requires a close cooperation with the local controllers and efficient controlling tools.

For this reason the "International Controller Committee (ICC)" was established in March of this year. The International Controlling Team (ZA) and the Regional Controllers are permanent mem-

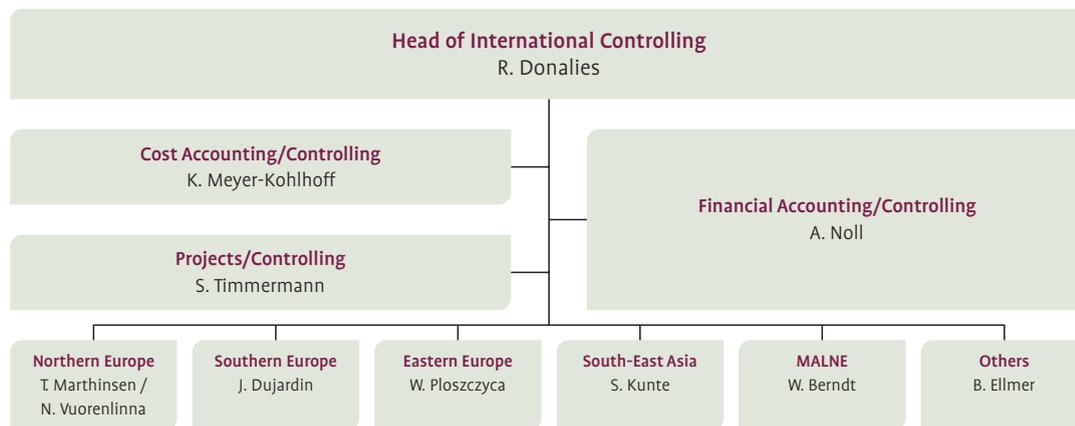
bers. Depending on the topics involved, the local controllers will also join the ICC-Meetings.

As Rainer Donalies says, "ICC is a flexible work group which promotes networking among controllers – which becomes more important because of the increasing cross border business.

Major goals are improvements in the management information system among the individual countries and the head

office as well as the increase of profitability". The first two-day meeting in March focused on the revised financial reporting procedures which are already well-integrated in the monthly reporting routine.

Currently, the next ICC-Meeting is being planned. The major topic will be the "evaluation of work in progress".



## International Management Board (IMB)

This board, which brings together all regional directors several times a year, was established in January 2002 by international managing director Peter Hoedemaker. It has become a successful planning and logistics instrument for KAEFER's global business activities.

Exchange of experiences and progress reports on current projects and possibilities for providing mutual support are topics addressed by this body, but first and foremost it focuses on developing and initiating strategies for penetrating new markets in various regions and marketing

KAEFER's products and services competitively. Since the first IMB meeting, which took place in Bremen in January 2002, meetings have taken place at twelve different venues, so far this year at KAEFER Austria in Vienna, in Garmisch in the context of the IMM and in Barcelona during the WIACO congress. The thirteenth meeting brought some ten participants together in Bremen in December 2004.

Topics on this year's agenda were international purchasing policies, the International Controller's Committee and international networking as well as large

projects in the various regions and efforts to expand the market in Eastern Europe, Asia and Latin America.

In addition to strategic goals, the IMB has of course also initiated various measures, in particular career advancement programs such as the Junior Executive Program (JEP) and the International Graduated Engineers Training (IGET). But the KAEFER International Soccer Cup, an enormously popular biannual event, also pursues the aims of the IMB, for one important aspect of the Board's "KAEFER Group" philosophy is to promote internal, personal contacts.



## Open house for young shareholders

At the meeting in 2003 the young members of the “next generation” of shareholders expressed the desire to get to know the company personally and gain an inside perspective on its operations. The aim was to promote a better understanding of the company’s agenda. Shareholders are now supporting the idea.

This all resulted in KAEFER’s first open house for young shareholders, which took place from June 17-19, 2004 in Paris, the headquarters of KAEFER’s largest foreign subsidiary, KAEFER WANNER. Here the participants had the opportunity to discuss organizational, managerial and legal topics, and the strategy of the KAEFER Group was illuminated using France as an example. Furthermore, a visit was paid to two construction sites to give the participants a practical impression of KAEFER’s operations.

The young shareholders were very impressed by this event. It met all their expectations and was felt to be very valuable as a means of finding out more about the company and helping them to identify more closely with its interests.

In light of such positive feedback the decision was made to have an open house in 2005 as well. This time it will take place in Bremen to allow participants to familiarize themselves with Corporate Headquarters and its operations.



*Young shareholders; visit to KAEFER WANNER headquarters in Paris*

## KAEFER Schiffbau GmbH founded

The advisory board of parent company KAEFER recommended medium-term organization of the divisions into GmbHs. The shipbuilding division was the first to act on this advice.

The recommendation was made on the basis of practical and organizational advantages, but also tax benefits. As a self-sufficient GmbH with a new legal form, shipbuilding will now be able to hold shares in medium-sized partner firms, a step which could not be taken by the parent company because of what would have been a great imbalance in size and organizational structures.

In particular, the fact that the parent company belongs to the ZVK (Supplementary Health Insurance Co. in Wiesbaden) was a serious problem for shipbuilding. The new GmbH can make immediate use of long awaited advantages. For the internal organization and the personnel everything literally stays the same – a new name for an old thing, so to speak.

“KAEFER Schiffbau GmbH” was founded in December 2003 and full-scale operations began in May 2004. KAEFER Isoliertechnik GmbH & Co. KG. is the exclusive shareholder and managing directors are Manfred Borowsky and Hans-Jürgen Gefken.





Robert Skrobisz,  
Regional director  
for Eastern Europe,  
Power plant in  
Polaniec (left),  
Trainees in 2004  
(center), Power and  
heat supply station  
in Gorzów (below)



## Go East: KAEFER expands in Eastern Europe

**The move to the east was absolutely right: within only three years, KAEFER has been able to increase sales tenfold in Eastern Europe and to achieve above-average profitability. Robert Skrobisz, Regional Director for Eastern Europe, has reason to be satisfied, but also warns that there are risks involved: "Rapid growth presents challenges to logistics, cash and personnel management. Moreover, we cannot rely solely on long-term maintenance contracts; we must continue to create new business on a daily basis."**

The Eastern European region includes Poland, Hungary, the Czech Republic and the Ukraine. However, Baltic countries, Slovakia and Russia are markets which are also becoming increasingly important for KAEFER. "In almost all of these countries, we are encountered with enormous economic dynamism and potential for growth. These are bright prospects when you consider that KAEFER has already been able to achieve enormous growth and above-average returns in this region, even given the stagnating economic environment of recent years", the Eastern Europe manager is happy to report.

KAEFER is currently represented by a total of around 700 employees in seven subsidiaries in our neighboring countries to the East. The crystallization point is the Polish TERMOIZOLACJA S.A. with offices in Zabrze. Its most important capital is its well-trained, technically qualified and highly motivated employees. "Our services and our people are increasingly on demand abroad", says Skrobisz and quotes a long list of references in Western Europe. In

the past year alone, fitters from TERMOIZOLACJA have been on assignments in eight countries, i.e. Sweden, Norway, Germany, France, Ireland, Spain, the Czech Republic and Slovakia.

### Safety is paramount

Foster Wheeler: The internationally active company awarded TERMOIZOLACJA the contract to insulate a heating boiler as part of the construction of a peat-fired power plant with an output of 250 MW at Shannon Bridge on the "Emerald Isle" of Ireland. Around 40,000 m<sup>2</sup> needed to be insulated, which meant 12 months of work for an average of 70 Polish employees. Foster Wheeler not only made the right choice from the point of view of quality and price by awarding the contract to TERMOIZOLACJA, they also gained from the very highest standards of safety: not a single accident occurred on site during the entire construction period. TERMOIZOLACJA was actually the first insulation company in Poland, and the second Polish

company ever, to be successfully qualified in accordance with SCC.

Not only Ireland, but France too, has offered a long-term commitment for the Polish employees. After a contract in a refinery in Reichstett near Strasbourg was completed to the complete satisfaction of the end customer, the number of TERMOIZOLACJA construction sites in France increased to a total of five. By the end of August, a total of 70 Polish employees were working in France, mainly for KAEFER WANNER, not only on industrial construction sites but also on shipbuilding assignments.

A total of around 300 employees were sent abroad on assignments in the past year - a figure which can still be increased, according to Mr. Skrobisz. However, it also increases the demands on the employees. Fitters with no foreign language skills have little chance of working abroad for TERMOIZOLACJA.

Hungary is now developing into a progressive market following years of stagnation. Since the end of 2003, an industrial sector is also active there which can now report its first success stories. "We undertook two large-scale projects in the past year for a total value of around 2 million Euros", reports Mr. Skrobisz. One involved the cold insulation of a chemical plant in the east of Hungary for TVK, a MOL subsidiary, and the other consisted of insulation work at a waste incineration plant in Budapest for LURGI Energy & Environment.

But a lot is happening in Poland itself as well. After over 20 years of absence from shipbuilding, TERMOIZOLACJA finally managed to secure contracts in the Polish shipbuilding sector. TERMOIZOLACJA employees are now helping to build a polar research ship at the Naval Shipyard in Gdynia. Their contribution includes insulation and sheet metal work. The Eastern Europe manager sees that this contract could become a door opener for other interesting shipbuilding contracts.

#### **Dynamic growth places great demands on logistics and management**

A series of organizational and personnel-related changes have been made, in order to allow the company to cope with the rapid rate

of growth in the future (50 % in Poland in 2004 alone and over 100 % in Hungary). Mr. Skrobisz says "Because we in Eastern Europe are dependent on new project business and, unlike our colleagues in Western Europe, are less able to rely on long-term maintenance contracts, our logistics have to react as fast as lightning." This means providing capacities in adequate quantities and at specific times and removing them equally quickly, e.g. having enough vehicles to transport employees or being sufficiently solvent to finance project handling in advance. "To cope with these eventualities, we have strengthened our project management and tightened our structures in Poland", says the manager. New appointments have been made in key posts in central purchasing, controlling, finance, as well as in the fields of personnel and law. A number of subsidiaries in Poland have also relocated geographically.

Synergies have already been set up within the region. For example, the Hungarian colleagues sought support from Poland for the costing and technical negotiations of the MVA Budapest project. Interregional cooperation is also working quite well. A solution could be found for the scarcity of resources resulting from rapid growth of business by the assignment of two German project superintendents, Mr. Röder from TVK for KAEFER Hungary and Mr. Werner from Slovnaft Bratislava for TERMOIZOLACJA.

"We have already invested in human resources and equipment and are now teaching German and English at the TERMOIZOLACJA training center. In the meantime, TERMOIZOLACJA is now operating the first MABI workshop and the small company, KAEFER Hungary, has recently acquired parts production capacities with their plasma cutting machine. Because we believe in sustainable positive development in this region and because this belief is confirmed by a number of economic prognoses, we would like to continue to invest in the future and will keep our eyes open for new markets in the region of Eastern Europe", says Mr. Skrobisz optimistically.



*Bio diesel plant  
in Trzebinia*



## Turnover through the roof in France

KAEFER WANNER just completed a successful business year with an all-time high turnover exceeding the 100 mil. Euro mark. The excellent results were made possible by activities in the industry, nuclear power plant, asbestos disposal and shipbuilding divisions.

The absolute highlight of the year 2004 was the negotiation of a contract with Framatome, the world's leading nuclear power plant builder. Within the framework of long-term projects for the French power supply company Electricité de France (EDF), KAEFER WANNER is to perform insulation and scaffolding tasks and carry out radioactivity protection measures at a cost of 25 million Euro for the customer.

Of course KAEFER WANNER worked successfully for EDF this past year as well. Tricastin 4, a pressurized water reactor in Southern France, needed to be renovated, and this called for extensive insulation and installation work. An average of 100 KAEFER WANNER employees were on the job from May until August. They came from almost all of the company's locations.

The industry division also did well last year. The branch in Etang de Berre, which is located in Southern France in the heart of the petrochemical industry, resumed its operations in March 2003. The 25-employee outfit provides services for BP and Shell, their main customers, as well as numerous other partners from the iron and

steel industry and from the shipbuilding branch (Sollac, Arcelor and DCN Toulon). Efforts to collaborate with other KAEFER WANNER locations in France really paid off.

After two years of red tape, KAEFER WANNER Luxembourg S.A.RL. was founded. As of August 1, 2004, the new location in Luxembourg has 10 employees who formerly worked at the French location. Arnaud Lejemble, director of KAEFER WANNER, has taken charge of the new outfit, Luc Corrias, head of sales and distribution in the East of France, is the new managing director, and Gaetan Cutaia supervises the operative business. By establishing the new location, promising perspectives have opened up because in Luxembourg, contracts are preferentially awarded to local companies. It was also possible to create synergies with KAEFER's Polish subsidiary TERMOIZOLACJA. For one, Polish fitters were sent to a construction site in Reichstett near Strasbourg. The KAEFERites from Poland also helped out their French counterparts with some short-term contracts such as industrial project PJ 21 in Gravenchon, a city in Normandy. At an EXXON refinery, electrical auxiliary heating units and pipelines had to be insulated for Foster Wheeler on a very tight schedule. Because time was so limited, as many as 30 fitters from the Portuguese subsidiary KAEFER FEITISOL were brought in at peak times as well.

Christoph Rottenwöhler, managing director of KAEFER WANNER and regional director for Southern Europe, praises the good collaboration among the various KAEFER companies. "Thanks to the energetic support of the Polish and Portuguese teams, we succeeded in meeting even short-term expectations to the complete satisfaction of our customers. Our French team will profit most from this".

Within the framework of a forward-looking investment policy, KAEFER WANNER beefed up its scaffolding business last year so as to be well equipped for anticipated large projects.

The asbestos disposal division had very good results this past year as well. The division continues to carry out extensive reference projects in Paris such as those for the municipal heating

plants (CPCU Grenelle), and a large contract for Tour Gan was completed. It involved asbestos disposal in the office complex of a large insurance company. The next large project, at Jussieu University in Paris, has already begun.

Numerous new activities were carried out in the shipbuilding industry. KAEFER WANNER crews installed galleys, floors and fire protection doors on ships of various kinds. Luxury liners from the Italian MSC shipping company were on the 'to-do' list as well as gas tankers, research ships and other vessels.

Furthermore, activities in the French shipbuilding industry profited from the professional help of KAEFER International Shipbuilding (KIS) and the exceptional competence of our KAEFER shipbuilding experts from Finland and Germany.

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## Mexico – a promising partner

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KAEFER became active in Mexico in 2001. At that time our company delivered materials to the Madero refinery in Tampico. KAEFER Insultec (Thailand) founded the subsidiary Aislantes de Materiales Técnicos de Mexico S.A. de C.V. for this purpose, but after the completion of the project, business activities were limited to a minimum. After carrying out a detailed market study the decision was made, at the beginning of this year, to reactivate the Mexican subsidiary under the name KAEFER Aislamientos S.A. de C.V.. With the support of the management team from KAEFER Aislamientos

in Spain, the company has joined forces with Mexico's largest supplier of insulation materials, Rolán Aislantes Minerales S.A. de C.V., and reentered the market. It now focuses primarily on LNG plants and industrial projects. The location is well-chosen. Mexico can and will serve as a strategic base for launching business activities on other growing markets in Latin-American.

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## Portugal – complete solutions for large projects

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During the past two years, KAEFER Portugal was particularly successful carrying out interior finishing tasks on large construction projects. In Porto KAEFER installed 22,500 m<sup>2</sup> of flooring and noise insulation in the city's two largest high-rise buildings. Gomes, Mesquita & Sons had commissioned the project. Another large contract for the Northern Portuguese metropolis involved noise insulation and the installation of special flooring in a luxury residential complex owned by EDIFER.

In Lisbon, Portugal's capital, the KAEFER subsidiary also did very well. New contracts are pending. At present, two buildings on the Expo grounds are being insulated. They have a total surface area of 4,500 m<sup>2</sup>.

Under the supervision of Paulo Almeida and Manuel Rodrigues, KAEFER Portugal has continually strengthened its market position and has succeeded in acquiring new customers.





Barajas Airport in Madrid

## Spain – industry and building construction

**Natural gas cogeneration power plants, refineries, gas tanks, airport terminals, new facilities for the foodstuffs industry – you name it. KAEFER's Spanish subsidiary KAEFER Aislamientos had a wide variety of tasks to perform last year, including very large projects, some of which have already been completed.**

One highlight was the 6 mil. Euro contract awarded by Dragados Offshore in Cadiz, which hired KAEFER Aislamientos to carry out extensive insulation work on a natural gas cogeneration plant for Norway. The plant is the first of its kind worldwide to be built off-site. It is a natural gas liquefaction plant for the Snøhvit gas fields in the Barent Sea, 140 km off the Norwegian coast. At this site, KAEFER Norway is already involved in construction work of the LNG plant.

The plant, which weighs approx. 24,000 t and is 50 m high, is being built in Cadiz and will be partially set afloat and then loaded onto a 154 m long, 54 m wide pontoon. From here the plant will go onto a special ship outside of Cadiz Bay and be transported 5,000 km to the Norwegian Island of Melkøya inside the Polar Circle.

KAEFER Aislamientos is to carry out insulation work on approx. 18,000 m<sup>2</sup> of pipelines and equipment. The cold insulation is designed to maintain temperatures as low as -190 °C. Due to the demanding noise insulation specifications and the strict safety regulations, the contract is one of the technically most complex and demanding of its kind. It was awarded to KAEFER Spain because of

the excellent balance between price, experience, quality, safety and environmental friendliness the company had to offer, as the commissioning company told us.

KAEFER is working in the compression zone of the complex as well as the energy production sector, where additional fire protection and heat and noise insulation measures are being taken in cooperation with Technical Services in Bremen. The project as a whole will involve more than 100 KAEFERites. Completion is scheduled for July 2005.

### Spain goes for natural gas – with KAEFER's help

Natural gas is becoming an increasingly important energy source for Spain. For this reason a number of giant LNG tanks were built over the past years, and KAEFER Aislamientos was involved in insulating them. In Bilbao, Huelva, Cartagena and Barcelona KAEFER was in charge of insulation work on gas tanks with capacities ranging between 135,000 m<sup>3</sup> and 150,000 m<sup>3</sup>.



above: Arsenio Fernández, below: Carlos Allica, Cold store for Pastas Gallo, LNG tanks in Huelva

Gas and steam turbine power plants have begun to replace conventional power plants, which produce electricity from coal or oil. During the construction of a new 2 x 400 MW power plant in Arcos de la Frontera in Southern Spain, KAEFER was in on the action for almost a year (end of 2003 until November 2004). Some 20 KAEFERites, at peak times even 30, were busy carrying out insulation work on boilers and turbines. The customer, IBERDROLA, which is one of the largest energy producers on the Iberian peninsula, plans to enlarge the power plant in Arcos de la Frontera to become one of the largest gas and steam turbine power plants in Spain. KAEFER Aislamientos hopes to be hired for the expansion of the plant on the strength of its good performance during the construction of the first two power plant blocks.

#### Safe, efficient and competent – KAEFER insulates hydrocracker plant

More than 100 KAEFERites were on the job at a refinery in the industrial complex in Puertollano working for the international oil and natural gas Group Repsol YPF. Spain's leading private energy production company is putting up a new hydrocracker plant for diesel production as well as a desulfurization plant there in order to noticeably reduce the sulfur content of its products. KAEFER carried out extensive insulation work on some 150,000 m of pipelines and 1,500 m<sup>2</sup> of equipment. More than 100,000 m<sup>3</sup> of scaffolding were put up under the supervision from KAEFER. Thanks to pre-fabricated insulation materials, simplified processes and new equipment, the experienced fitters succeeded in completing

their work within a relatively short period of time, putting in a total of 100,000 man hours. Safety always had top priority. KAEFER Aislamientos was one of three companies involved in the construction project with the best safety rates.

In addition to large industrial projects, KAEFER is also involved in numerous tasks for various building construction projects such as the expansion of Spain's largest airport in Barajas, Madrid. With 32 million passengers annually, Barajas is one of Europe's mega-airports. The new terminal will have a surface area of approx. 780,000 m<sup>2</sup>, making it one of the largest on the European continent. An investment volume of approx. 4.1 bill. Euros was needed to finance the construction of the terminal and "satellite buildings". KAEFER is in charge of numerous insulation tasks involving approx. 5,000 m<sup>2</sup> of connecting pipelines for electricity, water and air conditioning.

During the construction of a new production facility in Barcelona for the IDOM Servicios Integrales, a company in the food-stuffs industry, an average of 15 KAEFERites were on duty for nine months carrying out insulation and interior finishing work. They fitted panels and sheet metal for roofs and facades, installed gutters and drainage pipes and performed extensive interior finishing tasks – in cold stores, hallways and offices. These included fire protection measures, the installation of doors and interior facades as well as ceiling paneling. A total of 100 doors, 22,000 m<sup>2</sup> of fire protection panels, 8,000 m<sup>2</sup> sheet metal elements and more than 1,000 m<sup>2</sup> of wall and ceiling paneling were installed.

## Snøhvit contract enters first winter phase

At the GTL plant on Melkøya near Hammerfest, preparations are being made for the winter construction phase



This summer, at the site of KAEFER's largest project in the history of the company, running from March 2004 until Spring 2006, the pipeline racks which were pre-manufactured and pre-fitted with insulation in Belgium were delivered and then lifted onto their 8 m high support columns, assembled and prepared for precision joining by ARGE partner Aker Stord.

Now all the connections along the 450 m long pipeline route must be attached to the corresponding supply lines. Hundreds of bevel seams with highest strength classification must be welded, inspected, sandblasted, coated with corrosion protection and insulated. These and other tasks to be performed on the prefabricated components are being carried out on a 2-shift basis (14 days at the construction site – 12 hrs. per day including weekends – and 14 days of time off including vacation) all winter long. During the 2-month-long polar night the temperatures drop well below -5 °C, but due to the almost constant winds and snow flurries, the chill factor is more like -20 °C or lower.

To accommodate this harsh weather, KAEFER has already put up storm-proof, heatable weather protection tents and even the scaffolding itself is heated to avoid potential safety risks caused by ice formation and freezing temperatures.

At this construction site, which is connected to the mainland by a tunnel, a number of facilities were set up to make the work more bearable for the 2,000 men on the job 500 km north of the Polar Circle, among them 250 KAEFERites. The accommodations have a casino, sports facilities, saunas and an Internet café to enable the men to stay in contact with home. Rooms were even set up for gutting and freezing fish caught by the workers during their time off. In this way the men can treat family and friends to their delicious catches when they are home on vacation.

As Bernd Ellmer, Manager for International Business Development says, "We are very happy with the way things are going on this impressive construction site. It meets the highest safety and quality standards. The first milestone in terms of on-the-job safety was reached by Statoil, the commissioning company, in September, and all those involved received a bonus payment as a result. Of course it should not go without mention that KAEFER Spain was hired by Dragados Shipyards to carry out the high-quality insulation of the prefabricated GTL unit which forms the core of the new facility."

We are completely on schedule. The initial contract has been expanded and the 250 men in our integrated service team for scaffolding, weather protection, protective coating and insulation are highly motivated by the fact that they are involved in one of the world's more important projects for exploiting natural gas long-term.

## The end of the "warm-bed bonus"?...



Where space is a limited and expensive commodity, for example on drilling platforms, two men must often share a one-bed cabin, using the same bed and table in shifts. This was a common practice in the early days of industrialization, for example in British coal mines. Today this encroachment on workers' private sphere, a necessity in light of the lack of space, is at least compensated for financially – with a so-called "warm-bed bonus". The name comes from the fact that

men coming off their shifts have to almost literally crawl into a warm bed. One of KAEFER's developments has alleviated this situation a bit. The "twin bed" consists of a longitudinally rotatable surface with mattresses and linens on both sides. At shift changeover all that is needed is to fixate the linens with two elastic cords. Then the surface has to be lifted a bit, turned, and set down inside the frame again. A fresh bed of his own awaits the cabin mate when he gets off work!

Filled with gratitude, he falls asleep thinking about how everything has two sides to it, and this holds doubly true for KAEFER's "twin bed" – more comfort, and no more warm-bed bonus.

## Norway – expansive strategy a complete success

In Spring 2003 KAEFER Maritim acquired 80 % of the shares for IKM-Stillas and IKM-Visman, becoming an integrated service provider for offshore services as well. This allowed the company to gain access to Snøhvit and land the largest individual contract ever awarded to KAEFER in the course of its history!



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This success resulted from the early realization that there is a growing trend toward integrated services and the decision to act forcefully on this insight on the part of KAEFER Maritim in Norway. To crown the recently successful restructuring phase, the compa-

ny acquired 80 % of IKM-Stillas (scaffolding) and IKM-Visman, the market leader for corrosion and passive fire protection in Summer 2003, becoming KAEFER IKM. As the owner of the IKM Group with its numerous additional core competencies in the offshore area still owns 20 % of IKM and the two Visman founders still work for the old/new company, continuity is ensured in terms of customer retention and know how.

*Karsten Gudmundset  
with his team of  
managers*

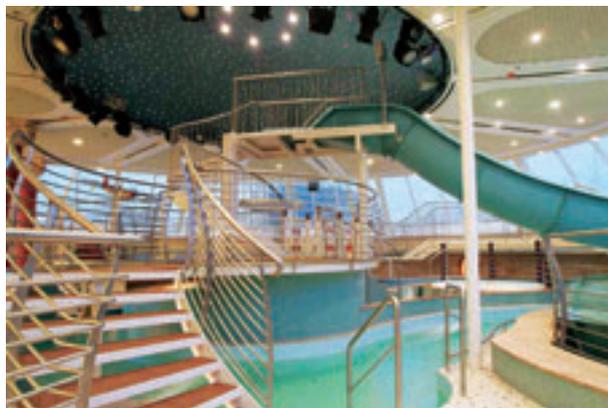
This step bore fruit unexpectedly soon. In Fall 2003 the company was offered the opportunity to participate in the 240 mil. Euro Snøhvit contract as a joint venture partner who will collaborate with the Aker-Kvaerner Group (Aker-Stord and Aker-Elektro). KAEFER's contract volume comes to 60 mil. Euro, not counting follow-up contracts which have already begun to come in. On January 1, 2004 KAEFER Maritim and IKM Stillas became a single legal entity, named KAEFER IKM A/S, whereas IKM-Visman returned to its original name – Visman, a real trademark in Norway.

In this context an executive with several years of experience in the offshore area was asked to join the team. In February 2004, Karsten Gudmundset became managing director of KAEFER IKM and Visman, which now practically form an integrated unit. This puts him in charge of the large Snøhvit contract together with Hans-Bjørn Paulsrud as Regional Director for Northern Europe.

## Swimming complex and cabins for super ferry

"Aqualand", a swimming complex measuring 600 m<sup>2</sup>, is the absolute highlight of "Color Fantasy", the new deluxe ferry which started servicing the Baltic Sea route between Oslo and Kiel in the beginning of December. Only a few of the world's luxury liners have such luxurious and spacious "spas", and KAEFER Eristystekniikka Oy with headquarter in Rusko near Turku played a pivotal role in the construction of this one. For years, our Finnish subsidiary has been a reliable partner of one of the world's leading builders of luxury liners, Kvaerner Masa Yards Oy in Turku. The owner of the unique, "full-scale luxury liner with auto deck" which services the Kiel-Oslo route is the Norwegian Color Line AS, which ordered the 300 mill. Euro vessel.

Apart from extensive work on the "Aqualand", KAEFER Finland also acted as turnkey-supplier of passenger cabins for four decks measuring a total of 12,500 m<sup>2</sup>. 711 modular cabins were delivered and installed, among them six royal suites and captain's suites, officers' headquarters and the laundry facilities. In addition, KAEFER Finland supplied the furniture for all the areas except for the modular cabins, making the Finnish team by far the largest general contractor for this shipbuilding project. At peak times 150 fitters, including sub-contractors, were on the job.



*"Aqualand"  
swimming pool  
complex,  
"COLOR FANTASY"  
deluxe ferry*

The new deluxe ferry holds 3,500 passengers, who are offered everything it takes to turn a trip across the Baltic Sea into a real experience. 120 m of stores entice passengers with their wares. 15 bars and restaurants await their guests with culinary delights and a relaxing atmosphere. And the luxury liner which traverses the sea at a speed of 22 knots can transport 750 automobiles, setting completely new standards for ferry shipbuilding in its wake.

*Spa in Bad Sauerbrunn, polygonal configuration of glass partitioning between swimming pools and resting areas*



## Austria – health was this year’s focus

**... it began with a new record in terms of on-the-job safety and continued with lots of new projects, among them interior finishing for a health resort.**

The new year started out with an award for on-the-job safety. The international engineering firm Fluor Daniel, which is supervising the OMV project, the largest industrial contract which KAEFER Austria is currently involved in, awarded the company a safety prize for 350,000 accident-free man hours. This statistic reflects the careful work performed by a crew averaging 60-80 fitters, which worked on the project over a period of 13 months. Now if that isn't a contribution to health!

As managing director Hannes Knoblich points out, "considering the fact that on-the-job safety has very high priority in refineries, such an award is of course enormously important for our reputation." That would seem to make sense. Congratulations to our crew in Vienna!

### Health resort in Bad Sauerbrunn

This project stood in the service of health as well – a 260,000 Euro contract for interior finishing work on a new building and full-scale renovation work on already existing buildings at the health resort in a spa in Burgenland, Bad Sauerbrunn. In the course of the summer, 10 glass fire-protection portals were put up in halls and 800 m<sup>2</sup> of partitioning with various rotating and sliding doors were installed in the wellness area. The arched design of the ceilings,

which reached heights of 3 m, called for a polygonal construction with stainless steel profiles and hardware.

Apart from such tasks, which were carried out in the pleasant health spa atmosphere, a lot of industrial work awaited the fitters.



*Entrance area, Bad Sauerbrunn*

### MAN Steyr AG

One of KAEFER's regular customers, MAN Steyr AG, had to rebuild 5 engine test benches to meet new specifications. Extensive sound absorbing measures were required, which involved difficult fitting tasks in close quarters and hard-to-access places. The KAEFER team had to pool all of its expertise to tackle the Shet roofs and numerous supply and waste disposal lines as well as various technical installations. It had its work cut out for itself; 170 man days went into the precision-installation of 750 m<sup>2</sup> of wall paneling made of KAEFER perforated sheet metal cassettes and 250 m<sup>2</sup> of ceiling paneling.

10 noise protection doors and 5 windows completed the contract, which was finished in October. Now MAN-Steyr's test engineers can really step on the gas!



Noise hoods for diesel standby set

### OMV AG refinery

The largest insulation contract of the year was the aforementioned refinery project executed for a regular customer, OMV AG. The company expanded its refinery – by the way the only one in Austria – to equip it for the generation of sulfur-reduced, higher-octane fuel. The 1.6 mil. Euro contract, awarded by engineering firm Fluor Daniel and carried out between June 2003 and July 2004, entailed the insulation of several columns and reactors, many containers and heat exchangers and approx. 10,000 m of pipes with approx. 4,000 pipe elbows and 3,000 insulation caps – accident-free!

### Industrial construction department under new supervision

Last but not least, we want to announce that as of June, diploma engineer Helmut Paiszler is on board again. The 36-year-old trained mechanical engineer already worked for KAEFER Austria before as head of cold store construction. After putting in a “guest performance” at another firm, he now supervises the industrial construction department. In other words, he is a familiar face and everyone is glad to have him back.

## Igor Zachoval – our man in Czechia

KAEFER had already made forays into the Czech market in 1991 – the beginning of a success story in which Igor Zachoval, now in his tenth year with KAEFER, has played a large role.

Every beginning is difficult. Our first contracts were acquired via the Kvadrant company and the “launching customer”, who came to us shortly after the East opened up, was the Pilsner Urquell brewery. The task was to insulate 48 fermenting and storage tanks. As we all know, beer stimulates the appetite. In this case this spelled out follow-up contracts for 350 additional tanks. By 1997, all the Czech breweries had been renovated and fitted with KAEFER insulation.

In the meantime, the legal situation in Czechia had changed, and in late 1993 the KAEFER IZOLA\_N\_ TECHNIKA was founded in Brünn. The company was initially affiliated with KAEFER Hamburg until in 1995 the company replaced its location-oriented structure with the new division structure.

Igor Zachoval, who had supervised business activities since the early days of Kvadrant, came to KAEFER in 1994, where the real “allrounder” has been head of Brünn offices ever since. Whether it's a matter of distribution, project supervision, subcontracting or painstaking cost control – Igor Zachoval is “Mr. KAEFER” in Czechia.

The business grew and grew. In the mid-90's it landed its first cold store contracts, and contracts for industrial and office buildings followed, for example City Center in Prague, Spalicek shop-

ping center in Brünn, the DHL headquarters in Prague, and in 2003 the meat-processing plant in Susice, a contract executed in collaboration with the KAEFER team from Neubrandenburg.

Nevertheless the company remained faithful to the brewery business, as Walter F. Möhl, head of the construction division and managing director of the Czechian subsidiary emphasizes. Not only the two large European brewery tank manufacturers Ziemann and Holvrieka are doing well in Czechia. ZVU is as well – and KAEFER insulation is a must for every ZVU tank. Just recently, 18 fermenting tanks were delivered to Peru.



Igor Zachoval

## The desert needs water...

Desalination plant  
for ocean water in  
United Arab  
Emirates



... and KAEFER Abu Dhabi will see that it gets it. For the countries on the Arabian peninsula fresh water is a rare commodity. This precious resource is needed for drinking water but also to irrigate the desert and make it fertile. For this reason the United Arab Emirates are building more and more desalination plants, which turn unusable salt water into drinking water. Such plants, which need a high energy input to desalinate ocean water, require extensive heat insulation. KAEFER Abu Dhabi has become a specialist in this area. This year the company is once again involved in the construction of a huge plant which is going up in the Emirates.

## Caribbean plants profit from KAEFER know how

On the Caribbean island Trinidad & Tobago KAEFER MALNE was commissioned to deliver insulation materials and supervise work in an ammonia plant and a methanol production facility. The insulation work in the ammonia factory began in January and was completed in September. The unit has a yearly production capacity of 2,000 t. KAEFER supplied all the heat and cold insulation for containers, pipelines and fittings as well as for two ammonia tanks. The bottoms of the tanks rest on hardwood bases and were insu-

lated with foam glass. The walls of the tanks were insulated with PUR foam. KAEFER is still busy at the largest methanol facility of the island state, which has an annual capacity of 5,000 t, where heat insulation is being fitted to pipelines, fittings, ducts and further equipment. Fire protection measures are also being taken. These tasks will probably be finished by March 2005.

## Nuclear insulation systems with new strategy

Nuclear cassette  
insulation in a  
power plant,  
Tianwan, China



One core competence of MALNE is the "Nuclear Insulation Systems" department. It evolved from the international nuclear power plant unit and was incorporated along with its workshop into the Bremen export division in 2000. One specialty of the department, which had as many as 80 employees working for it in the 1980's, is the production of cassette insulation for nuclear power plants. More than 20,000 m<sup>2</sup> of cassettes were produced during those years, most of them for German nuclear power plants. After the Federal Republic decided to phase out these plants, KAEFER's business declined drastically.

What had been a very successful market segment was not simply abandoned, however; operations were downsized and a new strategy for servicing the market was developed. Over a dozen employees work in this department today. Acting on its motto – internationalization – its experts have been very successful. "Every-

one involved is aware that the new challenge calls for a lot of commitment and flexibility from us all," says Günther Ahlers. The workshop team had the hardest time adjusting to the new situation. They had been used to working in Bremen, and now commissions in foreign countries became daily routine. Not only do these KAEFERites need some command of English, but also of languages like Russian, Portuguese and Chinese.

For our partners in these countries the KAEFERites act as trainers and supervisors. It is not unusual for a team to spend seven or eight weeks overseas. One highlight of the new activities was the establishment of a production unit for cassette insulation. Operations began two years ago in the workshop in Podolsk near Moscow. The Russian company Zio manufactures power plant insulation for the Chinese market and KAEFER delivered the necessary know how. Within the framework of a licensing contract, KAEFER's team explained how to use the machines and tools, carry out the complex work processes and apply various techniques. As Ahlers says, "a lot of conferring went on, and this really put a strain on the interpreters, who tried to do justice to both sides".

Despite numerous commissions in foreign countries, German customers still play an important role, however. One of them is Framatome ANP in Erlangen, for whom KAEFERites are currently executing a retrofitting contract in the Gösgen nuclear power plant in Switzerland, scheduled to run until mid 2005. The Far East is a promising market. In China alone some 30 nuclear power plant blocks are to go up within the next 20 years – an opportunity which KAEFER is sure not to pass up.

## KAEFER know how for “silent plant” in Norway

The Troll Field, located some 80 km west of Bergen, Norway is Europe's largest offshore natural gas field. Some 1,300 billion m<sup>3</sup> of natural gas lie 1,400 m below the ocean floor. This comprises about half the total deposits on the Norwegian shelf. For a decade or so companies have been tapping these resources. Along with a drilling platform, a large onshore plant has gone up, and KAEFER was involved in the construction work.

In March 2003 KAEFER MALNE was commissioned by the Linde AG to carry out insulation work on the Kollsnes plant in areas with temperatures ranging from -70 °C to +240 °C. All the plant components were insulated with cellular glass and stainless steel sheet metal casing. The project was executed as a team work by KAEFER MALNE, KAEFER Norway and TERMOIZOLACJA. At peak times as many as 115 KAEFERites were busy at the onshore plant of the Kollsnes project. After about 18 months of construction work, KAEFER's involvement in the project came to an end. During this time 18,000 m<sup>2</sup> of insulation material, much of it multi-layered highly noise-absorbing, was fitted. Extremely demanding governmental noise insulation regulations had to be adhered to; 40 dB is the legal limit for noise levels measured in the nearest private residence. This put high demands on noise insulation. The Norwegian plant is called “silent” for good reason.

The project was also very demanding in terms of on-the-job safety. Till the end of this project in 2004 KAEFER had put in more than 140,000 accident-free man hours on the construction site, which made them the most successful of all the companies involved.



Natural gas processing plant in Kollsnes, Norway

## Sophisticated logistics for difficult transports

If the right wares arrive at the right place in the right amount at the right time this is called logistics. Sounds easy, but it isn't. Particularly when semi-fabricated, i.e. unstable insulation cassettes for nuclear power plant blocks are to be transported from Bremen to Podolsk near Moscow. The logistics department of KAEFER's MALNE division knows what it's talking about!

But one thing at a time. The bodies of the insulation cassettes are prefabricated in Bremen and assembled in Podolsk, Russia. Their final destination is a new Chinese power plant in Lianyungang, some 600 km north of Shanghai.

The transport from Bremen to Moscow poses problems in itself. The route via Poland, White Russia and Russia is known for its bad, unsafe road conditions. Complicated, often arbitrary customs formalities and long waits at borders make the transport even more difficult. For this reason the logistics department began planning the truck transports early in order to mitigate problems from the very start. “Before the first transport we designed protective packaging which can be used for all kinds, shapes and sizes of insulation cassettes,” logistics expert Daniela Sagromski reports. This packaging is made in series production to minimize time and costs. The insurance company drew up an expertise before the first shipment was even loaded, and it documented the load securing as well.

Other obstacles had to be overcome as well. One of them involved agreeing with customs authorities on a procedure for write-offs to save on taxes and duty. Furthermore, it was neces-

sary to find a haulage contractor who has had experience with Russia. Painstaking care had to be taken with all the documents for exportation. The documents supplied by the customers, the haulage contractor, the insurance company, the board of trade, custom authorities and KAEFER had to be absolutely without error and conform completely with letters of credit in order to ensure payments and to give no cause for complaint at the borders.

The intensive preparation and the flexibility of all of those involved paid off. Between mid-2003 and the end of 2004, there were more than 25 truck transports - which all went completely smoothly.



Truck loading for transport to Podolsk, Russia

## Australia – BassGas project in Victoria



*Horst Körner,  
our new man for  
Australian activities*



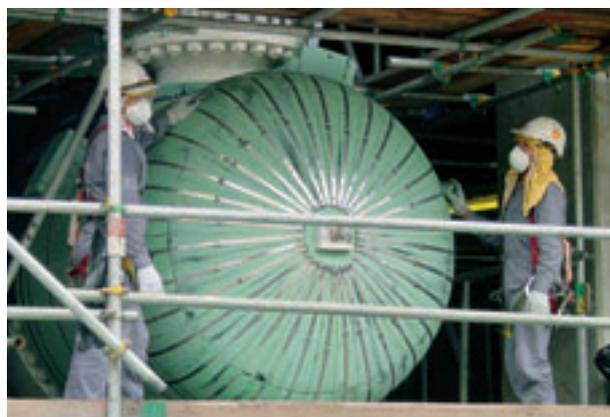
For this project 120 km south of Melbourne, Clough Engineering awarded KAEFER the contract for insulation and casing work on columns, containers and pipelines, which involved heat and cold insulation and fire protection and which also included management, material procurement and assembly tasks. The BassGas Project is of

considerable importance for South Eastern Australia. In Victoria, the consumption of natural gas is anticipated to double within the next 20 years. It is necessary to establish infrastructures for this growing market. After the Gippsland gas fields were exploited more than 30 years ago, the Southwest has now found a new source of natural gas. The deposits from the Yolla Field will cover 10 % of the need for this resource in the Province of Victoria for the next 15 years. The partners in this joint venture project are Origin Energy (the operators; 37.5 %), AWE (30.0 %), CalEnergy (20.0 %) and Wandoo Petroleum (12.5 %). For this project, the Clough offshore facilities and hydrocarbon plant divisions are putting up an offshore production platform with 147 km long, 350 mm thick subsea pipelines, 32 km of onshore pipelines including branches and a 75MMSCFD onshore gas processing plant.

The volume of KAEFER's contract also included casings for hydro-tested on-skid valves and flanges etc. as well as for off-skid columns, exchangers, containers and pumps. This included 1,400 m of straight pipelines, 950 bent pipes, 530 valves, 480 flanges and 19 unit components (containers, columns, exchangers etc.). The task began by taking stock of all components. One problem which arises was some unusually heavy rainfall. It was imperative that measures be taken to protect the materials and ensure appropriate work conditions. This posed a real challenge for the entire KAEFER team.

## Malaysia ahead of schedule on LNG plant revamp

Malaysia LNG Sdn Bhd (MLNG) awarded KAEFER Malaysia a contract which involved retrofitting and renovating two already existing trains. Modules 2 and 3 both had to be shut down for 140 days to completely remove and re-install insulation. Completion of retrofitting and renovation work on module 2 was scheduled for the end of October 2004, but KAEFER Malaysia completed its tasks ahead of schedule. The KAEFER subsidiary collaborated closely with the owner's project team to hand over the plant and restart operations ahead of schedule; it succeeded in finishing the project 10 days early. The experience with module 2 has prepared the insulation compa-



*Insulation work on  
MLNG Tiga project*

ny for the shutdown of module 3; the insulation team hopes to be able to work even more efficiently on this module. Shutdown is scheduled for March 2005. At peak times, KAEFER Malaysia had more than 500 trained and semi-skilled workers on the job at the construction site. In the year 2001, KAEFER Malaysia had been awarded a contract for full-scale insulation work on two new LNG trains (modules) at another plant, MLNG Tiga. The addition of the two new trains brought the total number of this plant's modules to eight. KAEFER Malaysia completed its work on these two modules successfully and on schedule. The strict quality standards which LNG plants are required to meet were strictly adhered to. The contract called for a thermo graphic survey, which was conducted in June 2004, to test the efficiency of the insulation system after 9 months of plant operation. No defects were found in the system and the owner was completely satisfied with the test results. At peak times, a team of 700 trained and semi-skilled workers were on the job. There was not a single on-the-job accident. Malaysia is the world's third largest exporter of liquefied natural gas (LNG), after Indonesia and Algeria. PETRONAS owns majority interests in three LNG plants – Malaysia LNG Sdn Bhd (MLNG), Malaysia LNG Dua Sdn Bhd (MLNG 2) and Malaysia LNG Tiga Sdn Bhd (MLNG 3) – which are located within the PETROANS LNG complex in Bintulu, Sarawak. Natural gas is supplied to the plants by Sarawak's offshore fields. The combined capacity of the three plants is 23 million t per annum.

## KAEFER successfully completes fertilizer project in Vietnam

KAEFER Vietnam successfully completed Phu My fertilizer project in Vietnam in September 2004. This was KAEFER Vietnam's (established 2002) first major insulation project in Vietnam.

Phu My fertilizer plant, which is designed to be the largest of its kind in the country, is located at Phu My in Baria Vung-Tau Province. The plant will produce 1.350 t ammonia and 2.200 t urea, with complete utilities and off sites, including production and export of electric power.

The project, which started in June 2003, was successfully completed ahead of schedule in June 2004. The total insulation work scope was 60,000 m<sup>2</sup> which involved hot and cold insulation on tanks, towers, vessels, heat exchangers, pumps and piping including valves and flanges.

At peak time KAEFER had about 500 workmen on site. The successful completion of the project has strengthened KAEFER Vietnam's position which is the only international insulation contracting company fully established in the country and in the Vietnam market which has a huge potential in the future.



Fertilizer factory  
70 km Southeast of  
Ho Chi Minh City

## South Africa sets new record for on-the-job safety

At the long-term construction site "SAPREF", a refinery in Kwazulu Natal which is operated jointly by Shell and BP, KAEFER in South Africa employs a regular crew of about 300. They just got best marks for on-the-job safety, breaking not only an in-company record but also setting a new record at the refinery. The KAEFERites put in 3 million man hours completely without lost-time-injury.

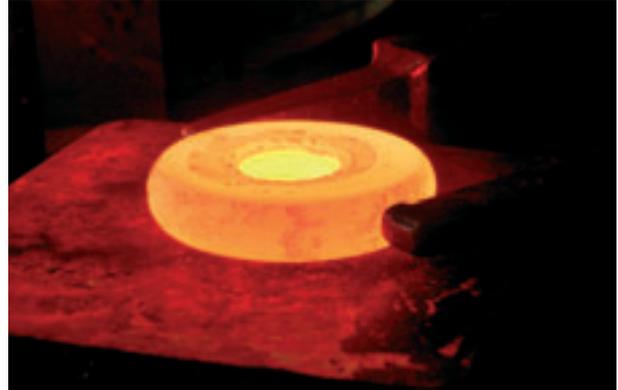
The construction site was set up 5 years ago, and since then KAEFER has reached one on-the-job safety milestone after the other. Considering the difficulties and risks connected with tasks like erecting scaffolding and carrying out insulation work on platforms at great heights and under adverse conditions, this was a valuable achievement for SAPREF and KAEFER alike.

In July 2004 both companies came together, represented by members of management, to celebrate their success with a special dinner at which Richard Parkes from SAPREF lauded KAEFER for having set a good example by "turning safety into a life philosophy". Rob Ross, who manages KAEFER's operations in Kwazulu Natal, attributed KAEFER's feat to the "ongoing cultivation of safety as a principle", which had raised safety awareness enormously among operative crews and executive managers alike.



Safety Award for 3 million accident-free man hours

## Steel prices explode – KAEFER counters



The global steel market is bustling, with an uptick which has prevailed for several quarters now. The high demand for steel in China, speculative purchases by large consumers and increases in costs of raw materials such as coke and scrap iron have driven up prices. And there is an increasing concentration of the market on the supplier side. "All of this has led to shortages, which have caused the prices for galvanized sheet metal and aluzinc to rise up to 100 %," Dr. Petra Ellen Schwemann, head of supply management (ZSM) reports.

There has even been some quota fixing on the market. Thanks to KAEFER's long-term relationships with suppliers, the company has always managed to procure the required amounts, but price increases have been unavoidable. "We succeeded in cushioning the increases, however", Schwemann says.

And yet the situation is tense because in general the increase in acquisition prices cannot be compensated for completely by raising our own prices. Most customers refuse to write price escalator clauses into contracts.

Not only the steel market, but also the mineral wool and gypsum plaster markets have experienced leaps in prices. Once again, efforts to concentrate business activities on the part of suppliers and the enormous increase in demand are responsible for this development.

KAEFER has only limited possibilities for confronting the situation. We look back on long years of supply management based on fair and trusting cooperation with steel manufacturers, and KAEFER has sensitized its purchasers working around the globe to this fact. "We confer on price levels and resources regularly, which enables us to analyze prices, quotas and quality on an international scale," Petra Ellen Schwemann reports. In the meantime KAEFER purchases a considerable portion of its steel products directly or indirectly from countries like Russia, Estonia, Slovakia and the Ukraine. "Needless to say without compromising quality", Schwemann emphasizes.

### A new suit of clothes

There's no doubt – the substance is what counts. And yet appearances should not be neglected either. This view is shared by KAEFER in Bremen as well – and in light of the façade of the company's headquarters in the Bürgermeister-Smidt-Str. 70, the time had come to practice what they preach. There is always talk of "corporate identity", advertising and everything else a company needs to present itself to the public in a favourable light – but no one had noticed how much the tooth of time had worn down gate and gable. As everyone knows, the cobbler always wears the worst shoes – but does that mean a company with building refurbishment as one of its core competencies should neglect the roof over its head, i.e. its headquarters?

Indeed not. The upshot? In Fall 2004 the Bremen outfit got down to brass tacks. They put up scaffolding and enshrouded the building before steam blasting it and giving it a friendly new coat of paint. Within no time we had, well, not a new building. Not even KAEFER can do magic. But at least a new suit of clothes. Luckily we aren't bursting at the seams – not yet, in any case.

The next time you pay a visit to headquarter, don't walk past the spanking new façade without looking up. Granted, the transformation act was not a feat of magic – just some darn good craftsmanship. Rest assured; no. 70 is still the right address. Welcome!

## Truly worthwhile – a visit to the “Wissenslandschaft”

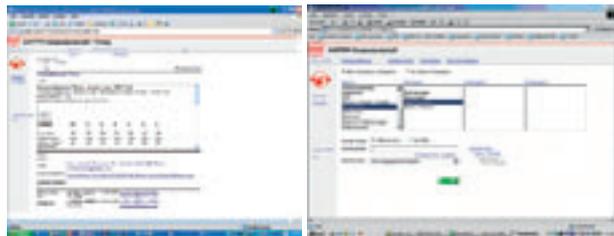
In a society based on division of labor, acquisition and accessibility of knowledge become increasingly important. For it to be productive, it must be passed on to others. Corporate strategic product development (ZSP) has now set up an instrument on the Intranet, the so-called “Wissenslandschaft” (“landscape of knowledge”) which does exactly this, its aim being to enable KAEFERites to exchange know how and share experiences with others and to help them find answers to questions they might have.

“Our ‘Wissenslandschaft’ is a platform for knowledge in many diverse areas of insulation technology and related fields”, Karl-Rudolf Friese, head of ZSP explains. “It aims to promote communication on many issues, not only technical questions, and to help people solve problems”.

The virtual platform evolved from several projects, carried out since 1999, which examined ways to pass on knowledge within the company. Until recently, the technology needed to establish a platform of this kind was not yet in place, but with the introduction of the Intranet a network was created which can be used to gather knowledge and make it accessible to others. “This is exactly our intention,” says Friese. “Our employees use the database to find answers to their questions, but they can also share their own experiences with others, for example as concerns materials, tools and fitting techniques.” This is the reason why the ‘Wissenslandschaft’ is always changing and will never be a finished product. The project is being supervised by corporate strategic product devel-

opment and corporate information technology (ZIT). Of course the two departments are always glad to answer questions if the instructions given by the virtual platform are not sufficient. Only those who have access to KAEFER’s Intranet can use the platform.

The ‘Wissenslandschaft’ is very easy to use. Simply log onto the Intranet, click onto ‘Wissenslandschaft’ and a start mask will appear. Now the user can either conduct searches according to categories, keywords or sub-categories or enter information him or herself using the enter key. To find out just how it works, take a try! It’s worth the effort! At present the forum has more than 200 entries, for example on topics such as fire protection, facades, corrosion and corporate services and administration. Karl-Rudolf Friese hopes that the number of entries will increase, for as he points out, “only accessible knowledge brings success to us all”.



## New Internet tool: [www.tuerplaner.com](http://www.tuerplaner.com)

**As of June 2004 an “electronic construction kit” makes it easier to configure door elements and components.**

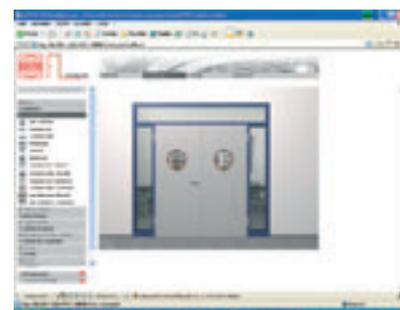
Even if there were only 10 variants in terms of size, frame, leaf, décor and hardware, that would make 1 million possible variations. In reality there are many more to choose from. The difficulties which arose while preparing a presentation on possible variants for the Axel Springer Publishing House project in Berlin inspired an ingenious idea.

Stephan Büttner from KAEFER’s Construction Division won manufacturers of doors and door hardware as partners for his project. With the support of “WIRUS”, “SIMONSWERK”, “Planet”, “RESOPAL”, “Küffner”, “novoferm”, “FSB” and “GEZE” as well as “archinova”, multimedia specialists from Bremen, he developed a CD-ROM which was then used to set up the Internet platform [www.tuerplaner.com](http://www.tuerplaner.com).

The platform makes it possible to combine building components of all cooperating suppliers, to visualize door elements and components on the monitor, to print out price lists for products and services including images and short texts, to compose detailed scaled diagrams and to send inquiries to the participating firms

directly. This way, the whole range of possibilities presents itself to the customer in a flash – to the benefit of planners and building owners alike.

This continually supervised and updated service, provided under KAEFER’s patronage, is accessible round the clock for anyone who is interested in using it: [www.tuerplaner.com](http://www.tuerplaner.com)



## Excellent apprenticeship!

### KAEFER wins German "Training Ace" competition.



In early December Edelgard Bulmahn, Federal Minister of Education, presented the first prize in the category Industry, Trade and Consumer Services. KAEFER won against approx. 80 competitors. "We were delighted about the outcome," personnel director Bernard Sudendorf declares. "It is wonderful that the efforts and activities which KAEFER has invested

since 2001 in its centralized industrial training program have received such public recognition." In 2001 the management decided to set up a centralized program. Since that time KAEFER has 52 apprentices becoming qualified insulation fitters and dry construction builders.

Together with the future commercial apprentices, 69 young people were receiving professional training at KAEFER in Germany in September 2004. "We now have reached a training rate of 6.5 %. This rate can truly bear comparison with other companies," Sudendorf is proud to say.

## KAEFER introduces employer/employee conferences

### Work together – talk to each other

In many areas KAEFER is taking innovative measures to perform well on the market despite the generally poor economic situation, one of which was to introduce employer/employee conferences, aimed to promote good cooperation between management and employees and thus ensure goal-oriented high-performance operations in the individual departments. A multi-division task force started working together with the Works Council in October 2003 to develop a concept tailored to KAEFER's needs. By March all the



details had been worked out and between April and August 5 managers and 25 employees tried out the concept – with very positive results. The conferences all went well and everyone looked forward to the next one. The trial phase also showed a need for certain modifications, which were then made. In November a company agreement was signed which put everything in writing.

"The employer/employee conference takes place once a year eye to eye," Ralf König head of the personnel department explains. In this dialogue, employees and managers make a mutual assessment of the situation and plan upcoming tasks and projects.

"We want to have an open, trusting exchange in which both partners get to know and appreciate each other's views and bring up issues which are neglected during everyday routine", König says. A look at the past – what were the most important tasks; what worked out particularly well and what was not so successful? – should be followed by a look toward the future, which is of primary importance. "What should stay the same and what can be improved, modified or changed completely? Such questions are raised", he explains. At the end of the conference, agreements are made which are binding for employer and employee alike.

The conference and the agreements are documented on a meeting minutes form for the sole use of the participants. Furthermore, KAEFER's management and the Works Council have expressly agreed that no admonitions will be made on the basis of such conferences. They will also not be used to compare the performance of individual employees. "The written documentation is confidential and only meant for the participants themselves", König says.

KAEFER's management team has the task of taking an intensive look at how such employer/employee conferences can be used as beneficial instruments so as to succeed in implementing the concept advantageously long-term. To this goal, all managers have had training since October. The first conferences took place in December, exclusively among salaried personnel. In mid-2005 plans for expanding the measures to include KAEFERites in the various trades will be discussed.

For more detailed information on employer/employee conferences visit KAEFER's Intranet page.

## Better collaboration of the personnel departments



Workshop conducted by managing director Peter Hoedemaker

In the middle of June, personnel managers and employees in charge of personnel affairs from Norway, Germany, Austria, Poland, France and Spain met in Bremen. Topics of the “Workshop on International Human Resources” were vocational training, competences and responsibilities, job rotation, personnel development, social standards, internal communication, flexible working hours, early retirement programs and absences from work. The participants agreed to meet on a regular basis in the future to discuss personnel policies.

Concrete goals were defined concerning the following issues:

- Competences and responsibilities should be made internationally comparable.
- The existing data base on experts and management members who are prepared to gain international experience should be extended.
- Efforts to implement job rotation should be intensified to increase the number of project managers with international experience.
- A “Human Resources” network within the KAEFER Group should be established.

## Second round for JEP

The second round of the international Junior Executive Program (JEP) for the career advancement of young KAEFER employees, with 14 young executives from six countries, was accomplished successfully. Three seminars took place over the past year, the first in January at Etelsen Castle outside Bremen, the second in June in Bremen and the third in September in Bordeaux. The topics were team management and leadership (in January), project management (in June) and change management as well as presentation techniques (in September). The group met for a fourth time in

Bremen in December to present the results of the project groups to the KAEFER management.

“We gathered lots of experience with the first JEP group and have altered the structures this year accordingly” Ralf König, head of the personnel department, reports. The proportion of praxis reports and discussions with experienced KAEFER managers was increased and the contact with the management group was intensified. On the whole Ralf König’s assessment is positive. “The modifications were a success“.

## IGET – young engineers from around the globegather practical experience

The 2 years’ IGET-Program (International Graduate Engineer Training Program) has now entered its second phase. Young engineers from India, Thailand and Poland have completed their first international assignment and started working at their second location of employment this August.

They are working in Thailand, South Africa, France and Germany. The previous positive experiences facilitated the decision to continue with a second group. Recruitment of the new trainees is expected to start in February 2005.



*KAEFER was in charge of installing cabins, wellness areas and the galleys on the "MS Heidelberg"*



## KAEFER – Ships – Architects

**Did you know that in the KAEFER world, sophisticated ship interiors are not only installed but also composed and designed? Sometimes one needs to take two small steps backwards to take one leap forward.**

Whether it is a luxury liner on the high seas or a river cruise liner, thousands of passengers enjoy their travels in attractive environments created by KAEFER. The general contracting department installs cabins, restaurants and wellness areas and delivers installations and furnishings as well as crew's cabins, complete galleys, pantries and cold stores.

Most recently, KAEFER's interior outfitting expertise demonstrated itself on numbers 3 to 5 of a series of six river cruise liners, the "JOHANN STRAUSS", the "ARTISTRY" and the "VIKTORIA", which were built at HDW-Nobiskrug Shipyards in Rendsburg for shipowner Premicon from Munich.

The work of the general contracting department usually begins during the third of nine planning and construction phases. During phases 1 and 2 an architect draws up plans for the interior outfitting in keeping with the specifications laid down by the shipowner of the shipyard and then the KAEFER team, supervised by Jürgen Reuter, brings the customer's wishes into agreement with the technical requirements of ship design and installation and takes charge of the implementation, which involves licensing, construction design, contracting and execution of all tasks right down to final inspection and turnkey delivery. But in early 2004 the general contracting department sailed to new shores – taking two steps back-

wards, from phase 3 to phase 1. The department now offers shipowners and shipyards full-scale interior outfitting services beginning with the initial sketches. As Jürgen Reuter's team points out: "this way the customer gets everything from one source. Coordinating interior outfitting ideas with technical limitations at a later stage can be very time and energy-consuming. At KAEFER, technical know how and interior outfitting expertise are pooled from the very start to prevent ideas from clashing with the reality of their implement ability".

This year KAEFER already acted on this principle. Interior outfitting work on the "ADLER NORDICA", which focused on its restaurant, was carried out within a record time – only six weeks between the first sketch and turnkey delivery. As the supervising interior outfitter reports: "Fire damage had occurred shortly before the season opened, so time was literally money. The shipowner was very glad to have an attractive solution for a huge problem which was implemented so quickly".

## KIS promotes KAEFER shipbuilding

Having been in business for just over a year, the director of KAEFER International Shipbuilding (KIS) Bruno Huriet takes stock. "We have succeeded in acquiring our first contracts, received numerous inquiries and got inquiries from potential customers in many countries." To be sure, large contracts have not been landed as yet, but in the shipbuilding industry, one needs patience, Huriet says.

KIS was established with an aim towards putting KAEFER's extensive shipbuilding know how at the disposal to all its branch offices worldwide. One core responsibility of the new organization is to pool profound knowledge and impart it to shipbuilding personnel in countries like Malaysia and Vietnam.

The first year brought a contract for the insulation of cold stores on two gas tankers at a French shipyard as well as contracts

for a small research ship involving installation of fire doors and insulation work.

By paying on-site visits and establishing various contacts, Huriet and his staff have succeeded in presenting KAEFER as a competent partner for potential customers. In France KAEFER WANNER has started receiving numerous inquiries, for example, and KAEFER has now made its first appearance in Vietnam, where shipyards have begun to take notice of the company. Orders for shipbuilding materials are a good start.

## Successful appearance at SMM Trade Fair in 2004

KAEFER Schiffbau GmbH und CF-SYSTEMS GmbH had a joint stand at the world's largest shipbuilding trade fair, the SMM, for Shipbuilding, Machinery & Marine Technology, making a successful appearance in the Hansa City in early October 2004. At the world's leading trade fair for the maritime industry one could feel the winds of change in the global shipbuilding industry. This year's motto was "The Innovation Mecca". There was a record increase in foreign trade visitors, who comprised 43 % of the total headcount. 1,450 exhibitors presented their products and services. 60 % of the exhibitors came from the 49 foreign countries which were represented at the fair.

In keeping with the trade fair's motto, also KAEFER presented some innovations. The highlight of the newly designed joint stand featuring KAEFER and CF-SYSTEMS was the modular cabin system. What attracted visitors the most was the model which could be assembled and disassembled.

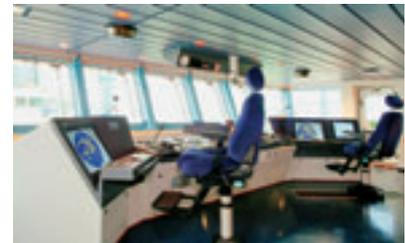
In particular, architects, designers and planners were drawn to the exhibit. KAEFER and CF-SYSTEMS succeeded in intensifying

customer contacts and establishing potential new contacts.

CF-SYSTEMS positioned itself as a systems manufacturer of versatile paneling – many surfaces to choose from – new fire protection solutions and various special solutions.



First trade fair appearance in new KAEFER design



AHTS shortly before completion

## KAEFER fitted the 5th and 6th AHTS

“Anchorhandling Tug Supply Vessel“ (AHTS) – a complicated name for technically sophisticated ships designed to carry out extremely difficult tasks for drilling platform operations. They move drilling platforms, tow icebergs out of danger zones, retrieve anchor chains, deliver huge amounts of cement to seal drilling holes and dispose of drilling mud, maneuvering backwards, forwards and sideways on rough seas in the process. The 6 ships commissioned by the A.P. Moeller Group and delivered by the Volkswerft Stralsund with KAEFER as specialist, are heavy athletes and allround talents. Ship no. 3 even has a crane with a lifting force of 200 t at depths of up to 1,000 m and 100 t at depths of 2,000 m.

The demands made on KAEFER’s trade were accordingly high. The acoustic calculations and corresponding noise insulation measures required for simultaneous operation of an unusually large number of main and auxiliary engines using “dynamic positioning“ (DP mode) were a classic task for the colleagues of the corporate technical service/acoustics in Bremen.

The contract included comprehensive fire, heat and noise insulation of flooring, walls, ceilings and pipelines including sheet metal claddings, the delivery and installation of cold stores and shelves, raised floors in the engine control room and the wheel house and interior outfitting and furnishings (shelves, metal cabinets, sports equipment, PCs, televisions, radios, built-in furniture).

In other words, all of KAEFER’s shipbuilding departments were involved.

A very special task demanded of the KAEFER team from Stralsund was to install 850 m<sup>2</sup> of ekki wood top layer on weather deck. This alone made up over 10 % of the total contract value. The craftsmanship which went into the fitting of this elaborate planking made it an aesthetic highlight, with our team could be proud of.

Without all these technical installations and features, AHTS vessels could not perform the important tasks they are designed for when it comes to exploiting new or already tapped oil and gas deposits at sea – tasks carried out under the most difficult conditions. After all, in most offshore regions the sea is much rougher than in the mild regions which cruise liners travel in. But the very fact that such commissions are technically so demanding gives KAEFER and the comprehensive competence of KAEFER Schiffbau GmbH the competitive edge.

## “Pride of America“

The disaster which occurred on the pier of the shipyards in Bremerhaven as a result of a storm on the night of January 13th, 2004, during which the three lower decks of the “Pride of America” were flooded, made headlines.

For months there was a standstill, and until the fate of the ship was decided, there was a lot of uncertainty.

But in August 2004 working were resumed on the “Pride of America“. And now it is going full speed ahead. The shipyards were recommissioned to execute the project, KAEFER likewise. The three lower decks need to be refinished and the insulation work in undamaged areas must be completed. The new delivery date is June 2005.

## Navy silencer – “cutting-edge technology”

New KAEFER will be installed on 20 Navy mine hunting vessels during general overhaul between 2005 and 2007.

KAEFER won the contract due to the technical quality of their amagnetic components – the first type series of this kind – developed and produced between 1989 and 1998 for these vessels. Ongoing efforts to perfect the product brought us the follow-up contract.

As Peter Niemann from the shipbuilding design and engineering department explains, amagnetic steel makes extremely high demands on design, welding technology and KAEFER’s fabri-

cation due to the thermal tension which results during operation. “The extreme temperature fluctuations in the silencers increase the risk of fissuring no matter what material is used, and special steel is particularly sensitive!”

In cooperation with the department technical services/acoustics. KAEFER’s shipbuilders succeeded in developing a product which ensures long-term stability despite these problems. A total of 40 new sound absorbers to replace those on 20 two-engine vessels will be delivered to several shipyards and navy arsenals.

## Shipbuilding profits from smart profile

**With a patent pending for an attachment profile the yacht building department of the KAEFER Schiffbau GmbH is well on its way toward setting new standards for exterior ceilings on luxury yachts.**

The ingredients to this success story are plastic sandwich or aluminum honeycomb panels which can be cut to size, and most prominently, attachment profiles which not only make it completely easy to assemble and disassemble individual panels without special tools but which also add a decorative element to ceiling design.

In this way maintenance work on technical installations, integrated illumination, loudspeakers, etc. can be carried out any time using the facilities available on board and the ceiling meets highest aesthetic expectations. The profiles and ready-to-cut panels as well as the prefabricated straight and convex profiles allow the designer to turn the ceiling into an attractive element in the ship’s design.

Of course all elements are made of plastic, VA steel or aluminum to make them seawater-proof, and thanks to the optoelectronic over measure and computer-controlled formatting they can be assembled on board without any adjustments. This way if any panels get damaged they can be easily replaced at a convenient time; it is not necessary to retake measurements or have other services performed on board.

Ulrich Doll points out: “The demand for this ceiling system – developed by KAEFER – is growing and growing. For this reason we are continually expanding the available range of materials and components.”



**New exterior ceilings for yachts**



## Stendal cellulose factory about to open its gate

One of the largest industrial contracts of recent years was executed by the industry division of KAEFER in collaboration with IL-Isolierungen Leipzig.

This contract proved to be extremely complex, for the main trades involved in the project hired individual crews for the various tasks and separate tenders were written for material supply and installation. This is a common practice on the global market but not in Germany. "Arge" landed 18 contracts from 12 different firms in Austria, Finland, Sweden and Germany, which totaled up to an overall contract volume of 8 mill. Euro.

The project was scheduled to begin in Summer 2003 and end in Fall 2004. As the material supply and installation contracts had been awarded separately but had to be

coordinated in terms of deadlines and quality, with joint billing for services rendered and products delivered, it was a real challenge for the 6 men of the construction site crew.

Containers measuring a total of 48,500 m<sup>2</sup> had to be fitted, some with a surface area of up to 2,900 m<sup>2</sup> and heights up to 54 m. 16,000 m<sup>2</sup> of pipelines were insulated and 3,000 m<sup>2</sup> of filters on the roof of the boiler house as well as the complete boiler unit for a 90 MW boiler block had to be fitted.

The support from our Finnish crew contributed considerably to the success of the project. Despite the large number of contracting firms, contracts, and teams, to say nothing of the size of the project, all the tasks were completed on schedule. The

facility will be able to go into operation in early January, 2005.

The Stendal cellulose factory is equipped with a clarification plant for process water large enough to cover the needs of a medium-sized city as well as a 90 MW bio-mass power plant. The facility will have the capacity to process some 9,200 m<sup>2</sup> of coniferous thinnings on a 3-shift basis daily, partly to generate the required process heat and electric power (almost 40 % of which will be fed into public supply lines), partly to produce a daily output of 1,700 t of cellulose, which will be delivered in the form of raw material to paper and hygiene product manufacturers in Europe and Asia as of 2005.

## Fire protection and insulation work for BMW

In Eastern Germany, BMW is stepping on the gas. Next year the first BMW 3-series models are to come off the production lines of the new automobile manufacturing plant in Leipzig, built at a cost of 1.3 billion

Euro. KAEFER Leipzig has been involved in the construction project. The industry division took charge of typical technical insulation work and fire protection insulation of pipelines and air ducts in the main

building. Between September 2003 and October 2004, 40 fitters put in 20,000 man hours insulating a surface which measured 15,000 m<sup>2</sup>.

## Extensive work during shutdown of “Adler 2004”



After “Herbststurm 1998” and “Symphonie 2001” it was time for another shutdown – “Adler 2004”. At the PCK Refinery GmbH in Schwedt, almost all the facilities were shut down to carry out necessary maintenance and inspection tasks. 2,057 employees of partner firms were on the job. During this time, KAEFER Berlin/Schwedt sent in a crew numbering 90 fitters at peak times to perform disassembly and reassembly work and to put in new installations. In addition, var-

ious plant components were fitted with fire protection insulation. The new FCC main column including the pipelines was fitted with completely new insulation. For its exemplary performance in terms of quality, on-schedule completion and on-the-job safety (not a single accident), KAEFER received a special certificate from the customer. Preparations are already being made for the next shutdown, “007”, which is due in 2007.

## Multi-division success – noise insulation panels for nuclear power plant in Beznau

KAEFER already carried out extensive insulation work at the nuclear power plant in Beznau in 1999, with a commission from Nordostschweizerische Kraftwerke AG, NOK. The Export/MALNE division has been involved in ongoing maintenance work – fire protection and cassette and mattress insulation – at the power plant ever since. KAEFER has always fulfilled the expectations of the customer to its complete

satisfaction, and for this reason a trusting partnership has developed. This year KAEFER was awarded the contract for the manufacture and installation of 48 stainless steel noise insulation panels. The engineering tasks were performed by the technical noise insulation department. Project supervision and transport were a collaborative task, which went very well.

The precision-prefabrication of the stainless steel panels in Bremen allowed the team to minimize the on-site installation work as much as possible. Within 6 work-days, 2 fitters installed the first 24 backdrops in the blow-out hoods of the power plant. The second set of 24 backdrops for the exhaust air unit of block 2 will be fitted during the shutdown which is scheduled for 2005.

## Insulation work at Compressor Station in Visbek



During the construction of a compressor station for natural gas in an industrial landscape park in Visbek (Lower Saxony) for the ExxonMobil Production Deutschland GmbH (Joint Venture of BEB Natural Gas and Crude Oil and Mobil Natural Gas/Crude Oil) KAEFER carried out extensive insulation tasks between Spring and Fall 2004. For safety reasons they decided to pre-manufacture and insulate the pipelines for the station in a nearby plant in Ahlhorn before transporting them to the construction site on flat-bed trucks. Since the compressor station was to be integrated into the surrounding landscape, very high demands were placed on noise insulation. On average, 15 KAEFERites were involved in the insulation tasks (heat and noise).

## Incinerator plant is modernized

The ANO Nord GmbH (Waste Treatment North), which operates the incinerator plant in Bremen, has spent some 94 million Euros modernizing its plant to meet future legal regulations. The far-reaching modernization project will go on until 2005, and KAEFER is contributing to its success with numerous services. Commissions for various tasks were granted by several companies, with KAEFER winning out against some tough competition. In the years 2002 and 2003, extensive insulation work was carried out on boilers 2 and 3. In 2004 KAEFERites were busy insulating boiler 1 in the new facility. In addition, old insulation had to be disassembled and new insulation

fitted on the spray absorbers of incinerating lines 1 to 3. Modifications of ID fans in lines 1 to 3, including heat and noise insulation, were involved as well as diverse insulation work in the new turbine hall. Specialists from KAEFER's Polish subsidiary TERMOIZOLACJA helped out with the great amount of work which had to be done on the new boiler. As it was necessary to perform all tasks during normal operation, the project was carried out in several phases.



## Cold column in Brunsbüttel renovated



At YARA in Brunsbüttel, a fertilizer manufacturing plant, KAEFER renovated a 60 m high CO<sub>2</sub> column. Before the project began, corporate technical services had collaborated with the location to draw up a technical expertise which spelled out the necessary renovation work. Inside the insulation material on the two columns, which operate at temperatures as low as -80 °C, there were approx. 20 to 25 tons of ice. During a four-week shutdown, KAEFER

completely renovated one column. The work involved pipelines, scaffolding, disassembly of the old insulation material, anti-corrosion insulation and a separate new PUR in-situ foam system with weather-protective casing made of aluminium sheet metal. The crew put in a total of 4,000 man hours with 22 KAEFER fitters on the job at peak times. The first column was renovated in 1999.

## Super job in Leuna



Unusual challenges call for unusual measures – like last Spring at a construction site on the premises of the TOTAL refinery in Spergau. At peak times, 45 KAEFERites were busy fitting columns K 1401 and K 1404 of a POX/methanol unit with new anti-corrosion and cold insulation. The tasks, which entailed tackling a surface of 4,500 m<sup>2</sup>, had

to be completed within just 3 weeks (spanning May to June). The extremely tight schedule was an enormous challenge for KAEFER in terms of planning, logistics, construction site supervision, preparation and coordination of personnel and materials. KAEFERites from Leipzig, Berlin, Magdeburg, Schwedt, Nordhausen, Schwerin, Hamburg and Düsseldorf were involved in the demanding project. In close collaboration with the contractor, MCE Industrieservice Leuna, and the end consumer, TOTAL, the crew ensured that all the work was finished on time in about 8,000 man hours to the satisfaction of all parties.

Apart from this short-term contract, maintenance work was carried out at the POX/methanol plant the whole year long,

a large part of it during the shutdown in May and June. During this time, 35 KAEFERites were busy fitting heat and cold insulation while the other KAEFER crew was engaged in reconstructing the two columns. In early summer, KAEFER Leipzig also succeeded in acquiring a long-term umbrella contract for TOTAL commissioned by MCE Industrieservice GmbH Leuna. It runs for three years (with an option to extend it to five) and was awarded on the strength of quality performance in the Spring.

## Ready to roll in Giesing – thanks to KAEFER

In mid-June, the Insurance Chamber of Bavaria inaugurated its new administrative building in Giesing, a district of Munich, with sumptuous festivities for the staff, numbering 3,300, which works in an 8-building complex.

In the new buildings C, D and H, a gross square area of 70.000 m<sup>2</sup> had to be finished. The building has two underground levels, a ground floor and 6 upper storeys. Apart from office space measuring 53,000 m<sup>2</sup>, the building also houses the

main kitchen with canteen and cafeteria, conference and training rooms as well as the technical headquarters for the complex.

KAEFER Munich was involved in insulating the entire technical installations including heating, refrigeration, sanitary facilities and air conditioning. In addition, extensive fire protection measures were taken and smoke extraction ducts were installed.



## Belgian malt factory insulated



Between March and October KAEFER was involved in the construction of a malt factory in Antwerpen's harbor area, commissioned by the Belgian Boortmalt Group. Two 40 m high towers and the adjacent buildings had to be fitted with sandwich insulation panels. Both concrete stairwells were fitted with adjustable substructures and trapezoidal sheet metal and some 1,300 m of process pipelines were insulated with Armaflex and stucco aluminum. A surface area measuring approx. 17,800 m<sup>2</sup>

(including towers and adjacent buildings) was insulated. KAEFER was also responsible for delivering, installing and enameling 57 steel doors and 47 vinyl windows. Most of the fitting work was carried out using suspended scaffolding; some was done with lifting platforms and free-standing scaffolding. KAEFER put in a total of 20,000 man hours, with 25 fitters working at peak times.

## Fire protection and good air at clinic

It is known as Europe's largest communal hospital with maximum performance level – over the past 20 years, the Nürnberg Clinic has received almost half a billion Euros in funding and has become a state-of-the-art medical complex. The most recent addition is the clinic's new west wing, the most prominent feature being the surgical center. The Free State of Bavaria invested a total of 106 mill. Euro into the building complex. The new building has 13 general care units with 403 beds, an intensive care unit (21 beds) and a palliative care unit (13 beds). In addition, a new OP division with 12 operating rooms and sterilization facilities was created, as were a central emergency ward and new surgical, urological, gynecological, ophthalmic, ENT and anesthesia units. KAEFER carried out extensive heat and fire

protection tasks. 38,000 m of sanitary supply lines (waste water, rain water, cold and warm water) and some 28,000 m of pipelines for the heating and air conditioning systems had to be insulated. The contract also involved 7,600 fire protection lead-throughs and the insulation of the supply air and waste air ducts in the air conditioning system. A total of 19,400 m<sup>2</sup> air ducts had to be insulated.



## Insulation work at refinery in Bavaria

For almost 40 years, the refinery in Burghausen operated by OMV Deutschland GmbH has provided Southern Bavaria and Upper Austria with crude oil products. From the start, the refinery has counted on KAEFER as a reliable service provider. When the new plant went up, KAEFER Ingolstadt was called in. Recently, KAEFER Munich completed an extensive insulation contract for Linde AG to the fullest satisfaction of the customer and the end customer, OMV. It involved fitting a crack furnace with approx. 6,300 m<sup>2</sup> of insulation materials. This included some 3,200 m<sup>2</sup> of pipelines and pipeline components, 1,560 m<sup>2</sup> of fur-

nace components, 395 m<sup>2</sup> of steam and condensate pipelines as well as apparatuses, instruments and other components. An additional contract involved the outside casing of the furnace including pipelines and components, the total surface of which measured 3,500 m<sup>2</sup>.

As the facility reaches mean temperatures of up to 850 °C, mineral and high-temperature wool as well as Microtherm panels were used as insulation and sound-proofing materials. The Microtherm panels must not be warped or get wet. Particularly during the winter months, this requirement made it difficult to transport and fit

the materials. A large part of the plant was affected by the project. As the fitters had to work at heights of up to 45 m and outside temperatures as low as -25 °C, 100 % concentration was demanded of them. And they were on a very tight schedule, which made it necessary to work on weekends and holidays with Saturdays counting as regular work days. Between Fall 2003 and mid-February 2004, all the tasks were completed on schedule with high-quality results. At peak times as many as 55 fitters were in action on the construction site.

## KAEFER WKS/WKSB successful

*Scaffolding on the  
Boskoop Bridge in  
The Netherlands*



For our subsidiaries in the Netherlands and Belgium, KAEFER WKS B.V. and KAEFER WKSB N.V., there were numerous highlights in the insulation and scaffolding business. Some demanding scaffolding work on bridges in the Netherlands and Belgium even drew the attention of the local press. For example, the four towers of the Algera storm-surge protection bridge near Krimpen on the IJssel had to be scaffolded and covered with plastic sheeting. The job was done within four months.

Another spectacular feat was the scaffolding job on the Haringvlietbrug motorway bridge near Rotterdam. It traverses the Haringvliet, a subsidiary branch of the

Rhine, and is one of Holland's most important arterial roads. Motorway A 29 runs along here. In order not to impair traffic, the job had to be completed on a very tight schedule.

A bridge in Belgium needed full-scale scaffolding as well. Some 50,000 m<sup>3</sup> of material went up on the Temse Brugge over the Schelde.

Other scaffolding work involved industrial projects such as the construction of cold boxes for the Snøhvit project in Norway. The unit was built in Antwerpen, and scaffolded by KAEFER WKSB using 80,000 m<sup>3</sup> of material. In an aluminium foundry operated by Corus Aluminium

Duffel in Beverwijk near Amsterdam two furnaces needed scaffolding. Due to the instability of the scaffolding (weight of 1000 kg/m<sup>2</sup>) the work was very demanding. For this project, the overall scaffolding volume amounted to 60,000 m<sup>3</sup>.

A large amount of insulation work was carried out for chemical and energy producers as well. The absolute highlight and the largest commission in Benelux was a 5 mil. Euro contract awarded to KAEFER WKSB and KAEFER Isoliertechnik by chemicals heavyweight Degussa in Antwerpen.

And KAEFER WKSB fitters were on the job in the new building of a power plant headquarter at BASF in Antwerpen, where they carried out scaffolding and insulation work. At peak times, 20 KAEFERites were on the site.

Extensive know how was called for at the Dutch TOTAL refinery in Vlissingen. Three trains and a 200 m long jetty unit had to be scaffolded and insulated.

And last but not least, KAEFER WKS was involved in building a new chemicals terminal in Terneuzen in Southern Holland. New tanks and other facilities went up, with KAEFER acting as scaffolding specialists. The overall scaffolding volume came to 150,000 m<sup>3</sup>.

## BTS GmbH – new location, new machine – Bingo!

In 2004 we managed to take two important measures to improve competitiveness and thus also secure jobs. By moving the BTS GmbH from Hamburg to Scheeßel while at the same time integrating Bremen's sheet metal workshop, all the manufacturing facilities for the North German region of Bremen, Hamburg and Kiel are now concentrated in Scheeßel.

As industry division head Helmut Hecht explained, the prefabrication and special constructions outfits succeeded in

reducing costs considerably, which enabled them to invest in a new MABI-Bingo-2 machine. In terms of productivity it is vastly superior to its predecessor, and this increases the performance and flexibility of BTS once again.

But that isn't all. The Pfungstadt and Dordrecht locations are happy to take the machines which are no longer needed in Scheeßel to increase their own workshop capacity.



## Industry – for sure an upward trend

Actually there is a downward trend – as concerns accidents, that is. And that spells out an upward trend for safety. There is no end to the declining accident rates of the last few years, and at the industry division meeting which took place in February in Bremen we had the honor of congratulating four new prize winners for 2003. The Berlin, Düsseldorf, Ingolstadt and Schwedt

locations all had zero-accident records this past year. As industry division head Helmut Hecht says, "safety is something we put great store by and all of our locations take it very seriously. We should really award medals, but since this isn't customary in Bremen, I don't mind raiding my treasure chest of special local wines – the more I have to give away, the better!"



## Schwedt bids farewell to Rosemarie Becker

It's never easy to say goodbye, particularly in the case of Rosemarie Becker, who retired in February 2004 so she would have more time to tend to her beloved garden. Not only did we lose the head of the Schwedt location, but also one of the founders of the first KAEFER locations in Eastern Germany. With "Directive LA 287/90" in her pocket the supervising employee of the local refinery

of PCK Raffinerie made her way to KAEFER Hamburg in Spring 1990 to set up market-economy operations for her team of 62.

Rosemarie Becker succeeded, and has done very well ever since. Despite all the difficulties which arose after the wall fell, and the distrust of the new 'foreign' firm at the refinery, Becker turned Schwedt into a KAEFER location. The pioneering spirit

prevails. The Schwedt team of 36 is still ploughing ahead, having tripled their business volume in an area where many hopeful entrepreneurs would have made an emergency landing long ago.

KAEFER's easternmost location in Germany will have to go on without Rosemarie Becker. We wish her lots of luck in the future!



## Erich Eppert retired

After a career which lasted 37 years, - 32 of them at KAEFER - Erich Eppert entered the passive phase of early retirement on Dec. 31, 2004. Before he joined the KAEFER team he studied engineering in Darmstadt, specializing in mechanical engineering. His first job was with Adrema Pitney Bowes. Advanced training in the U.S.A. followed. Then he became group supervisor for the construction division.

Erich Eppert joined the company on Oct. 10, 1972, at the Pfungstadt location. He was granted procuracy on Oct. 1, 1977 and on Jan. 1, 1985 general procuracy. When the division structure was set up on Sept. 1, 1994 Erich Eppert was put in charge of the Southern region, coordinating the industry units in Munich, Ingolstadt, Pfungstadt and Roxheim. While at KAEFER, Erich Eppert supervised numerous projects in Germany and

foreign countries. Due to his expertise in technical and noise insulation and his skills in selling and marketing, he has always been highly esteemed by his customers. The Linde AG project in Böhlen, which he supervised and completed on a very tight schedule, was a particularly impressive accomplishment. We wish him the best.





TGV tunnel tube in The Netherlands

## Tunnel robot on the march – tackling two tunnels in 2004!

The builders of the TGV high-speed train tracks which connect Amsterdam, Brussels and Paris opted for high speed when it came to the tunnels as well, counting on KAEFER's robot to do the job.

South of Rotterdam the Oude Maas and the Dordtsche Kil were in the way of the new TGV line. The solution was to build two 1,100 m long river tunnels using the cast-in-place pile method, which entailed letting the prefabricated elements of the double tube down into the water and casting them into place in the river bed using a kind of dry dock. An overall stretch of 4,400 m was created in this way, the walls and ceilings of which had to be fitted with fire protection paneling.

For the robot and its team no new task, but different from the one performed under the Weser near Dedesdorf. The train track tubes do not have rounded cross-sections but rather rectangular ones with slightly rounded corners where the walls meet the ceilings. And it was not permitted to use diesel-electric power to operate the robot but only electric power supplied by a connecting cable. The tracks will not be laid until later.

3 x 625 m Promat panels had to be fitted, for which the robot drilled 14 holes at a time, fixing the panels with 4 dowels. The other ten dowels were driven in separately with compressed air because the smaller cross-sections of the tunnels (compared to those of

street tunnels) made it impossible for the robot to drive in 14 dowels at once. Another special feature of the project were the extra-large washers needed to make the panels "hurricane-proof". Not only does the TGV push an enormous blast wave in front of it as it races through at 310 km/h. What is worse, it pulls along everything in its wake which is not nailed down.

The Dutch company left nothing up to chance when it came to making their construction "water-proof". Large partitions protect the tunnel tubes against flooding. The decision in favor of KAEFER's tunnel robot was also made in the interests of safety and the robot didn't disappoint them. Project manager Olaf Holtz and construction site supervisor Dirk Stephanski completed the project on schedule with the 6-man team working two shifts a day and Karl-Heinz Guse and Dieter Röhlig as shift supervisors, delivering high-precision results in only 4 months.

We can only hope that after completion of the project the trains running the Amsterdam-Paris route will be just as much on time.

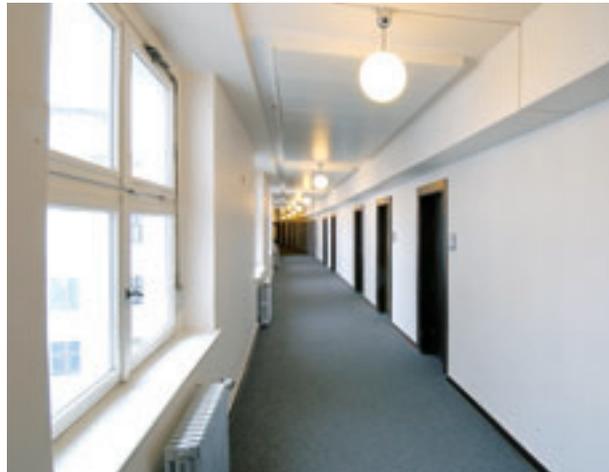
## Broadcasting facility in Berlin/Brandenburg – 4,000 m<sup>2</sup> of built-in ceilings went up during broadcasting operations

In the “Haus des Rundfunks”, an historic building with a turbulent past, the floors were in the limelight – 4,000 m<sup>2</sup> of them! KAEFER’s construction division optimized the fire protection in this large building and laid new cable routes. A tricky task.

In close collaboration with the Material Testing Institute Braunschweig (MPA), folding Armstrong metal ceilings (class F 30) and cable routes were flush-fitted between old Poelzig gypsum cable troughs full of cables. The task was not only technically demanding, but also a challenge in view of restrictions which regulate the renovation of historic buildings and aesthetic imperatives. Moreover, it was only possible to suspend the metal ceilings from the already existing hollow stone ceilings using special Hilti injection anchors and a custom-tailored steel substructure.

On average 12 men were on the job for seven months working on this contract, part of which had to be carried out at night due to the noise they produced. During the day, only “quiet” tasks could be performed so as not to disturb broadcasting operations, which have been going on for over 70 years. This made it an even greater logistic challenge – on top of having to work on a building while in use.

The KAEFERites from Berlin mastered the task on time and to perfection. The only thing is, when they listen to the radio these days, they sometimes think they hear the sound of their own drill ...



*Installation of fire protection ceilings in the hallways of the RBB*

### “Haus des Rundfunks“ in Berlin

**In 1930, Berlin became the home of Europe’s first full-scale broadcasting service – the “Haus des Rundfunks“. As one of the few public buildings unscathed by the war, it is now registered as a public monument. It has a fascinating history and is still in operation. Recently, KAEFER’s building construction division was on assignment there. Reason enough to take a look at its turbulent past.**

The foundation stone which was laid on May 29 was stolen and never replaced. The construction work was delayed because the Reich’s broadcasting company, as project commissioner, didn’t exactly know what the specifications for broadcasting facilities were. The acoustics in the large broadcasting hall also caused problems. But when it finally went on the air, the “Haus des Rundfunks” made broadcasting history.

On March 1, 1935 the first regular television shows aired – 3 times a week for one and a half hours. The 180-line picture – about the size of a standard envelope – was poor and could only be received by a few ingenious tinkerers with home-made receivers before becoming accessible to a wider audience in public “television rooms“, but the race against BBC London and broadcasting companies in the United States had been won. During the Second World War, the first stereo broadcasts were aired and magneto phones (recording instruments) came into use, attracting the attention of Americans and Russians in 1945.

Nevertheless, almost all broadcasts were live. Audiences could hear the voices of celebrities like Lale Andersen (“Lili Marleen”) und Heinz Rühmann.

On May 17, 1945, after an interruption of only a few weeks, the broadcasting service was on the air again – under Russian supervision. The children’s choir became a very popular institution, for the “Haus des Rund-funks“ was one of the few intact, heated public buildings and a sanctuary for many children who stayed there after singing to do their homework, sometimes all day. The cable connections on the broadcasting tower in Tegel had been severed when the Spree Bridge in Charlottenburg was destroyed and for months material had to be recorded on magnetic tape and rowed across the Spree, where it was picked up by couriers and brought to Tegel.

Today the historic building is used by the RBB – “Rundfunk Berlin/Brandenburg” and is equipped with state-of-the-art technology – to which KAEFER made a contribution.



## KAEFERites are not only enthusiastic soccer fans...

... for one, they have promoted the sport by helping with the expansion of Bremen's legendary Weser Stadium.

Not only did the SV Werder Bremen win the German Soccer Championship in 2004. Its stadium is constantly being expanded and modernized. Now a new shell has been added with four round office towers whose shimmering bluish glass surfaces endow the structure – impressive in itself – with an extremely attractive exterior.

Rounded structures are aesthetic but they also pose much more of a challenge to construction crews than do square-angled ones. Some 1,600 m<sup>2</sup> of F-90 insulation for the rounded stairwells had to go up, and instead of the customary two layers of 25 mm gypsum plaster boards the decision was made, after conferring at great length with the architects and the MPA Braunschweig (Institute for Building Materials) to use 5 layers of 12.5 mm gypsum plaster boards just flexible enough to be fitted. 4,500 m<sup>2</sup> of partitioning were installed to form offices, some with rounded walls, and

3,750 m<sup>2</sup> of acoustic ceilings (perforated) and 3,500 m<sup>2</sup> of gypsum plaster ceilings (smooth) were fitted. No standard task, for rounded string courses and in some places friezing had to be fitted along with 2,500 m of lighting which was integrated into the rounded edges to form a band of illumination and accent the differences in ceiling heights. Last but not least – the VIP room became a real eye catcher; here rounded sails were suspended from the ceilings.

The special constructions were supervised by Hans-Dieter Schulz, and Thomas Kolschen was in charge of the project as a whole. "It was not only a pleasurable and interesting commission. We even managed to finish on schedule despite the fact that we got off to a late start, in February 2004. By August everything was done. After all, the new soccer season was about to begin."

## Meat market ready for business in a flash



*Comprehensive construction work in cold store for wholesale meat market in Hamburg*

A very tight schedule, much too little room on the construction site and adverse winter weather – our KAEFER cold store experts from Neubrandenburg weren't phased by it. On schedule and without mishap they ploughed ahead and finished their work at Hamburg's new meat market. Their tasks included installing the cold stores in various steps. Some 7,000 of wall and ceiling panelling went up and 119 doors went in. That might sound simple, but in part the doors – for cold stores, deep freeze rooms and mechanical rooms, some of them swing doors – had to meet very strict fire protection and smoke tightness standards. Because all the trades were forced to work on the construction site at the same time, logistics had top priority. The winter weather made the façade insulation work quite difficult. The contract included special fire protection insulation and elevator shafts with heights of up to 12 m. To make things worse, some changes were made in the planning after operations had got underway.

## “Above us only sky”



After serving as the venue for operas, musicals and theater productions for some 30 years, the Bremen Theater was direly in need of renovation work, which began in early 2003.

After 1 1/2 years of construction work, completed in September 2004, the theater now has a much nobler profile. The building has been refurbished down to its very foundations, its technical facilities were modernized, auxiliary rooms were newly designed

and in part expanded, and the auditorium, the defining element of the structure, now presents itself in new splendor.

Project manager Werner Duwe, construction site supervisor Carlos Perdigao and a team of 10 fitters prefabricated and installed the “curvaceous ceiling paneling interrupted by light vaults whose 3-dimensional form has 34 different radii according to blue prints drawn up by an acoustic engineer from the Netherlands. The paneling could not be attached to the bare ceiling directly so a freely suspended secondary construction had to be created. As it was not possible to indicate all the points of intersection on the blue prints, some had to be individually calculated during the installation process itself. And while the team was working on location the volume of the order was increased by approx. 35 % to include standard construction site tasks in the dressing rooms and the canteen, etc.

In any case the work of art is a success, and now an elegant sky with 500 m<sup>2</sup> of integrated noise and fire protection technology arches above some 800 seats.

Concert hall of  
Goethe Theatre in  
Bremen

## Europe’s largest freeze-drying plant for coffee

Last year, Europe’s largest freeze-drying plant for coffee was built in Bremen. The two-storey freeze tunnel is 41.6 m long, 17.5 m wide and 12 m high. It freeze-dries coffee extract at temperatures of –58°C. KAEFER’s domestic cold store outfit, with headquarters in Bremen, was in charge of the wall and ceiling insulation, fitting some 2,400 m<sup>2</sup> of high-quality 200 mm thick V2A panels.

The construction project, commissioned by the Philip Morris subsidiary, posed two real challenges – the plant’s two-storey design and the fact that the ceiling of the first storey had to rest

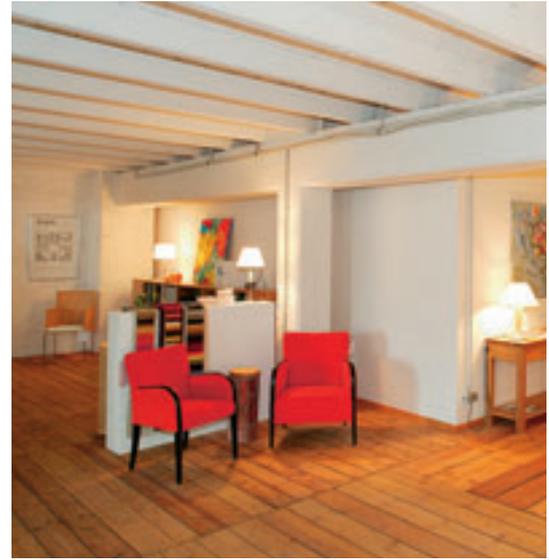
on a steel construction extending beyond the tunnel itself. This called for elaborate compensating insulation. Of course the low operating temperatures placed high demands on planners and fitters alike. Special doors, gates, hatches and windows have to remain functional no matter how cold it gets. And before delivering the finished product to the customer, it was necessary to pass a demanding acceptance test with a complex steam diffusion pressure check.

## Complex statics for deep freeze

During the construction of a shipping storehouse in Osterweddingen near Magdeburg, KAEFER’s domestic cold store outfit was hired to put up the exterior shell of the deep freeze facility and to install the sectional and sliding gates. The building, which measures 70 x 70 x 15 m, went up between March and June. Due to its design – the exterior façade serves as the outside wall of the deep freeze unit – complex statics calculations had to be made. The 200 mm thick panels must withstand extreme temperature fluctuations – ranging from –28 °C inside to as much as 60 °C outside in the summer. For this reason the panels were mounted using special hooks. They prevent the exterior surface of the insulation panels from forming wrinkles as a result of element deformation. After

painstaking statics calculations were made, it was possible to determine where to position the hooks. In the meantime the deep freeze storehouse, commissioned by Wolter Koops, is in operation.





## A new life – high and dry – for Harbor Storehouse XI

For 77 years, “Storehouse XI” was a bustling site 24 hours a day 365 days a year filled with the perpetual sound of cranes’ chatter, dockers’ yells and the hissing and whistling of shunting freight trains. Built in 1912 in Bremen’s Europahafen, the 3-storey, 16-segment structure is almost 400 m long. It served as a transshipment center for parceled goods and wares from all over the world.

In 1989 operations came to a grinding halt. The container boom had made port traffic in its classic form dispensable. The overseas harbor was filled up and the area was used for other commercial purposes. Without a quay, Storehouse XI was like a stranded whale. Sleeping Beauty was to slumber for 15 long years. KAEFER’s experts got in on the reawakening; the long structure whose facade is punctuated by a series of gables is now full of life again. It houses the music, painting and sculpture departments of Bremen’s Academy of the Arts along with a number of medium-sized Coompanies, which inhabit about half of it. These include a shipping firm and a furniture outfit as well as galleries, restaurants, customer services companies and even a harbor museum.

The Dr. Hübotter Wohnungsbau GmbH had taken over the building from the City of Bremen for a symbolic price, the architects’ office of Prof. Manfred Schomers + Rainer Schürmann drew up the

blue prints and then KAEFER’s experts came into play. First of all, 40 specialists from KAEFER Waste Disposal Technology in Bremen and Pfungstadt arrived on the scene under the supervision of Achim Albrecht to rid the building of asbestos. After five months of hard work, the 14,500 m<sup>2</sup> construction site was handed over “all clean”. Then the construction division from Hamburg got in on the action, taking over many interior finishing tasks. Gypsum plaster boards (4,800 m<sup>2</sup> of F90 boards, 5,500 m<sup>2</sup> of F0 boards and 2,800 m<sup>2</sup> of F30 boards) went up as well as 1,100 m<sup>2</sup> of fire protection ceilings and 11,100 m<sup>2</sup> of gypsum plaster board ceilings including fire protection paneling and 680 door elements with electronic master key systems. When the job was done the elongated, monotonous storage facility had been transformed into lecture halls, seminar rooms, offices, exhibition rooms and restaurants.

And the assignment was truly a success. An attractive combination of historical architecture and stylish, daringly modern elements preserved the spacious quality of the building while creating rooms full of atmosphere which make it fun to study and work.

## Chilled ceilings on the rise

In the new administrative building of pharmaceutical company Viatrix AG, the Pfungstadt team of the construction division installed 5,000 m<sup>2</sup> of metal chilled ceilings and 200 m<sup>2</sup> of gypsum plaster chilled ceilings this summer as a subcontractor for Bilfinger & Berger. In cooperation with Fural manufacturers, a system with high flexibility for special solutions was used. This set the course for the future intensive marketing of the system – exclusively by KAEFER’s

construction division. At Mannheimer Versicherung, KAEFER is installing a grid chilled ceiling with cooling capacities of up to 180 W/m<sup>2</sup>. As expert Wolfgang Maier says, “It’s an interesting market which we have been peddling since late 2003. There is an increasing demand for chilled ceilings, as they operate draught-free and more economically than air conditioning. And we have some ideas up our sleeves as concerns products for installation.”



## AIRBUS Training Center in Hamburg

**Flying is always something special. This 566,000 Euro contract awarded by AIRBUS, one of our regular customers, was not really daunting. Nor was the amount of wall and ceiling paneling it called for. The challenge lay in the finishing tasks themselves.**

An aluminum panel ceiling had to be integrated into an elegant rounded hallway (with an 840 m arc radius) - accented by friezing. The French architect couldn't specify the dimensions but he had exact ideas about what the finished product should look like. Each individual task had to be conferred on at the construction site before the go-ahead was given. KAEmobil F 30-A walls with F 30 glass elements (5 m between center lines) had to be fitted on-site as well without previous specifications.

The same story with the Eternit wall paneling. A metal sub-structure was put up, to which enamelled beech profiles were attached horizontally to hold the color-coated 8 mm Eternit panels, which were fitted on-site using adhesives, also without any detailed blueprints. And last but not least, the acoustic ceilings with authentic wood veneer and friezing supplied by Maeder/Switzerland are not exactly run-of-the-mill elements –

unlike the 3,000 m<sup>2</sup> of gypsum plaster walls (W 112), 2,800 m<sup>2</sup> of suspended grid ceilings and a number of 1 and 2 leaf door elements which went up.

Project manager Harm Steben and Hamburg's interior finishing team from KAEFER's construction division mastered all the challenges, however, and they are confident that the pilots who will receive instruction on the various types of AIRBUS aircrafts will feel comfortable in such attractive surroundings.

## A just-in-time calculation!

The German Railways decided to secure its centralized data with a complete, separate backup system. In Fall 2003 a building was found, and initiation of the system was scheduled for 2004 but the only time window available was around Easter. By then all the interior finishing and technical installation work had to be done; otherwise it would have meant delaying everything for an entire year. KAEFER succeeded in setting up everything required for the extensive data processing equipment and the accompanying safety technology in the 2-storey building within 6 months – putting

in cavity floors for the electrical supply system with optical smoke detectors, a battery-buffered USV with a diesel stand-by set, an Argonite extinguishing system and special high-performance air conditioning for the data processing equipment. The unit operates completely automatically, parallel to the data processing center, which monitors it. After a record time of a mere 6 months, it was possible to boot up this "standby computer in warehouse format".



*Military hospital – Parc du Bois,  
Potsdam – completion of first model unit*

## GC department for building renovation and construction – go-ahead for old and new!

Whoever reads a daily newspaper now and then to bide time until the next K-WERT comes out knows that in Germany not all signals are set for go-ahead. We have more yellow and red lights than we like. And yet there is a department in Bremerhaven which can't be stopped by anything – the general contracting department for building renovation and construction. Their secret? Our reporter was so impressed when he got the scoop in the city on the Weser estuary that he rushed off to the 'scene of the crime'. Curious? Then accompany him on an excursion from Bremerhaven to Berlin.

Bremerhaven – tempestuous winds roll off the North Sea and in the offices of the GC department, the coffee always gets cold because there is so much to do. In 2004, 8 projects were underway – a new building in Wiesbaden, a data processing center and five renovation projects in Berlin. Another one in Dresden had just come in – the first contract for a foreign customer, an American investment fund.

The overall contract volume amounts to over 30 mil. Euro, and all projects extend beyond 2004. What is so special about this? Almost everything is being done by German tradesmen and everyone, the real estate owners, the subcontractors and the purchasers of the property are all completely happy – even with the prices! Klaus Kanngeter detects surprise in the eyes of his interlocutor and explains, “as a general contractor we implement turnkey projects

at fixed prices with a 5-year warranty period, in accordance with German law. For new buildings this is of course routine, but when it comes to full-scale renovation of historic buildings, some of them over 100 years old, one is sometimes in for some big surprises, and then the air can get really thin. In this case our long years of experience and our reliable subcontractor network save the day.”

Sounds good. And yet, is it cost-effective!? As Klaus Kanngeter tells us, “we ensure reliable quality by choosing our tradesmen carefully and dealing with them fairly. Thorough evaluations and documentation of past projects minimize our cost risks. This way we can guarantee our customers long-term quality and reliability at a reasonable price. When selling high-quality domiciles in historic buildings, the tax advantage alone doesn't do it – one needs a good reputation which has established itself in the small circle of increas-

ingly cautious investors in this exclusive segment.” Further talk of the peculiarities connected with historical real estate inspires the curious reporter to take a trip to Berlin, where this segment is booming most.

#### Berlin-Spandau and Grunewald

As of March 2004, after only 7 months of construction work, the Adamshof once again offers contemporary living for 54 households, and the colors stipulated by the agency for historic monuments has brightened up the once drab exterior of the complex. In a second construction phase, 76 more units will follow. On Auguste-Victoria Street a mere 8 units are being refurbished, but they are remarkably large, measuring some 250 m<sup>2</sup> each. A model unit is almost ready for showings; the project will begin in July 2005.

#### Berlin-Friedrichshain, Boxhagener Street:

Behind a residential complex with 14 units one finds a former factory building, now called the “Schaltzentrale” (“Switchboard”) because it housed a telecommunications office before the Wall came down. The windows and ledges have been removed. Five airy storeys, held up by only a few supports, are exposed to the elements. Visions of spacious rooms with light-colored hardwood floors, large expanses of glass and lots of sunlight come to mind – 52 attractive lofts. Construction work began early this past year. The first tenants are to move in at the end of 2005. KAEFER is acting as general contractor on this project, and that means being responsible for all the architectural and technical planning tasks with a partly “open budget” to accommodate unanticipated necessities and variations in interior design. The same goes for the next, currently largest project.

#### Potsdam, Parc du Bois, Military Hospital

The red, clinkered facades of this complex, built during the German Kaiserreich between 1890 and 1894 on what is now a lusciously

wooded lot, are astonishingly well preserved. But the interior exudes a morbid charm. High ceilings and wide hallways combine with small chambers and tiled surgeries with built-in bathtubs. The plaster on the walls is crumbling, the electrical installations have a decidedly nineteenth-century look to them and a poster on the wall with Cyrillic lettering reminds us of the last soldiers who were nursed back to health here.

And yet a modern, Scandinavian-style model unit shows which direction the project will take, starting in late 2004 and ending 2 ½ years later, when 8 buildings with 170 units surrounding an attractive private park with a French garden at its core will be ready for their new residents.

#### Berlin-Grunewald, “Villa Seebergsteig”:

Last stop – a magnificent villa built by a banker named Meyer in 1897. The elaborate architecture, inside and out, and the high-quality interior finishing bear proud witness to pre-World-War-I haute-bourgeois building style. Since then, nothing has been destroyed or lost. All it needed was painstaking restoration and modern technical installations.

The owner was determined to do justice to his precious possession. This gave the KAEFERites and their craftsmen an opportunity to demonstrate exceptional competence in dealing with historic building substance. A jewel sparkles with new splendor.

So much for our small excursion ... to Berlin through the eyes of the GC specialists for old and new, a constantly growing team. In 2002 they numbered 4. At present 14 KAEFERites are ploughing the terrain, with 3 acting as project supervisors and 7 as construction site supervisors. But it's time to think about expansion once more. There is a little competition going on in the department. Whoever makes it from Bremerhaven to Berlin and back the fastest gets the “Blue Ribbon”. But that won't do it. The outfit is on the lookout for reinforcement.

## Facades department – 33 at one shot



This department is characterized by large quantities and routine tasks. The contract in Hamburg-Neuwiedenthal involved renovating the shells of 33 apartment buildings on the Twistering. This spelled out 16,800 m<sup>2</sup> of roofing, 35,000 m<sup>2</sup> of thermal insulation compound system paneling and 14,200 m<sup>2</sup> of basement ceiling insulation. The supplier for the system paneling and cement repair was the

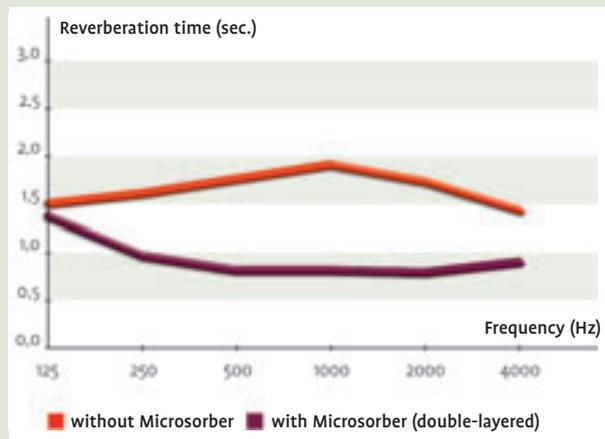
Sto AG, and the task was performed, “as always”, by the ZBD GmbH. The roof work was carried out by our long-term partner Uwe Stolle.

Despite the routine, it was a remarkable contract, involving a new customer, the Süderelbe eG, building society, a volume of 3.7 mill. Euro for general contracting services and completion in record time – a mere 10 months!

## Good acoustics and pleasant room climate – MICROSORBER makes it possible

How pleasant the atmosphere of a room is depends to a large degree on its temperature and room acoustics. In order to create an optimal climate, modern office buildings in particular utilize the heat exchange which takes place between structural elements, especially ceilings, and the ambient air. An important prerequisite for the proper functioning of thermo active ceilings is that the ceiling's surface is exposed. This previously contradicted acoustic demands, which could often only be met by putting up suspended noise-absorbing elements and panelling.

KAEFER's MICROSORBER system is the answer to the problem. Thermo active ceilings can be combined with micro-perforated noise-absorbing foil to optimize acoustics. A pleasant ambience is created – in terms of climate as well as acoustics. The cooling performance of the ceilings depends heavily on the configuration of the foil. When it is properly segmented and ventilated from both



sides, the foil can provide 75 % of the cooling effect of ceilings without suspended elements.

This was the result of tests carried out by the engineering offices for room climate, Hausladen + Meyer GbR, in Kassel, which used analytic procedures and numerical calculations to measure heat exchange between thermo active ceilings which had been combined with MICROSORBER noise-absorbing foil.

Furthermore, the engineering offices examined the non-isothermal flow which occurs in the summer months. They discovered that if foil is configured properly, this has only a negligible effect on the well-being of a room's inhabitants.

These insights have already been put into practice. In the administrative complex of MAN Gutehoffnungshütte AG in Oberhausen, MICROSORBER foil was installed in the employees' canteen, which the new extension houses. The glassed-in, light-flooded room measuring 150 m<sup>2</sup> has an inviting, relaxing atmosphere. Its transparency makes special measures necessary, however, in order to create optimal acoustic and climatic conditions. Thermo active ceilings now provide climate control, and sound-absorbing MICROSORBER foil makes for good acoustics.

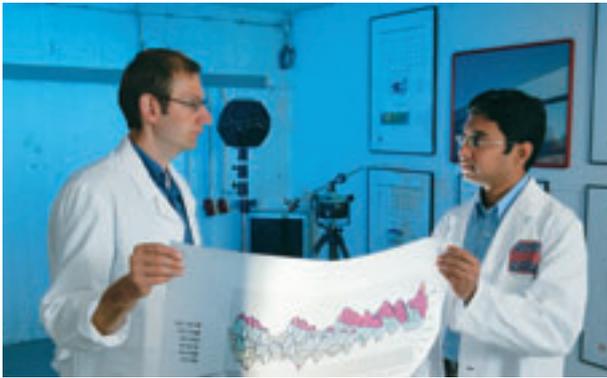
Another, much more extensive project was tackled at the end of the year. The EDP firm CC CompuNet in Ratingen was putting up a new office building complex and KAEFER's MICROSORBER department fitted some 1,200 m<sup>2</sup> of MICROSORBER foil underneath chilled ceilings to create open-plan offices for EDP-specialists. For more information, please contact Mr. Recep Divanoglu. He will be glad to answer your questions.

## KAEFER makes a big splash



It is surrounded by woods and meadows and is in the direct vicinity of a recreation area; "Platsch", an indoor and outdoor swimming pool complex in Ennepetal, North Rhine Westphalia, attracts large and small water rats alike. As of the end of September, MICROSORBER foil ensures optimal acoustics for those splashing around in the water. In the course of construction and renovation work, the owners of the complex decided to use translucent foil to reduce reverberation times considerably and to brighten up the place. As Recep Divanoglu, head of the MICROSORBER department explains, "it was a very demanding job because much of the foil – totaling 1,200 m<sup>2</sup> – had to be cut to size and fitted on location, all within two weeks."

## Acoustic bunker for material testing



Whether in the industrial construction business or interior finishing, sound-absorbing features dictate the choice of insulation materials in general as well as among innovative materials like those of the LOLAMAT system. For the past ten years, our specialists from the acoustics department of corporate technical services have been using a bunker in Bremen-Findorff for material and systems testing.

“The rent was low and we were able to fix up the facilities to suit our purposes“, says Hans-Joachim Rennecke, head of the department. In addition to a testing wall, a noise insulation testing tunnel was set up. Before beginning operations, an acoustics

engineer from the technical university of Dresden measured the “acoustics bunker” on Leipziger Street and optimized the facilities for the tests.

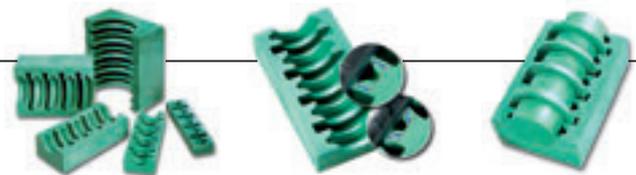
“We can measure very high performing insulation here, for example, and carry out extensive test procedures similar to those used for DIN certification without requiring lots of instruments and personnel,” says Rennecke. The acoustics technicians and engineers have performed numerous tests on LOLAMAT products for KAEFER subsidiary CF-SYSTEMS GmbH, but the industry division and the interior finishing department as well as many other customers make use of the acoustics department’s services as well.

The bunker with its more than 1 m thick walls is the ideal environment for tests with noise levels of up to 110 dB (A). No noise penetrates the walls, and what is just as important, no exterior noise can get in. Highlights in the history of the “acoustics bunker” have been tests performed on noise insulation for the gas turbine industry, acoustic measurements of LOLAMAT products and a project for Kellogg engineering offices in Norway, Rennecke says. “The project involved the optimization of a procedure for taking measurements in loud environments,” he recalls.

There is only one drop of bitterness attached to the bunker’s success story; the acoustic engineers cannot issue test certificates“. For that we still have to resort to costly institutes,” the engineer says.

*Interpretation, consulting and development of noise protection measures*

## Multi-flex module



In 2003, GK-SYSTEM GmbH made waves with an innovative generation of EMC packaging systems. Now the engineers and technicians have optimized their conventional GK packaging system. The new multi-flex module makes it possible to accommodate several different cable diameters in one module. The special patent-pending solution uses so-called V-ribs which allow for diameter tolerances of up to 4 mm. Multi-flex modules which have a ribbed

core are full-scale reserve modules. Cables can be replaced or added without replacing them. The advantage for the customer is more flexibility and reduced assembly and storage time. At this year’s SMM in Hamburg the innovation attracted customers from the domestic as well as foreign markets.

## GK-SYSTEM successful in Southeast Asia

In recent years GK-SYSTEM GmbH has really made a name for itself, primarily on the German marine and passenger ship market. Now the shipbuilding suppliers from Ahrensburg are stepping up their international activities. Early this year a regional marketing and distribution platform was set up in Singapore. Its expansive warehouse enables it to make short-term deliveries. This internationalization strategy has already shown first signs of success. The company supplied the globally active Keppel Offshore Group with GK cable penetrations for several new jack-up units on oil well drilling

platforms. Keppel has also already awarded substantial repair contracts. Singapore is viewed as the hub of the offshore industry and a global turning platform for innovative market technologies. The world’s largest production shipyards have their headquarters here or in the region. The successful establishment of a distribution location in the Southeast Asian metropolis has inspired GK-SYSTEM to intensify efforts to penetrate these markets.

## RECORE – just the thing for rail vehicles and fast passenger ships

Street cars are “in” again – with new names like “Cityrunner“, “Avanto“ or simply “K 4500“ and „K 5000“. You find them in Geneva (Cityrunner), Paris (Avanto), Cologne (K 4500) and Brugge (K 5000). Their job is to assure that cities do not collapse underneath the constant increase in automobile traffic.

KAEFER’s products/systems division is often involved in the construction of this kind of public transportation. The division delivers ultra lightweight, fire-resistant materials from RECORE for interior finishing of rail vehicles. “For street-cars K 4500 and K 5000, manufactured by Bombardier in Aachen, we supplied ceiling paneling“, division head Dr. Holger Carlsburg reports. And for Siemens’ fast-speed street car “Avanto” the division is delivering the flooring, ceiling paneling, air ducts and fire protection insulation.

What make RECORE so attractive are its lightweight construction, its easy-to-install features and its compatibility with other KAEFER products. Whenever lightweight, fire-resistant materials are in demand, RECORE is the answer. “For this reason, the European market for rail vehicles is for us one of the areas with the highest growth potential, but also the most demanding one in terms of material specifications,” says Dr. Carlsburg. RECORE has been used in German and French high-speed trains.

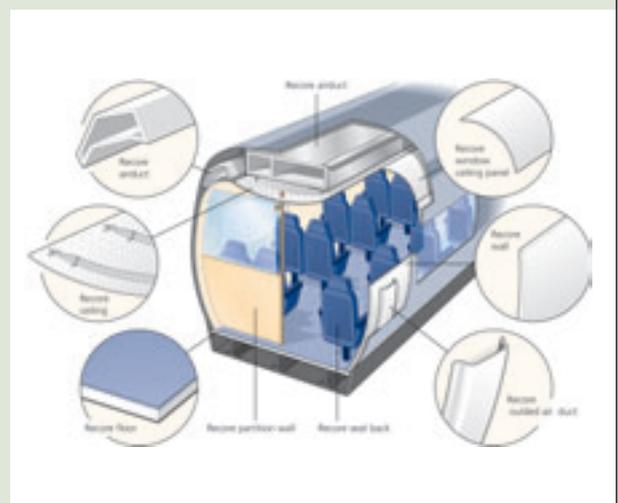
Apart from delivering building components, KAEFER is constantly expanding its range of RECORE-related services, making increased efforts to land engineering and installation contracts in response to the demand on the part of rail vehicle manufacturers for complete systems including insulation and installation. In this respect, this sector is following in the footsteps of the automobile industry.

In collaboration with the shipbuilding division, RECORE has been developed for applications on ferries and yachts. A particularly successful example is the use of the material for folded air ducts, produced by RECORE Technologies and fitted by KAEFER Norway. The air ducts made of ultra lightweight material can be folded up completely and then assembled. In Norway they were used at the Fjellstrand Shipyards in Hardanger for a fast ferry, the “Halunder Jet“. “This is a good example of a complete value-added chain“, says Dr. Carlsburg. The entire project was in the hands of KAEFER, including the systems services in Sweden and the installation work in Norway.

By the way, over the past four years KAEFER’s employees in Muggensturm near Rastatt have manufactured some 65 kilometers of the innovative, easy-to-install air ducts for the rail vehicle industry.



“MS Rygerfjord” fast ferry



## New angle on market for bemo Brandschutzsysteme

As an active partner of metal workers, planners and architects, KAEFER subsidiary bemofensterbau has been a well-known market player for more than 25 years. bemo products have stood up to the test in thousands and thousands of construction projects. Now the company has a new name – bemo Brandschutzsysteme GmbH – as a synonym for flexible, transparent fire protection systems.

Over the medium term, bemo Brandschutzsysteme GmbH aims to position itself as a provider of special and systems solutions with high engineering competence in the area of fire protection. The long-term goal of the experts from Weißenthurm is to enter the EU and global markets. To do this, its sales force needs reinforcement. “Our aim is not so much to market our own profiles but rather to foreground our competency when it comes to solutions for transparent fire protection which are flexible, technically demanding and aesthetic“, says bemo’s new managing director Edgar Timm. The advantage of bemo solutions is the great versatility they offer in terms of planning, design and installation.

bemo fire protection systems are just the thing when architectural demands made on transparent fire protection call for a high degree of flexibility – flexibility which is reflected in the optimal symbiosis of form and function which bemo makes possible. When used in combination with LOLAMAT, bemo’s innovative coolfire solutions meet highest fire protection demands. And the solutions are extremely versatile. There is a wide range of products extending from fire protection facades and doors to ventilation casements, all of which are available in different safety and fire-resistance classes.

### Edgar Timm new bemo manager

Edgar Timm knows what he wants. “We have a clear potential for greater market penetration and for this reason we are going to beef up our field staff. In any case our engineering services, which are unique in our branch, will continue to dominate the



*Edgar Timm, managing director of bemo Brandschutzsysteme GmbH*

range of products and services we offer in the way of metal constructions, facades, planning and architectural design.“ Timm has been the new managing director of bemo Brandschutzsysteme GmbH since January of 2004. The 39-year-old succeeded Harry Gütter and Rolf Flohr.

The native of Nordhorn studied engineering in Hanover and worked in development and sales distribution before joining the strategic marketing team. He most recently headed European product management within the GEA Air Technology division. One foundation of his entrepreneurial strategy is to expand bemo’s position as a flexible, professional supplier of transparent fire protection solutions within the KAEFER Group.

## Flexibility and attractive products land contract

Because the bemo team was on its marks, the Media Courts at Berlin’s Reichstag are now fitted with coolfire F90 facades. In June 2003 the bemo team conferred with architects and recommended their coolfire G 30 and F 90 products as well as their self-closing fire windows. Only a few months later a call for tenders went out with the aim toward simplifying the entire fire protection. bemo

reacted immediately and gave orientation prices for alternatives. One month later the general contract was awarded to Timm Fensterbau, which was already incorporating competitive products into their solution. bemo’s Rolf Büchle reacted quickly and succeeded in turning the tables, however, landing the contract for bemo and its coolfire F 90 solution.

## New baths within a week's time

When large real estate companies and building societies renovate their property, they are often confronted with the problem of how to refurbish baths as quickly as possible. In general it takes between two and three weeks to modernize a bathroom – too long a time to expect tenants to tolerate. In close collaboration with KAEFER's construction division in Bremerhaven/Bremen, CFS has developed basic bathroom components which could soon help to solve this problem. As Holger Carlsburg, managing director of CF-SYSTEMS says, "we have developed prefabricated bathroom components using modular panels which come complete with tiles, pipelines and connections for the sanitary installations. These

modular bathrooms reduce the time between the gutting of the building and completion of renovation work to five days".

The first models have already been put up and praised by architects and planners as innovative highlights at numerous presentations. KAEFER's construction division in Bremerhaven/Bremen and CF-SYSTEMS are both confident that this innovative marketing strategy will land them new contracts in the drywalling and renovation business.

## MS HEIDELBERG – smooth sailing ahead

In mid-March Jacqueline und Josephine Deilmann, the granddaughters of Hamburg's shipping company owner Peter Deilmann, christened the river cruise liner MS HEIDELBERG. It was built at the shipyards of the SET Schiffbau- und Entwicklungsgesellschaft mbH in Tangermünde. According to the shipping company, the MS HEIDELBERG is the optimum of what is possible in the way of river cruise liners today. The 110 m long ship has 56 luxurious cabins with French balconies, a 5-star restaurant with a panoramic view, a spacious lounge, an on-board library and an exclusive sun deck. KAEFER's shipbuilding division and CF-SYSTEMS played a crucial role in the construction of the vessel. The SET shipyards in Tangermünde on the Upper Elbe usually build ships in a shipbuilding hall and then launch them using a cradle. That only works with ships whose length does not exceed 86 m, however. As the MS HEIDELBERG was to be 110 m long, the ship was built in two sections which had to be welded together in the water.

In Fall 2003 the Elbe was not high enough to launch the two halves of the ship, but the interior outfitting work could not begin

until the sections had been welded together. On the other hand, the delivery date had been set and the shipping company had already begun to book passengers for the vessel's first voyages. When the time pressure grew, the Elbe was deepened in the vicinity of the shipyard so that the sections of the ship could be launched. After an 8-week delay, the interior outfitting tasks could finally begin.

In collaboration with an Austrian carpenter's company named List, KAEFER had taken charge of almost all the interior outfitting work within the framework of a turnkey project. List built the passengers' cabins on the upper deck and KAEFER installed those on the main deck and in the crew's areas on the lower deck. KAEFERites also finished the entire wellness area. CF-SYSTEMS supplied LOLAMAT wall and ceiling systems; some 1,550 m<sup>2</sup> of seamless wallpapered wall and ceiling panels were installed.

High-quality interior outfitting of cabins on 5-star river cruise liner "MS HEIDELBERG" with LOLAMAT wall and ceiling paneling



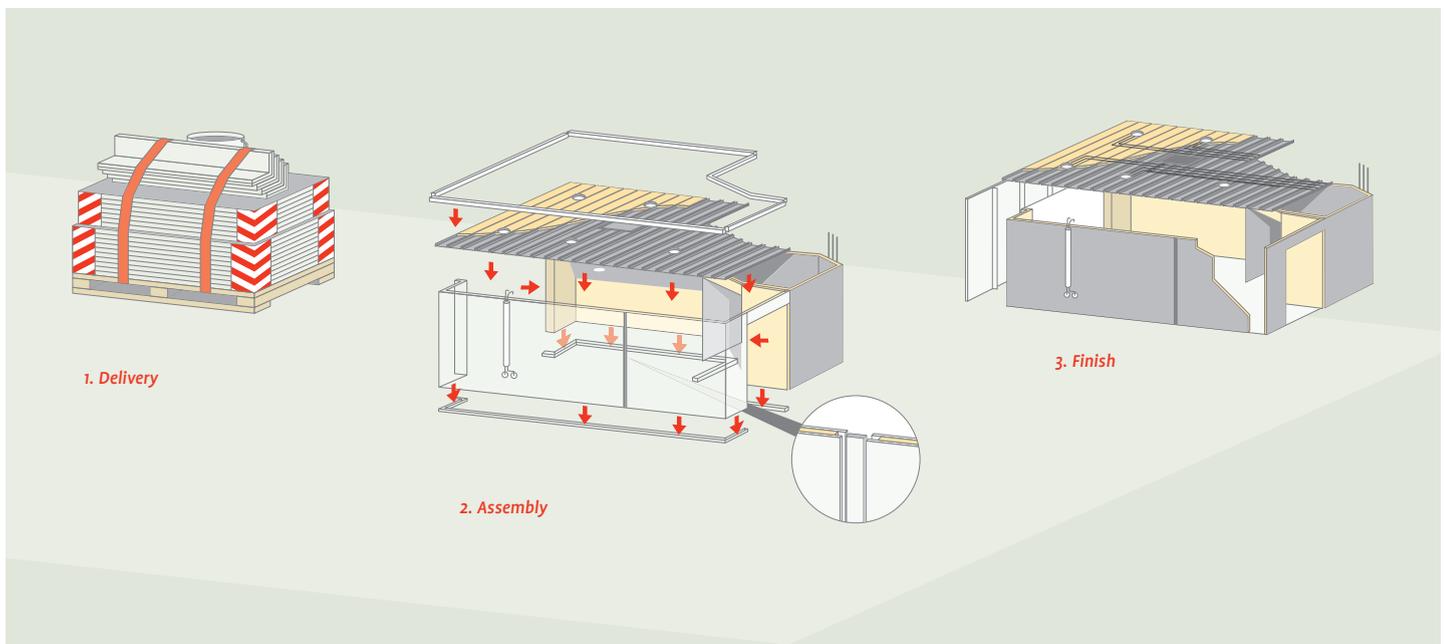
## Luxury suites on building block principle

What is the result when intelligent engineering solutions and attractive product ideas are combined with an enormous cost reduction? The answer is modular suites for luxury liners. In close collaboration with the KAEFER shipbuilding division in Bremerhaven, CF-SYSTEMS designed one. The first 40 luxurious modular cabins were installed on the "PRIDE OF AMERICA", a vessel which is being built at the Lloyd Werft in Bremerhaven.

What makes the system so ingenious is the easy and very economic assembly. "It is sort of like the big Swedish furniture company that begins with an I", says Holger Carlsburg, head of CF-SYSTEMS. "We prefabricate the individual suites at the plant and

then bring them to the shipyards. Here they only need to be assembled. No special tools or know how is required," he emphasizes.

The conversion and repair specialists at the Lloyd Werft in Bremerhaven were not the only ones to be won over by this complete package product. Meyer Werft in Papenburg wants to install the modular suites soon as well. Furthermore, CF-SYSTEMS presented the "suite on the building block principle" to an interested audience of trade specialists at this year's SMM in Hamburg.



## Successful appearance at Posidonia 2004

For the 19th time, Piraeus became the hub of the international shipping world. The "Posidonia 2004", one of the most important international shipping exhibitions, opened its doors for four days. More than 20,000 visitors came to the event and some 1,650 exhibitors

from 74 countries proudly presented their products. Together with their partner company DMG, CF-SYSTEMS displayed its LOLAMAT system.

## LOLAMAT awarded environmental certificate

As a particularly low-emission product, LOLAMAT was certified by the "eco Umweltinstitut" in Cologne. In a series of laboratory tests, LOLAMAT was tested for formaldehyde emissions and other carcinogenic substances. For all products, the concentrations of toxic

substances measured by the tests were far below the limit values laid down by the Committee for Health-Related Evaluation of Building Products (AgBB). This shows that LOLAMAT is particularly suitable for interior finishing of passenger ships.

## LOLAMAT brings international success to CF-SYSTEMS



The CF-SYSTEMS GmbH (CFS) has strengthened its position on the European market for mega yachts once more. In all countries where luxurious yachts are built, CF-SYSTEMS is in the picture, cultivating excellent relationships to shipyards. At the leading Italian yacht building shipyard Benetti – a member of the shipyard Group Azimut-Benetti, the world's third-largest manufacturer of mega yachts – the LOLAMAT line of the KAEFER subsidiary has become the absolute standard. "We started out working for Benetti in 2003, and now we have been promoted to series supplier," Dr. Holger Carlsburg, managing director of CF-SYSTEMS is happy to report.

After LOLAMAT wall systems were used on 3 mega yachts, nos. 3, 4 and 5 of the "Benetti Vision" line, as well as on the newly built models 231 and 232, the shipyard opted for a complete LOLAMAT solution in 2004: The next yacht in line, no. 233, was fitted with LOLAMAT ceilings, walls and floor systems. LOLAMAT's fire protection features, its extremely lightweight construction and cost-saving quick and easy installation had won over the Italian yacht

builders. Two to three other ships are soon to follow. The Benetti Shipyards in Viareggio and Livorno have medium-term plans to build 6 to 8 mega yachts per year.

CF-SYSTEMS is not only active in Italy, but also in Greece, England, Denmark and last but not least, The Netherlands, where, CF-SYSTEMS set up its own strategic sales and distribution outfit in early 2004. "Our neighbor to the West is the second largest manufacturing market worldwide, so it is crucial that we step up our marketing activities in this country", Dr. Carlsburg explains.

After CF-SYSTEMS was awarded a contract to deliver materials for one of twelve Australian patrol boats in 2003, the company landed new contracts in Australia this past year, having convinced customers of what LOLAMAT products have to offer. CF-SYSTEMS is to deliver fire-protection doors and wall paneling for interior finishing to Austal Ships, the world's largest manufacturer of fast-speed ferries. In the course of the next few years, the company will be building twelve patrol boats for the Australian navy, using components from the LOLAMAT modular system.

Most recent developments show that LOLAMAT is becoming more and more popular among shipbuilders worldwide. Its success lies in its excellent fire protection and interior design features, its lightweight construction and easy installation. In close collaboration with renowned shipbuilders, innovations tailored to the needs of individual shipyards have been implemented and new licenses have been procured. "Shipyards are showing an ever increasing interest in LOLAMAT, ", says Dr. Carlsburg. "We are on the right course".

## Sport and Sponsoring



Basketball is a fast and exciting sport which also captures the spectators' attention with lightning action and brilliant moves. Since 2001, the "Bremen Roosters" have been playing for Bremen in the second division and are fighting energetically to move into the first division.

In 2003, KAEFER decided to sponsor this team. The players' ambition and that of their coach Udo Enskat is supported by a network of sponsors including Sparkasse Bremen, Nordcom, Nehlsen, Zechbau, Eventim and a range of other companies, not only financially but also by providing contacts, advice and action. The games take place at the weekends, mostly in Hall 7 of the Community Centre and there is always a troop of KAEFER fans among the avid

spectators who cheer on "our" team and enjoy the exciting action on the court. For those who feel committed to ball sports in Bremen, it is a must to sponsor the SV Werder Bremen soccer club which is so successful at the moment. Since this summer, KAEFER is therefore represented on perimeter advertising in the Bremen Weser Stadium of the current German football champions. You can see from another article in this KAEFER magazine that we still have business in mind – in the report on the Stadium extension, where our interior design team from Bremen has successfully tackled interesting tasks, not on the pitch but in the area of VIP events.

## “European Championship“ in Bremen

257 KAEFER soccer players from 6 countries met on the second weekend in September for two days of matches at Peterswerder in Bremen with 22 teams competing in the championship. The sun made a grand appearance as well, creating an atmosphere reminiscent of Portugal. Over 100 wives and camp followers cheered their heroes on. And their performance was impressive – 224 goals in a total of 83 games, an average of one every 16 minutes!

The contributions of generous sponsors – many thanks to them – and careful preparations made the high-powered tournament possible. The organizing team had everything under control and at the end of the day food, drink and dance awaited the appreciative guests. A total of 370 participants and grandstand spectators had the opportunity to establish contacts and rekindle friendships made at the 1st Soccer Cup two years ago in Saarbrücken on two unusually warm autumn evenings under the trees lining the Weser Terraces.

There were a lot of happy faces at the award ceremony on the second evening:

The team from Leipzig got Bronze, whereas the TERMOIZOLACJA team (“Lucky Loser” at the 1st Soccer-Cup) won out against the team from Munich/Pfungstadt, becoming the new champion. The Spanish team received the special Fair Play Award, and Team I from France was named “Lucky Loser” this time.

The leading goal-scorer of the tournament was Mario Rinaldi from the Bemo team, and the best keeper was Krzysztof Chrupek from TERMOIZOLACJA. Only one ball made it past him!

The 2nd International Soccer-Cup ended with lively multi-lingual talk way into the night and everyone felt sorry for those who couldn't come and promised to meet for a return match at the 3rd Soccer Cup and to celebrate together once more!

Rank	Team	Goals
1.	Poland	25 : 01
2.	Munich/Pfungstadt	14 : 06
3.	Leipzig	12 : 02
4.	France II	07 : 06
5.	Düsseldorf	18 : 08
6.	Bremerhaven	07 : 08
7.	Kiel	11 : 12
8.	Austria	16 : 09
9.	France I	10 : 12
10.	Hanover/Schwedt	11 : 05
11.	Corporate Headquarters/Products	13 : 06
12.	Bielefeld	09 : 18
13.	Spain	09 : 10
14.	France III	10 : 14
15.	Bemo	08 : 07
16.	Norway II	05 : 13
17.	Bremen	15 : 10
18.	Norway I	04 : 11
19.	Export	09 : 13
20.	Norway III	02 : 13
21.	Hamburg	04 : 15
22.	Building Construction	04 : 14



Teams “France I + II + III” at the Soccer Cup in Bremen

## Motorcycle tour 2004 – extreme biking

As is fitting for an event which has become a real tradition, the beginning and end are marked by a steadfast ritual. Before climbing onto their bikes on a Saturday in June, the group met for a big breakfast in “Heinzi’s Garage”, and the tour ended on Sunday with a delicious and well-deserved evening repast in Hagenburg at Steinhuder Sea consisting of – you guessed it! – asparagus, just like every year. In between a beautiful tour across the Weserberg region and the footlands of the Harz mountains with an overnight stay in Stadoldendorf. The group succeeded in getting around some showers which interrupted the sunny summer weather. With one exception – a truly biblical cloudburst at mid-day on Saturday out in the elements. As organizer Ulrich Doll put it, “Before the flood we were 21 men and 3 women. After the flood, when the troupe began to reappear out of the haze and spume, we were still 21 men and 3 women. It didn’t even hail. The right morale for our next tour in 2005”!



## General Works Council: KSB and employer/employee conferences are main topics

Two topics dominated the agenda of the General Works Council this year: the transformation of the shipbuilding division into a GmbH, KAEFER Schiffbau GmbH (KSB) on May 1st of this year, and the introduction of employer/employee conferences for employees of KAEFER Isoliertechnik GmbH & Co. KG.

The founding of the KSB affects the social benefits of the employees who work for it. They no longer fall under the scope of the Social Security Benefits Office (SOKA) responsible for the building industry, the former Leave and Wage Equalization Fund of the German Building Industry (ULAK) and the Supplementary Health Insurance Co. of the Building Industry (VvaG). After negotiations with management, the Works Council succeeded in drawing up a company agreement which compensates for these disadvantages so that the employees will suffer no loss of benefits. The vacation provisions for KAEFER employees in the operative business were determined along the lines of the regulations of the Federal Framework Agreement for the Building Industry for salaried personnel.

Another issue of negotiation was also amicably settled this year, namely a framework agreement for KAEFER Schiffbau GmbH. Such agreements regulate distribution of work hours, travel expenses and Christmas bonuses for employees in the operative business as well as supplementary compensation for insulation fitters and Christmas bonuses for salaried employees.

What made negotiations difficult were differences of opinion between the Works Council and management concerning the question as to which collective agreements apply for KAEFER Schiffbau GmbH.

With the consent of the Works Council, KAEFER introduced employer/employee conferences. The chairman of the General Works Council, Jürgen Carstens, as well as his deputy, Klaus Dworatzek, were involved in the task force set up to initiate the program from the very start. They succeeded in asserting their interests. As Carstens says, "we prepared a company agreement which was signed in November. It defines the framework of the conferences and lays down clear rules. The conferences are to be absolutely confidential; there will be no record of them in the personnel files. They are also not to be viewed as a form of evaluation and are to have no legal implications". Minutes are drawn up to document the conferences, but these remain exclusively in the possession of the participating parties.

"After the company has had some experience conducting such conferences, initially only with salaried personnel, we will see that we come to an amicable agreement as to how the program should be implemented for employees in the operative business", says the chairman of the General Works Council.

## Treasure hunt – anyone game?



Human progress usually goes this way: someone works day in, day out, and all of a sudden he realizes there is a way to simplify his job or optimize the results. He puts on his thinking cap, tries out a few things, and with a little luck he is already one step further - a tried and true method which has worked for centuries.

It should work for KAEFER too, one would think. After all, the company has an employees' suggestions program, and as of 2005 the program will incorporate all of KAEFER's German subsidiaries and have its own place on the Intranet. But there are some hitches.

In 2004 6 suggestions for improvements received awards, 2 technical and 2 commercial/organizational ones. But this is not exactly spectacular considering the fact that we have 1,700 employees who work on the domestic market (as of 2003). Does this mean only every 283rd employee has a feasible idea?

Rest assured – KAEFERites are much more creative than that. They just don't let on to the fact. Is it a matter of modesty? Reserve? We don't know, but we want to find out. We are looking for ideas which are buried somewhere like hidden treasures. What keeps you from bringing them forth? What must be done to encourage you!?

Be courageous and let us in on your flashes of insight. Even if they remain mere sparks – it takes not only brilliance, but also patience to get a spark to ignite. Give us more than business and projects to report on. We would love to feature some ingenious ideas and clever thinking!

## Group Works Council – job security through more flexibility

The Group Works Council has suggested ways of making work schedules more flexible to secure jobs in KAEFER companies. “We must be innovative if we want relatively secure jobs in the future. This is all we can do”, says the chairman of the Group Works Council Gerold Knapp.

For this reason, the Works Council has proposed a model involving flexible work hour accounts, its aim being to balance out peak and reduced work loads. “We are negotiating with management on the introduction of work hour accounts for a trial period of two years,” says Knapp. Employees can collect overtime during these two years and have various options. They can either be paid for the extra time, have the sum paid into the company’s employee-financed retirement plan or put it into a lifetime work hour account which reduces the number of remaining lifetime work hours accordingly. Furthermore, it would not be possible to lay off a worker until his or her work

hour account no longer showed a positive balance. “We are currently negotiating such regulations and hope to come to a satisfactory agreement,” says Knapp. He advises employees to restrain from drawing up individual agreements with their employers. “This often leads to disadvantages which cannot be rectified after the agreement has been signed, and such agreements tend to disunite the work force,” the Works Council Chairman says.

At a meeting held in June, the Group Works Council elected an executive board whose task is to improve collaboration between management and the Group and General Works Councils. It consists of Gerold Knapp and Jürgen Carstens, with Jörg Stahlkopf from the Stralsund-based Wartungs- und Service-GmbH as deputy member. “The executive board will allow us to react more quickly and effectively and to utilize synergies which are created by numerous overlappings between the Group and General Works Councils“, say Knapp and Carstens optimistically.

## New chairman for European Works Council

KAEFER’s European Works Council was set up in 1995, and Holger Matthes played a pivotal role in establishing it. Until this year, our KAEFERite from Pfungstadt presided over the European Works Council. Matthes has now retired, after working for the company for 40 years, and he has resigned from office in this important body. The Works Council took leave of Matthes during its annual meeting in Bremen this year.

Klaus Dworatzek, Chairman of the Works Council in Düsseldorf, was elected as the new Chairman of the European Works Council and Gerda Singer moved up into the European Works Council from the Works Council in Bremen. Some important topics which were discussed at this year’s European Works Council meeting were how German guidelines for sending del-

egates to meetings can be applied to companies in foreign countries and how to implement the Employee Suggestion Program as it exists in Germany in companies in the international KAEFER Group. As the new chairman, an active member of the European Works Council for the past three years, explains it, “we have agreements concerning both issues which work very well in Germany and which are laid down in company agreements. We should make efforts to introduce such guidelines to our foreign subsidiaries in the appropriate manner.” After all, we don’t have to go back to square one every time we set up a new body.

The European Works Council is now made of up three German, two Spanish, two French, one Polish, one Norwegian and one Austrian employee.

Most of us take being able to see well for granted, just like the sunrise. We should sometimes pause for a moment and try to imagine what a dramatic turn life would take, if harm should come to our own eyes. And even if the worst is avoided, the eye is extremely sensitive to pain. Anyone who has had to have a splinter removed from their cornea because they decided to use a saw “just quickly, just for once” without protective goggles knows exactly what we mean. You should not try to do something like this yourself. So put on your protective goggles and you can start work with your mind at rest – that’s the only way!



“Eye Protection” poster

## Thanks for 40 years!



**Karl-Heinz Luebbing**, On June 18, 1964 Karl-Heinz Luebbing, a trained locksmith, was hired by KAEFER as an assistant plumber. Apart from being on the job at various construction sites in Germany, Luebbing was sent to Emmen, Netherlands in 1987 to act as a foreman at NAM. Lübbling was named safety commissioner in 1997 and has worked for many years at the Lower Weser nuclear power plant.



**Gerd Wilken**, Gerd Wilken, a trained engine fitter, starting working for KAEFER as an assistant fitter on August 1, 1964. Due to his professional know how and reliability he was promoted to foreman in 1972. KAEFER sent him to Indonesia a number of times, for example in 1982, 1984 and 1987. He now supervises individual projects in the Oldenburg/Bremen region.



**Heinz Hillers**, came to KAEFER on September 7, 1964, beginning at the Gelsenkirchen location. He is a trained locksmith and his

first assignment was at the BASF power plant in Marl. He initially worked as an insulation plumber before becoming a construction site supervisor on various sites. After the Gelsenkirchen location was integrated into the Düsseldorf outfit, Hillers was assigned to the Bayer construction site in Uerdingen, where he was much respected as a reliable employee.



**Ralf Vogel**, Ralf Vogel began his apprenticeship as an insulation fitter on April 1, 1964 and worked on various construction sites in Germany and foreign countries. In 1972/1973 he attended the technical school in Bremen and was named insulation fitting inspector in late 1973. He primarily supervised large construction sites such as ERE in Lingen, at which he had worked frequently during his apprenticeship. He also supervised large projects on long-term construction sites and at individual plants. Ralf Vogel has acted as group leader in the industry division in Bremen since 1995.



**Hans-Werner Siebrecht**, On August 3, 1964 Hans-Werner Siebrecht began working for KAEFER as an assistant insulation plumber, earning an hourly wage of 3.70 German Marks. Two years later it was raised to 4.14 German Marks. Siebrecht worked on many construction sites in Germany as well as in foreign countries, among others at a construction site in Sapele, Nigeria, where the

BBC had commissioned KAEFER to insulate four turbines. For many years Siebrecht has worked for the NEAG, being in charge of mobile construction sites in Vogtei, Söhlingen, Steyerberg and Brake.



**Jan Henne** began to work for TERMOIZOLACJA on April 1, 1964. He was on duty on many construction sites and worked for a long time in Germany and the Netherlands. He supervised complicated tasks performed on desulfurization units in the power plant in Opole, always demonstrating his many skills. He now works for the Technical Services and Project Controlling department as deputy to the production supervisor and is in charge of calculations. He is currently acting as project manager on a construction site in Slovakia.



**Maria Woźnica** began to work for administrative services at TERMOIZOLACJA on August 1, 1964, which she headed until she retired. She always demonstrated exemplary organizational skills. After a long and successful career she retired on August 31, 2004 and is now in charge of her granddaughter Angelika. Both granddaughter and grandmother are full of energy!



**Peter Robbers**, born on December 13, 1941 in Lilienthal, came to KAEFER (the Bremen location) on April 1, 1964. His first assignments were at Klöckner in Bremen and at the petroleum refinery in Wintershall (Emsland). On July 1, 1964 Robbers changed locations, being sent to BASF's long-term construction site in Ludwigshafen. Robbers got to know his future wife in the Palatine wine region, where he settled down. The logical move was to relocate in Pfungstadt. Until 1971, Peter Robbers was on duty at the BASF long-term construction site. Here he acquired additional professional qualifications. In 1971 he was named head of the sheet metal workshop in Pfungstadt. Robbers will retire on December 31st of this year. He has always been respected by his fellow workers and superiors as a very reliable and valuable employee.



**Karl Debast**, came to KAEFER on October 8, 1964. After completing his insulation plumbing apprenticeship in the main workshop, he had assignments in Düsseldorf-Reisholz and later in Monheim. During the 1980s he took on new responsibilities and became a construction site supervisor on various different sites such as the Walter Rau site in Neuss, ESSO in Erkrath, VAW in Norf, UK in Wesseling, the Rheinbraun power plant in Wachtberg, the Shell site in Holland and the nuclear power plant in Mülheim-Kärlich. Here Debast had the opportunity to successfully demonstrate his circumspection and experience.



**Günter Sedlaczek**, (married, no children, hobby: cats) trained to become an insulation fitter at KAEFER from 1964–1967. From 1980–1995 he worked as a construction site foreman in places like Singapore, Greece, Italy as well as in various German locations. In 1995 he supervised the Vulkan Shipyards in Bremen until they closed down. In 1997 he trained to become a qualified foreman. Since then he has acted as construction site supervisor at the Meyer Shipyards in Papenburg, where he was responsible for the installation of galley panelling and more than 6,000 qm<sup>2</sup> of stainless steel insulation per ship, which is used for walls and ceilings in large galleys and pantries. On May 1, 2001 Sedlaczek became a salaried employee. He executed a total of 8 large luxury liner projects during his stint in Papenburg. When operations closed down there temporarily, Sedlaczek was involved in the successful delivery of ships from the Cassens Shipyards in Emden as well as the Kröger Shipyards in Rendsburg, playing a key role in their operations. In November 2002 he was called to Bremerhaven.



**Bernd Swetik**, (married with one child) trained to become an insulation fitter at KAEFER from 1964–1967. Afterwards he had assignments in Singapore, Indonesia, Sumatra, Holland, Norway and Bahrain. He also worked in the industrial construction business and was on the job on domestic construction sites such as Vulkan in Bremen, the Meyer Shipyards in Papenburg and the Bremer AG Weser, where he acted as foreman. After the Vulkan plant in Bremen shut down, Bernd Swetik was assigned to the shipbuilding workshop in Bremen. He has been a member of the Works Council for several years.



**Gregor Nahler**, (married, 2 children) trained at KAEFER to become a commercial clerk from April 15, 1958 until March 31, 1961. Afterwards he started to work in the payroll accounting department. After a short stint with Brinkmann, a construction company in Bremen-Vegesack, which lasted from October 1, 1962 until June 30, 1964, Nahler returned to KAEFER. He relocated to the Bremerhaven outfit in January 1995. During this time he was on the job at various construction sites, among them ones in Sumatra, Holland, Karlsruhe and Dresden. On July 1, 2001 Nahler entered the active phase of partial retirement. The passive phase began on July 1, 2003 and will end on June 30, 2005, when Nahler will be officially retired.



**Holger Matthes**, came to KAEFER as an insulation fitter on January 17, 1964. From September 1964 until April 1967 he worked at the BASF construction site in Ludwigshafen, switching over to the Pfungstadt location in July 1967. As of 1974 he had a long-term assignment in the workshop in Pfungstadt, where he was in charge of training apprentices. As of 1976 Matthes acted as Chairman of the Works Council in Pfungstadt and was a member of the General Works Council and its bodies, remaining a member and serving as secretary until he retired on March 1, 2004. In 1984, Matthes also became a member of the companies Committee on Industry and Trade, initiated and helped to found the European Works Council and served as its Chairman from April 5, 1995 on. Matthes retired on March 2, 2004.

# KAEFER Jubilees

## KAEFER Isoliertechnik GmbH & Co. KG Berlin/Dahlewitz

### 20-year anniversaries

Manfred Mahlke	01.01.1984
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### 10-year anniversaries

Karl-Heinz Lehmann	01.01.1994
Holger Wendt	01.04.1994

## KAEFER Isoliertechnik GmbH & Co. KG Bielefeld

### 30-year anniversaries

Heiko Hirnschal	14.10.1974
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### 20-year anniversaries

Ralf-Olaf Bendt	03.01.1994
Ralf Niermeier	18.09.1984
Dieter Tannhaeuser	15.09.1984

## KAEFER Isoliertechnik GmbH & Co. KG Bremen

### 40-year anniversaries

Karl-Heinz Luebbing	18.06.1964
Hans-Werner Siebrecht	03.08.1964
Bernd Swetik	01.04.1964
Ralf Vogel	01.04.1964
Gerd Wilken	01.04.1964

### 30-year anniversaries

Klaus Besmahn	09.05.1974
Jürgen Brinkhus	01.08.1974
Donald Carstens	25.09.1974
Kurt Funk	01.08.1974
Helmut Grauerholz	01.06.1974
Joerg Hauschild	07.05.1974
Hermann Heet	11.12.1974
Torsten Henning	19.03.1974
Marlene Kahl	01.04.1974
Gisela Kellner	01.01.1974
Horst Logemann	29.08.1974
Thomas Nieder	01.08.1974
Heiner Poppen	22.01.1974
Gerhard Stolle	25.09.1974
Dieter Tesch	01.08.1974
Dieter Zack	01.11.1974
Emin Zumberi	06.06.1974

### 25-year anniversaries

Jens Fischer	01.08.1979
Joachim Hoffmann	16.08.1979
Thomas Hohenstein	01.08.1979
Ralf Michael	02.04.1979
Joerg Randermann	01.08.1979
Hans-Dieter Schulz	01.08.1979

### 20-year anniversaries

Marcus Berger	17.09.1984
Manfred Brunssen	06.08.1984
Peter Fahrenholz	01.01.1984
Michael Gebbert	17.09.1984
Jens Hafer	17.09.1984
Heinz-Friedrich Harde	01.10.1984
Sabine Manig	01.08.1984
Norbert Rapp	17.09.1984
Michael Schulte	01.08.1984
Horst Tegeler	27.06.1984
Theo Wiedmaier	17.09.1984
Andreas Wilken	17.09.1984
Gerd Wolpmann	01.10.1984

### 10-year anniversaries

Till-Justus Gerhardt	01.05.1994
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## KAEFER Isoliertechnik GmbH & Co. KG Bremerhaven

### 40-year anniversaries

Gregor Nahler	01.07.1964
Günter Sedlaczek	01.04.1964

### 30-year anniversaries

Dietrich Thöns	01.04.1974
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### 20-year anniversaries

Andrea Genuttis	01.08.1984
Karin Skörup	01.05.1984

### 10-year anniversaries

Kai Kurtenbach	05.04.1994
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## KAEFER Isoliertechnik GmbH & Co. KG Brunsbüttel

### 25-year anniversaries

Siegfried Schulz	02.04.1979
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## KAEFER Isoliertechnik GmbH & Co. KG Düsseldorf

### 40-year anniversaries

Karl Debast	08.10.1964
Heinz Hillers	07.09.1964

### 30-year anniversaries

Norbert Boelke	02.09.1974
Sabri Dzelili	06.08.1974
Dieter Gorski	11.07.1974
Herbert Itzigsohn	19.08.1974
Rainer Sponholz	02.09.1974

### 25-year anniversaries

Rainer Liedke	01.08.1979
Uwe Renziehausen	01.02.1979

### 20-year anniversaries

Rolf Frank	01.09.1984
Jozo Radeljic	16.02.1984
Michael Rottland	01.07.1984

## KAEFER Isoliertechnik GmbH & Co. KG Emden

### 30-year anniversaries

Helmut Bents	02.12.1974
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## KAEFER Isoliertechnik GmbH & Co. KG Hamburg

### 30-year anniversaries

Ernst Becker	01.02.1974
Egon Kreuzfeld	16.04.1974
Erich Plagemann	22.10.1974
Dieter Steinwarb	04.09.1974

### 25-year anniversaries

Wolfgang Berger	01.09.1979
Frank Blaschke	01.09.1979
Klaus Miesling	05.04.1979
MatthiasMünster	01.09.1979
Ronald Wennrich	01.09.1979
Manfred Zahn	01.09.1979

### 10-year anniversaries

Thomas Kaminski	01.09.1994
Igor Zachoval	01.02.1994

## KAEFER Isoliertechnik GmbH & Co. KG Hanover

### 25-year anniversaries

Wilfried Bergmann	22.08.1979
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### 20-year anniversaries

Wolfgang Lange	30.07.1984
Olaf Pfothenhauer	19.03.1984

### 10-year anniversaries

Oliver Konze	01.08.1994
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## KAEFER Isoliertechnik GmbH & Co. KG Kiel

### 30-year anniversaries

Manfred Steen	02.04.1974
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### 25-year anniversaries

Rüdiger Lütt	23.05.1979
Wolfgang Wickeren	01.04.1979

### 20-year anniversaries

Alf Detlef	01.08.1984
Max Nelz	05.06.1984
Joachim Schöttke	10.09.1984

### 10-year anniversaries

Kurt Filzek	01.10.1994
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## KAEFER Isoliertechnik GmbH & Co. KG Muggensturm

### 25-year anniversaries

Lothar Pfeiffer	02.01.1979
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## KAEFER Isoliertechnik GmbH & Co. KG Munich

### 25-year anniversaries

Zdravko Music	04.07.1979
Guenther Schwarz	02.07.1979

## KAEFER Isoliertechnik GmbH & Co. KG Neubrandenburg

### 10-year anniversaries

Heike Seep	01.04.1994
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## KAEFER Isoliertechnik GmbH & Co. KG Pfungstadt

### 40-year anniversaries

Holger Matthes	17.01.1964
Peter Robbers	01.04.1964

### 25-year anniversaries

Michael Beinl	01.07.1979
Mate Luburic	06.08.1979
Klaus-Peter Schatz	01.10.1979
Frank Scheuermann	01.09.1979
Gottfried Städtler	01.07.1979

### 20-year anniversaries

Michael Hanninger	01.08.1984
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### 10-year anniversaries

Bruno Dietz	01.01.1994
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## KAEFER Isoliertechnik GmbH & Co. KG Roxheim

### 25-year anniversaries

Mustafa Ayar	22.11.1979
Helmut Dietenbeck	03.09.1979

### 20-year anniversaries

Mustafa Kuecukmehmetoglu	23.07.1984
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## KAEFER Entsorgungstechnik GmbH Pfungstadt

### 20-year anniversaries

Beate Steyer	01.11.1984
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### 10-year anniversaries

Olaf Poehle	01.06.1994
Hans-Jürgen Vaupel	14.11.1994

## CF-SYSTEMS GmbH Bremen

### 20-year anniversaries

Klaus Wuttke	17.09.1984
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## KAEFER Eristystekniikka OY Finland

### 20-year anniversaries

Arto Jansson	19.03.1984
Tapani Puro	27.07.1984
Peter Salin	17.10.1984

### 10-year anniversaries

Lasse Lehto	11.10.1994
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## KAEFER WANNER SAS France

### 30-year anniversaries

Marc Benard	23.09.1974
Mohamed Berguen	07.10.1974
Dominique Canu	09.09.1974
Michel Casses	25.02.1974
Patrick Dicks	23.09.1974
Jean-Philippe Dugenet	15.10.1974
Roland Garcia	14.05.1974
Michel Hromada	09.09.1974
Denis Landry	03.09.1984
Claude Martin	02.12.1974
Jean Marie Masson	16.10.1974
Hadj Mostefaoui	23.10.1974
Ahmed Moukaideche	31.07.1974
Milagros Nayrand	04.07.1974
Rene Ruiz	08.04.1974
Eric Sergent	30.09.1974
Serge Tonnerre	01.04.1974

### 20-year anniversaries

Herve Aubert	20.02.1984
Hugues Bigot	08.03.1984
Jean Marie Blicke	09.07.1984
Jean Bonell-Balp	06.08.1984
Valerie Bailey	01.02.1984
Christian Carrasquet	03.09.1984
Gilles Cassier	20.02.1984
Alain Cazier	20.02.1984
Bernard Choquet	19.03.1984
Roger Collange	06.08.1984
Henri Dergnacourt	14.08.1984
Jean Louis le Duff	02.07.1984

Jean Louis le Duff	02.07.1984
Jacky Ducorney	04.10.1984
Nicolas Eudeline	22.08.1984
Guy Gimenez	07.08.1984
Jean-Marie le Goff	20.02.1984
Michel Hanot	09.07.1984
Abdelvhab Hattab	26.06.1984
Rene Haurie	20.02.1984
Dominique Hego	03.09.1984
Miguel Hernandez	20.02.1984
Catherine le Hir	11.04.1984
Bruno Joly	20.02.1984
Mustapha Khebchi	01.10.1984
Viviane Lariven	01.04.1984
Pascal Loget	30.07.1984
Valentin Lopez	20.02.1984
Patrick Martin	12.03.1984
Marc Origas	27.06.1984
Christian Pigeron	20.02.1984
Bernard Pioterek	19.03.1984
Genevieve Prouvost	17.09.1984
Noel Pusset	01.10.1984
Pascal Renaux	05.04.1984
Eric Routier	13.08.1984
Rene Sgard	05.07.1984
Michel Soreau	12.12.1984
Luciano la Spina	12.12.1984
Bora Stankovic	20.02.1984
Christian Touchard	20.02.1984
Didier Vincent	20.02.1984
Blandine Voirin	20.02.1984

#### 10-year anniversaries

Jean-Francois Aoustin	24.10.1994
Eric Bernard	24.01.1994
Jean Claude Bocquet	04.11.1994
Bernard Bray	20.09.1994
Fabrice Douaud	05.12.1994
Philippe Ducoin	07.11.1994
Marcel Garand	18.07.1994
Jean-Claude Gervasoni	05.09.1994
Dominique Hamon	08.08.1994
Pedro Hernandez	08.08.1994
Philippe Huguet	03.10.1994
Jerome Moriceau	07.11.1994
Gerard Moyon	15.11.1994
Gerard Pichereau	19.09.1994
Wieslaw Plywacz	16.12.1994
Michel Potiron	21.11.1994
Emilien Roussel	02.03.1994
Gilles Saulnier	03.11.1994
Jean-Michel Sennegon	30.03.1994
Joel-Michel Simonet	24.01.1994

#### KAEFER (Malaysia) Sbn. Dhb. Malaysia

#### 10-year anniversaries

Naveen Kad	04.04.1994
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#### KAEFER Isolering AS/ KAEFER Norge AS Norway

#### 25-year anniversaries

Ketil Amesen	15.01.2004
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#### 20-year anniversaries

Erik Okkerstrøm	10.01.2004
Charles Valentinsen	28.03.2004

#### 10-year anniversaries

Bjørn Dag Kismul	02.05.2004
Jone Andersen	05.09.2004
Eirik Hansen	05.09.2004
Mustafa Darwish	13.10.2004
Cleng Helge Strøm	17.10.2004
Kenneth Tjøsvoll	24.10.2004
Geir Yngve Andreassen	04.11.2004
Rune Thime	09.11.2004

#### KAEFER IKM A/S Norway

#### 20-year anniversaries

Erik Okkerstrøm	10.01.1984
Charles Valentinsen	28.03.1984

#### 10-year anniversaries

Jone Andersen	05.09.1994
Geir Yngve Andreassen	04.11.1994
Mustafa Darwish	13.10.1994
Eirik Hansen	05.09.1994
Bjørn Dag Kismul	02.05.1994
Cleng Helge Strøm	17.10.1994
Rune Thime	09.11.1994
Kenneth Margido Tjøsvoll	24.10.1994

#### KAEFER Isoliertechnik Ges.m.b.H Austria

#### 30-year anniversaries

Josef Stürzer	19.08.1974
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#### 25-year anniversaries

Franz Enigl	19.11.1979
Herbert Radakovits	17.09.1979
Richard Schmidmeyer	02.05.1979

#### 20-year anniversaries

Heinz Krammer	27.02.1984
Mileta Palalic	24.07.1984

#### 10-year anniversaries

Ali Durak	05.04.1994
Gottfried Lehmann	01.03.1994
Admir Marhosevic	01.08.1994
Adnan Marhosevic	11.07.1994
Kurt Rein	07.02.1994
Nico Saric	14.03.1994

#### TERMOIZOLACJA S.A. Zabrze Poland

#### 40-year anniversaries

Jan Henne	01.04.1964
Maria Woźnica	01.08.1964

#### 30-year anniversaries

Stefan Groszek	01.02.1974
Mieczysław Jarosz	01.02.1974
Jan Nowak	01.11.1974
Jerzy Tomasik	01.06.1974
Krzystian Woźniak	01.11.1974

#### 25-year anniversaries

Roman Chrupek	01.02.1979
Piotr Kwiatkowski	01.09.1979
Wiesław Malinowski	01.06.1979
Stanisław Pochron	01.01.1979
Stanisław Świstak	01.02.1979
Konrad Tomsia	01.03.1979
Andrzej Wojcik	01.03.1979
Adam Wrona	01.10.1979

#### 20-year anniversaries

Henryk Kozłowski	01.11.1984
Zygmunt Pieczara	01.04.1984
Adam Puto	01.08.1984
Norbert Tomczyk	01.10.1984

#### 10-year anniversaries

Krzysztof Kobylecki	13.08.1994
Tadeusz Hanak	16.08.1994
Anna Sobocka	01.11.1994
Witold Misiaszek	07.12.1994
Grzegorz Setnik	17.12.1994
Józef Muszyński	17.12.1994

#### TERMOIZOLACJA Zachód Poland

#### 30-year anniversaries

Waldemar Kowalczyk	01.08.1974
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#### 25-year anniversaries

Alojzy Miska	01.09.1979
Jan Serwach	01.09.1979

#### Termosprzęt Zabrze Poland

#### 10-year anniversaries

Norbert Grabiński	01.12.1994
Teresa Kacprzak	01.04.1994

#### TERMOIZOLACJA Oświęcim Poland

#### 25-year anniversaries

Krzysztof Kozak	01.10.1979
Marian Sadza	01.10.1979
Roman Jewiarz	01.10.1979

#### 20-year anniversaries

Bogusław Brania	01.01.1984
Kazimierz Chaïm	01.02.1984
Jerzy Głsiorek	01.10.1984
Władysław Gibas	01.12.1984
Zdzisław Orkisz	01.12.1984
Jerzy Piotrowicz	01.10.1984
Władysław Spadek	01.11.1984

#### KAEFER Aislamientos S.A. Spain

#### 30-year anniversaries

Luis Jesús García Souto	14.05.1974
Salvador López Varo	19.05.1974

#### 20-year anniversaries

Julio Garay Uriarte	01.04.1984
Rafael Lorenzo Vázquez	09.04.1984

#### KAEFER Thermal Contracting Services (PTY) LTD. South Africa

#### 30-year anniversaries

Mjoyini Vilakazi	17.04.1974
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#### 25-year anniversaries

Tonny Bongwe	19.03.1979
Jerry Dikgale	11.04.1979
Daniel Mafatle	14.08.1979
Daniel Mthethwa	19.04.1979
Sipho Zulu	14.05.1979
Solomon Mtsweni	10.09.1979

#### 20-year anniversaries

Trevor Gamble	08.10.1984
Samuel Mahlangu	04.07.1984
John Miya	28.02.1984
Ben Mkhathsha	16.01.1984
Sipho Sambo	02.07.1984
Mogato Segkala	16.05.1984
Ephraim Tshoba	16.07.1984
Tony Wood	16.07.1984

#### 10-year anniversaries

Rudi Breedt	14.03.1994
Joseph Buthelezi	02.05.1994
Mfaniseni Chiliza	02.05.1994
Christine Gamble	01.08.1994
Dalangaye Jama	02.05.1994
David Khumalo	13.10.1994
Simon Khuzwayo	02.05.1994
Msikeleni Mbuyisa	02.05.1994
Jabulani Mhlongo	02.05.1994
Simakhule Mjila	01.02.1994
Michael Mjwara	02.05.1994
Patrick Mlanjana	02.05.1994
Ernest Motha	02.05.1994
Moses Mzobe	02.05.1994
Nkomo Nzimande	02.05.1994
Patrick Ramashia	09.05.1994
Johan Torre	30.05.1994
Ngqwanga Zikhali	02.05.1994

#### KAEFER Insultec Ltd. Thailand

#### 10-year anniversaries

Sookporn Jitjammong	03.05.1994
Rajindar K. Khosla	07.04.1994
Surat Meemuk	01.06.1994

## Imprint

k|wert – the Company Magazine of the  
KAEFER Group

#### Published by:

KAEFER Isoliertechnik GmbH & Co. KG  
Bürgermeister-Smidt-Straße 70  
28195 Bremen, Germany  
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#### Layout & Typography:

in|corporate GmbH, Bremen und Berlin

#### Print:

BUD, Golm

#### Photo Sources:

KAEFER-archive, Wolfgang Geyer/Nürnberg,  
Anke Müllerklein/Hamburg, Roland Schiffer/  
Bremen

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