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Industrial Services

GLOBE

Information from Bilfinger Berger Industrial Services AG for clients, partners and the group

Issue 01/2009

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Passing the executive baton

Following the appointment of Thomas Töpfer (left in the photo above) to the Management Board of Bilfinger Berger AG, Dr. Hendrik Brenig (right in the photo above) was appointed by the Supervisory Board to the position of Chairman of the Management Board of Bilfinger Berger Industrial Services AG (BIS AG), effective 1 April 2009. A leader in the process industry in Germany and in Europe, the industrial services company has been part of Bilfinger Berger AG, of Mannheim, since 2002. The new Chairman of the Management Board is committed to providing continuity and to continuing the success of the company's proven business model.

"Our employees enjoy the certainty of knowing that we are committed to this value system even in times of economic difficulties."

Thomas Töpfer

Thomas Töpfer (47) has had a significant part in the success of BIS AG since 1995. He has been a member of the Management Board since July 2001, and since July 2004 he has held the position of Chairman of Management Board of BIS AG, previously trading as Rheinhold & Mahla AG. The economics graduate worked as a management consultant before joining Rheinhold & Mahla in 1995, initially as managing director of a subsidiary, and since 1999 as fully authorised officer of the company.

Performance almost trebled

Under his direction, the Group of companies has positioned itself as a solutions provider and achieved extraordinary growth by expanding the range of services systematically and accelerating the process of internationalisation. In the wake of this internationalisation, the expansion within Europe was followed by a step-up in operations in North America last year. Aggregate output of BIS AG almost trebled since 2004, with a constant rise in earnings to more than 2 billion euros in 2008; the size of the workforce had risen to just under 22,000 employees by the end of 2008.

A particular strength of BIS AG is its decentralised organisational structure, with individual operating units assuming a high level of entrepreneurial responsibility. An important factor in this context is the reliance on, and appreciation of, our workforce: industrial services are a personnel-intensive business, making high demands in terms of commitment and dedication to service, quality, accident prevention and integrity. These requirements are taken seriously by the many employees based at our operating units in working for our customers. It is a consequence of our awareness of our social responsibility at BIS AG that in recent years we have intensified our efforts in the field of basic and advanced vocational training, accident prevention as well as healthcare and long-term care provision for the elderly.

Thomas Töpfer makes it clear that he considers a well-developed corporate culture to be one of the most important prerequisites for achieving strong growth, and for successfully implementing the integration processes that are part and parcel of such growth: "Our business principles underscore a value system that provides us with a focus, an identity and a distinct profile that are recognised beyond our national borders. The result is a pronounced sense of belonging. Our employees enjoy the certainty of knowing that we are committed to this value system even in times of economic difficulties." The departing Chairman of the Management Board also sees reasons for optimism despite the slump in the global economy: "We support our customers in their efforts to optimise costs by providing them with everything from needs-oriented service concepts right through to complete outsourcing solutions. The level of experience and competence we bring to bear can only appreciate in value in difficult economic times, and we can therefore expect to see additional opportunities opening up for us in future."

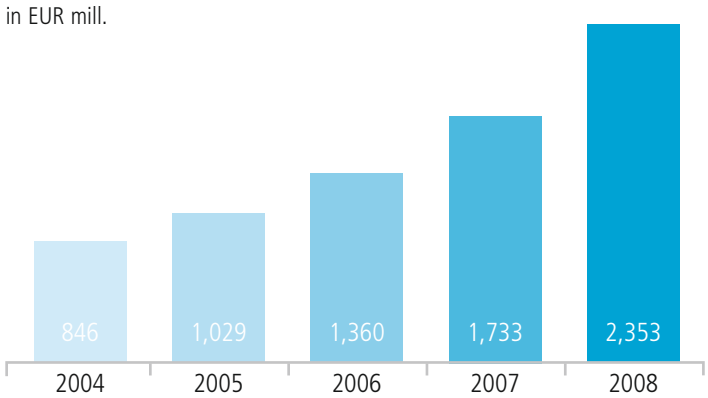
"The decentralised structures are an essential element in the impressive performance of our business."

Dr. Hendrik Brenig

A compelling business model

The new Chairman of the Management Board, Dr. Hendrik Brenig (47), emphasises that the Group of companies is well positioned in the market and will be able to exploit opportunities for further development in future. "The decentralised structures are an essential element in the impressive performance of our business. They provide the foundations for a tried-and-proven business model that will allow the company to continue to grow, and to master the challenges we are all facing at present." Dr. Hendrik Brenig was born in Bonn. After studying business administration in Cologne, he completed his doctorate at the University of St. Gallen in Switzerland. Over the course of his career he has held executive positions with the Volkswagen Group, with VAW Aluminium and Hydro Aluminium. ■

Consolidated total revenues
in EUR mill.



Three questions for the new Chairman of the Management Board

Dr. Brenig, what importance do you assign to continuity in the corporate orientation of the BIS Group of companies?

Dr. Hendrik Brenig: Continuity in the corporate orientation of our Group means predictability, reliability and, of course, stability in the development of our business. We see our encouraging start into the new financial year overall as confirmation that our strategy and organisation are proving sound even during these turbulent times. It shows that our Group of companies is built on solid foundations, and that further profitable growth lies ahead.

What are your first impressions?

Dr. Hendrik Brenig: During my many visits to operating companies in Germany and abroad, I met many dedicated and highly motivated members of staff, and this has left me with very positive impressions. The down-to-earth attitude that I encountered struck me as one of the cornerstones of success of the business. It shapes the manner in which people relate to each other, and especially during the current economic situation, it fosters a healthy dose of confidence in our own strength.

What kind of statement would you like to be able to make at the end of the year?

Dr. Hendrik Brenig: The most important aspect is concerted action to overcome any obstacles that may lie ahead. If, at the end of the year, I can state on behalf of all of us that we remained focused on our task, that we did a good job on behalf of our customers, that we looked for opportunities and made the most of them – then this will have been yet another successful financial year for our company. ■

Tailored personnel development

Local training specifically targeted at technical employees

Tailored employee training makes a crucial contribution to the BIS Group's competitiveness. All central and local training activities are pooled under the BIS Academy's roof. One important target group for training is technical staff too.

"Reflecting our decentralised structure, which delegates a high degree of responsibility to the operating companies, our personnel development activities are firmly entrenched in the individual companies," says Michael Schmitz, Head of Personnel Development. Accordingly, local training programmes are increasingly growing in importance, as examples from the United Kingdom, Norway and Poland demonstrate. "The regional programmes are specifically targeted at our technical staff," adds Michael Schmitz. "These employees make a particular contribution to BIS AG's success. Consequently, training plays a key role within the BIS Academy. Local offerings are able to cover skills-development needs in a particularly efficient way."

Innovative offshore training

In the United Kingdom, BIS Salamis operates two Skills Centres to substantially strengthen its training commitment to technical employees. The first centre was established in Aberdeen, followed in February 2008 by a second one in Norwich. BIS Salamis' core business, namely the provision of maintenance services in the oil and gas industry, entails particular demands and requirements. At the two BIS Skills Centres, insulators, painters and scaffolders are trained so that they are able to meet these requirements. Offshore activities in particular call for far greater technical expertise due to the unique environment they are undertaken in. Frequently, the operatives must work at great heights, suspended by ropes; and they must access difficult positions and carry out their work in extremely tight spaces. Rope access and working-at-height training as well as courses on the correct use of breathing apparatus and fall prevention for work on scaffolding form key elements of the extensive training programme. Certified by the Scottish Qualifications Authority, the skills-development system established by BIS Salamis defines in great detail the expertise and capabilities required for offshore activities. This results in clear criteria for individual training.

Flexibility crucial

In addition, the two BIS Skills Centres develop bespoke training packages for specific customers to ensure flexible responses to special project requirements. One project, for example, which focused on pipeline repairs and replacements together with the construction of steel scaffolding in the concrete base of a North Sea oil rig necessitated a tailored upfront training package for the pipe layers, painters and assemblers assigned to the job. The crew had to perform numerous simulations and dry runs to ensure that they were able to complete all work safely and were prepared for all critical situations.

However, the BIS Skills Centres are open not only to the company's own employees. "We also offer training to customers," explains Paul Matthews, Director of Human Resources at BIS Salamis. "Last year, we conducted working-at-height training courses for Shell employees, for example." Customers are also able to hire BIS classrooms and training facilities.

Internal and external utilisation

BIS Industrier in Norway has been operating a school and training centre since 1993, now with a main office and four local departments. Known as the "BIS Kompetansesenter", it is Norway's largest provider of Public Trade Certificates within insulation, scaffolding and painting, currently expanding by cooperating with BIS plettac and BIS Multiserwis on training and certification of operators for the Norwegian oil and gas market. "We also provide courses for clients and suppliers", says Rune Erland, head of BIS Kompetansesenter. Further, the competence centre provides an extensive management training programme, courses on project planning and management, employee management and health, environment and safety (HES) matters, as well as the recruiting of operators and managing of trainees. "In line with our 'competence cares' vision as the key to our business strategy, systematic and ongoing employee skills development enjoys high priority. This strengthens our competitiveness and bonds trained employees to our company," explains Kurt Harald Aase, director of human resources at BIS Industrier.

The participant numbers testify to the strong interest being shown in these courses: between 2002 and 2008, the BIS Industrier-Kompetansesenter registered a total of 3,828 participants in over 60 courses. During the past ten years, more than 1,200 specialists from within the company underwent training, together with some 130 trainees joining the company for the first time. In recognition of these results BIS Kompetansesenter received the "Competence Award 2007" from the local government. Looking forward to the future, Kurt Harald Aase has this to say: "This year, we want to extend our training programme for skilled employees, among other things. To this end, we will be using our special offshore training facility in Sandnes." This facility is primarily used to train, scaffolding assemblers and painters, under realistic conditions, to prepare them for deployment on oil and gas rigs.

Initiative-driven success

Since 2005, the Polish company BIS Multiserwis has been doing much to promote the official recognition of the professions of industrial insulator and industrial plumber. Explains Managing Director Marian Siwon, "In Poland, the professions of industrial insulator and industrial plumber are defined by law. However, the statutory job descriptions are no longer adequate given the massive increase in customer requirements with respect to maintenance work." To establish these two professions in Poland, BIS Multiserwis opened a training centre in 2005. This was followed by intensive efforts to secure accreditation by the Ministry of Economics and Education, involving the submission of detailed descriptions of the job requirements including the necessary skills, an analysis of market requirements and statements by independent associations. The Polish BIS company's unerring and unwavering commitment paid off. As a result, the professions of industrial insulator and industrial plumber are now well-established elements of the Polish vocational training system.

Intensive training in rope access supported work is provided by the Skills Centres of BIS Salamis.

Training in these two new professions is provided at vocational education colleges as well as at one of the facilities operated by BIS Multiserwis, which serves as a skills centre. "The course for the first year of trainees will be commencing this year," reports Marian Siwon. At the moment, the training curriculum and materials are being prepared. At the same time, work is being completed on introducing skills and quality tests. BIS Multiserwis has already trained its own staff in these two professions. Beyond that, all BIS Multiserwis employees are receiving German and English lessons. Reflecting the particular responsibility which the Polish company considers itself to have as a good corporate citizen, 24 people recommended by the labour exchange also received training at BIS Multiserwis, after they were employed by the company.

Group-wide learning

The local training and skills-development activities described here are being used as a platform for sharing knowledge within the BIS Group. The activities in Norway, the United Kingdom and Poland constitute examples of best practice for personnel development within BIS AG. "The BIS Academy offers an ideal platform for this and is thus encouraging networking throughout the Group and the joint sharing and development of innovative ideas," stresses Timur Tavas, chief representative and head of Central Human Resources & Services. ■

Prestigious award

Paul Matthews accepting the award in recognition of his achievements from Martina Cooper, Hudson HR and the sponsor of the award, as well as Stephen Jardine, Scottish Television, at a gala dinner in Glasgow.

In November 2008, Paul Matthews, Director of Human Resources of Aberdeen-based BIS Salamis, received an award in recognition of his particular achievements in Human Resources. At a gala dinner attended by 600 guests, he received the "HR Director of the Year Award" from "HR Network", the leading Scottish publication on human resources and training. The award acknowledges the outstanding strategic contribution which he made to the company's success. As Director of Human Resources, Paul Matthews is responsible for over 2,000 BIS Salamis employees and in this role exerts a decisive influence on the entire company's performance. This also applies to his commitment to the BIS Skills Centres in Aberdeen and Norwich (see report on this page).

What is particularly praiseworthy is Paul Matthews' excellent relations with BIS AG. Thus, he actively participates in HR activities at the Group level, helping to shape it as a participant in the international HR network and in addition supporting the Junior Management Team, BIS AG's training programme for young potentials. The recognition of BIS Salamis' successful HR activities is seen as marking a favourable signal affecting the entire BIS Group. As part of the Western Europe division, BIS Salamis plays a key role in securing and extending BIS AG's leading position across Europe. "It is only through the outstanding achievements of our employees that we are able to reach our ambitious targets," says Dr. Rudolf K. Jürcke, a member of BIS AG's Executive Board. "We are therefore extremely pleased that Paul Matthews has received this award, and we congratulate him as well as the entire management at BIS Salamis on his success." ■

Looking for bright sparks

Students from the Limburg Technical College of Further Education receive information first hand, here in conversation with Managing Director Günter Illig from BIS Industrieservice Mitte and Human Resources Consultant Nicole Kühnert.

Together with about 80 other exhibitors, BIS AG and its parent group Bilfinger Berger attended a fair held at the Commerzbank Arena in Frankfurt on Main under the motto "Arena frei für kluge Köpfe" ["Arena open to bright sparks"] and provided around 3,000 visitors with information about careers and courses of study in the natural sciences and in engineering. Numerous conversations held at the exhibition booth developed into closer contacts with teachers who were looking to support their students in their career choice, for example by conducting career information talks at schools, by organising engineering project weeks and excursions, and by providing assistance with job applications. These contacts quickly led to advanced activities in the schools. "Personal contact with multipliers or opinion leaders is an irreplaceable asset in the recruitment of young talent," said Nicole Kühnert, Personnel Development Consultant for BIS AG. Günter Illig, Managing Director of BIS Industrieservice Mitte, Frankfurt am Main, supports this view: "The promotion of junior talent and successful networking in our region are of central importance for us. Everything revolves around people. It is only by fostering the development of qualified and committed junior talent that we can maintain our position as one of the leading providers of innovative, future-proof industrial services in the long term. ■

Standardised risk management process introduced

Early-warning system detects vital signals

The slump in the global economy in the wake of the dramatic financial crisis towards the end of last year represented highly pertinent confirmation for the management of BIS AG that systematic risk management is a valuable tool in tackling potentially critical developments at an early stage. Accordingly, after the first risk assessment in September 2008, the potential effects of the financial and economic crisis were immediately analysed in November, so that the results could be taken into account in the budget planning for 2009 in the so-called risk report.

To Chief Financial Officer Joachim Rödiger the risk management system, which was further enhanced in 2008, is an indispensable prerequisite for sound, responsible corporate management. The risk management system helps detect signals indicating risks to the company and allows counter-measures to be introduced at an early stage. Joachim Rödiger: "We implemented our risk management in the form of a standardised process which helps us manage the BIS subgroup, identify and analyse risks and counter them proactively."

Risk assessment is carried out by means of a structured questionnaire. The management of those BIS companies which together account for 70 per cent of Group performance were surveyed directly. Assessments specific to specialist areas were also obtained by including the central heads of those divisions in the survey. The division heads made their assessment of the relevant markets on a cross-border basis. In all, the approximately 1,100 survey questionnaires returned produced a meaningful database for the risk report overall. In addition to, and independent of this systematic survey, the advent of the financial crisis and the economic slump have given rise to a supplementary assessment.

Web-based survey in future

In its highly condensed form, the risk management system facilitates the production of assessments of relevant risk factors both for individual divisions and for the Group as a whole. The scope covers general economic conditions as well as industry-sector and company-specific particulars. Following the launch last year, future risk surveys will be carried out on the web on a regular basis and will include all the companies within the Group.

How quickly individual business risks can take on great significance is shown in a study by Ernst & Young focusing on central Europe. For example, the item "Deepening of the recession" appears for the first time this year on the list of the ten most serious commercial risks. It is also considered an expression of the declining trust on the part of the general public for the "reputation risk", which can affect entire sectors. To Joachim Rödiger, the study confirms the value of a risk management system: "Just as with an early-warning system, we make use of the special expertise within the Group to identify and assess risks. Recognising these early indicators provides us with vital scope for action, rather than finding ourselves surprised by developments as they unfold."

Using the scope for action

In this view, the actual management of risks entails making use of the scope for action provided by having the system in place. If an analysis shows that the company is exposed to structural risks, it follows that measures will be required to counter the risk and at least minimise any damage that may occur. Moreover, the documentation of risks – however early in the process – should lead to an agenda on how to counter the risks in question.

In the event of acute dangers, such as during the financial and economic crisis, what counts for the CFO is speed above all. Keeping a close eye on customers' payment practices, and following up on overdue receivables in particular, were not expressions of inappropriate suspicion. He said that especially during difficult economic times, every business would accept the fact that the payment risk had to be limited and appropriate safeguards taken. Precautionary measures such as prompt billing and appropriate terms of engagement would also help prevent too much capital being tied up in orders placed. ■

Meaningful data helps CFO Joachim Rödiger in the decision-making process. Even more important to him are the consequences drawn from it.

Employer encourages workforce to provide for old age

Early retirement will be no more of a luxury in future than it is now. However, extending the period of working life on the one hand and facilitating early retirement on the other calls for timely provisions to be made. For most BIS companies in Germany, therefore, the new BIS LifeTime programme was introduced at the beginning of this year. Owing to the necessary tax and social insurance law related requirements, the programme cannot be easily migrated to other countries, but it does provide general guidance on how employers and employees can adapt to demographic trends.

On behalf of the companies taking part in the programme in Germany, the Central Works Council and the Central HR Division of BIS AG joined forces in launching the programme to provide for old age. Speaking on behalf of the Central Works Council, its Chairman, Volker Böhme, emphasised: "We know from our many and various contacts with employees just how important it has become for each individual to provide for old age. We're convinced of the need to adopt new approaches in this particular field in future."

With financial backing from the employer, the BIS LifeTime programme enables provisions to be made for early retirement in spite of a working life prolonged to the age of 67. Each employee in a permanent position, after passing their probationary period, can voluntarily arrange for so-called value accounts to be kept, into which time and/or remuneration components can be contributed. The programme to provide for old age is sponsored by the employer in an amount of up to 300 euros per annum. The credit balance established over the years is used to acquire a claim for exemption from service. If the value balance is not used for an exemption from service, then the funds will be disbursed after mandatory tax and social insurance deductions have been made when the employment relationship comes to an end.

The value balance is protected from insolvency within the scope of a fiduciary construction. Moreover, the statutory regulations serve to ensure that the amounts invested will be fully available for the exemption from service. It is worth stressing that participation in the programme does not represent a decision to opt for early retirement. Nobody needs to forfeit their freedom to make a decision until they are ready to retire. "The programme is intended to give assistance with sponsorship from the employer in building a bridge to retirement," says Timur Tavas, General Agent and Head of the Central Human Resources & Services division, "and the financial buffer set up provides the necessary leeway for decision-making purposes." ■

The new trade association WVIS was introduced to the press during the MAINTAIN trade fair. From left: Dr. Ing. Reinhard Maaß, Managing Director, with Management Board members Martin Hennerici, Thomas Töpfer (Chairman), and Ludger Kramer.

New trade association for industrial services

Sector gaining in stature

Leading businesses providing modern industrial services have founded their own trade association. The Wirtschaftsverband für Industrieservice e.V. (WVIS), headquartered in Düsseldorf, was established with the aim of representing the interests of this high-growth industry sector, to engage in the formulation and further development of standards, for example in the area of occupational safety, and to promote a positive image of the industry sector to the wider public, said Thomas Töpfer, speaking in his capacity as Chairman of the Management Board of the WVIS.

As a result of the dynamic growth in this industry sector, the association is facing a range of tasks, according to Thomas Töpfer. Prime among these were active communication about the breadth and scope of the industrial services sector. He added that modern industrial services covered the entire life cycle of a production plant, the assured quality and reliability of the services, as well as the efficiency and availability of a plant. The association would be making a contribution towards positioning the industrial services sector as a reliable and indispensable partner for industry. Its aim was to offer all businesses specialising in the provision of industrial services "an umbrella organisation and a forum for their concerns".

The association's statement points out that the current low level of production capacity utilisation due to the economic situation represents a special opportunity to implement plant maintenance and optimisation measures. In recent years, capacities had been utilised to the limit in many sectors of the manufacturing industry as a result of the economic boom. Periods of lower capacity utilisation provide an opportunity for businesses to maintain and upgrade their plant and manufacturing equipment carefully. The capital investment required for this purpose is not only manageable, it also helps preserve assets and keep them in good working order. Moreover, innovative service concepts and even intelligent outsourcing models can also make a contribution towards lower costs in the long-term, and to minimising risks in the production process.

The foundation members of the WVIS e.V. are BIS AG, Voith Industrial Services Holding GmbH (Stuttgart) and MCE AG (Linz/Austria), with a combined workforce of around 55,000. The sector represents a market volume of about 20 billion euros in Germany and about 100 billion euros Europe-wide for outsourced industrial services for the processing and manufacturing industry. Their Internet address is www.wvis.eu. ■

ACHEMA 2009

Visit us between 11 and 15 May 2009 at our display in Hall 9.2, booth J33-J35

Processing industry meets at the ACHEMA

Broad range of services underlines BIS competence

Bilfinger Berger Industrial Services (BIS) targets the processing industry both nationally and internationally, and offers a comprehensive range of services to the chemicals and pharmaceutical sectors in particular. The BIS Group comprises more than 80 companies, including some with very specific competences. At the ACHEMA trade fair, which opens its doors from 11 May to 15 May 2009 in Frankfurt/Main and which is seen as an important international meeting place for the processing industry, BIS AG and six of the Group's companies will be representative of the broad spectrum of expertise available within the BIS Group.

Through its strategy of offering customers "industrial services solutions", Bilfinger Berger Industrial Services is making a sustained contribution towards achieving a higher profile for maintenance services as an independent, solutions-based industry segment and has earned a prominent position within the processing industry both in Germany and internationally. The chemicals and pharmaceuticals industry are part of the core business for BIS. The ACHEMA therefore represents an important platform for the BIS Group as an industry forum for leading companies in the chemicals, petrochemicals, biotechnology, pharmaceuticals and food industry sectors, as well as for the power generation and refinery market. The joint presence of BIS AG and Group companies BIS E.M.S., BIS Industrieservice Mitte, BIS Industrieservice West, BIS Prozesstechnik, BIS Rohrleitungsbau and Peters Engineering centres around a mixing plant – consisting of all the required piping, pumps, valves, container vessels and a steel supporting structure together with the relevant instrumentation and control equipment – designed to give an overview of the range of services and capabilities of the companies represented here. The plant demonstrates a fluid circuit incorporating storage, transportation, dosing, blending, measuring and monitoring functions. Short slogans presented on "digital picture frames" also list the Group's range of standard services as well as drawing attention to the more specialised services on offer.

Driver for innovation

The chemicals and pharmaceuticals sector is one of Germany's leading industries. The chemicals industry in particular is generally considered a driver for innovation. For a multitude of other industry sectors, it is by far the biggest supplier of new materials such as lightweight yet stable plastics for the automobile industry, for which it also acts as a source of innovative ideas. New materials, components and new chemicals allow other manufacturers to develop innovative products with enhanced properties, like new-generation thermal insulation panels for the construction industry. Moreover, innovations in the chemicals industry help streamline production processes and make them more cost-efficient and environmentally sound.

Disruption-free operation of processing plant and equipment in the chemicals and pharmaceuticals industry requires the deployment of innovative services solutions as well as highly qualified personnel. Representing the broad spectrum of expertise available within the BIS Group are the Group companies attending the ACHEMA industry fair. These companies are introduced individually below, along with selected highlights within their respective areas of expertise.

Magnet for visitors

The ACHEMA presents an overview of comprehensive solutions for entire process technology branches which – according to the organisers of the trade fair, DECHEMA – is unparalleled anywhere in terms of its breadth, depth and topicality. Some 4,000 exhibitors from 50 countries have registered to date. The ACHEMA will occupy 8 halls as well as an outdoor area, a net exhibition floor space of 140,000 m^2 in total. Around 180,000 visitors from 100 countries are expected to attend the fair. The second mainstay of the ACHEMA is a conference with a program comprising 925 presentations, special and guest events, podium discussions, expert forums and plenary presentations – a programme reflecting the full diversity of processing technology today. This year's theme for the ACHEMA special event is: "Chemistry and biotechnology of regenerative raw materials and sources of energy".

Career opportunities with a good future

Basic and advanced vocational training is of prime importance for the Munich-based company BIS AG, and this topic is therefore also featured in their presentation at the trade fair. Industrial maintenance is a field with great potential for the future, offering a wide range of career prospects – for potential job applicants with professional experience as well as for apprentices and university graduates. The company bundles its broad range of personnel development measures under the virtual umbrella of the BIS Academy. The spectrum covers everything from interdisciplinary centralised courses right through to decentralised activities for employees in the trades that are carried out on location. The Group of companies is investing heavily in its workforce, because a high level of professional qualifications is a vital prerequisite for achieving further growth on the basis of having efficient work teams. It is a fundamental requirement especially in a young, high-growth and innovative sector such as industrial services.

Single-source procurement

The two Frankfurt-based BIS companies **BIS Prozesstechnik** and **BIS Industrieservice Mitte,** both headquartered at the Höchst industrial park, are the leading services providers for the processing industry and the energy sector. Some 800 employees look after customers operating both nationally and internationally in the chemicals, pharmaceuticals and food sectors, in biotechnology, waste disposal and the energy sector.

BIS Prozesstechnik specialises in maintenance services for machinery and drive equipment, the servicing of valve equipment as well as the planning, maintenance and calibration of E/I&C and analytical devices and equipment. "We take care of the effective, long-term implementation of a well-designed maintenance concept," explains Dr. Stefan Stieler, managing director of BIS Prozesstechnik. "All the necessary services can be provided from a single source." E&IC and analysis engineering is based in a centre of competence for measurement technology servi-ces which handles the planning and design, instal-lation, maintenance and inspection of process anal-ysis equipment, clean-room qualification, the servicing of laboratory equipment for HPLC, GC, scales, pipettes and a laboratory for the world's largest Feldbus multivendor facility.

The machinery and drive technology division renders services relating to the planning, maintenance and installation of all rotating equipment.

The manufacture of three high-quality, mobile titanium vessels by BIS Industrieservice Mitte was a custom design in accordance with the customer's specifications.

The growing area of valve equipment servicing (workshop-based service as well as mobile on-site service) is also part of the division's wide range of products and services. One speciality of the division is a pool of equipment for lease that comprises some 15,000 items of equipment. The pumps and motors division has been using tried-and-proven full-service models for years. These models help customers achieve high levels of plant availability while optimising costs.

Maintenance and the assembly and installation of equipment in the fields of mechanical engineering and E/I&C as well as specialised workshop services are the areas of special expertise provided by BIS Industrieservice Mitte. The scope of services they offer covers everything from detail engineering and prefabrication via assembly/disassembly right through to equipment commissioning, including all services associated with plant engineering. The company develops bespoke packages of solutions for customers incorporating its expertise in insulation, scaffolding, noise control, apparatus engineering, corrosion protection as well as plastics, films and fabrics.

The expertise of the Apparatus Engineering division of BIS Industrieservice Mitte includes the processing of special materials such as titanium for use in applications in the chemicals and pharmaceuticals industry. This BIS company has manufactured and supplied three high-quality mobile titanium vessels, including agitators and electric motors, custom-built to suit an individual customer's requirements. The titanium vessels were designed using CAD modelling technology. Elastic grinding equipment was used to produce a surface finish of Rz ≤ 0,8 µm.

Cooperation wins out

Maintenance and the assembly and installation of equipment in the fields of mechanical engineering and E/I&C as well as the provision of specialised services are also core areas of expertise for the **BIS Industrieservice West,** company based in Düsseldorf. Other important areas are insulation, scaffolding and corrosion protection. This BIS company will be completing a merger with **BIS HIMA** in the course of this year, and this will result in the perfect combination of traditional complementary packages in the areas of technical construction services (scaffolding, insulation, corrosion protection), interior finishing and industrial facades with E/I&C and mechanical engineering services. The cooperation between the two companies with a combined workforce of 600 is already well established as a result of their joint management.

BIS Industrieservice West and BIS HIMA have demonstrated their ability to work with other BIS companies in the past. They are aiming to build on this ability in future. "We see ourselves not so much as a provider of individual services in the future, but as a business specialising in the bundling of our comprehensive range of competences within the Group of companies," says Joachim Weber, Head of Sales/Project Management with BIS Industrieservice West. This approach is evident in the Toho Tenax project: This leading European supplier of carbon fibres is currently expanding the Heinsberg production facility yet again. Having installed Unit 3 in the year 2006, resulting in an increase in the annual carbon fibre production capacity by 1,500 tons, from the previous 1,900 tons, Unit 4 is already under construction. It will boost the volume of production by a further 1,700 tons of carbon fibre annually.

And, as they did three years ago, Toho Tenax is again entrusting BIS companies with a wide range of specialist services. BIS HIMA was responsible for the entire E/I&C installation, as well as equipment engineering, the installation of heavy equipment and the manufacture and installation of the roller blocks. BIS Rohrleitungsbau handled the construction of all piping, with prefabrication on CNC tube bending machines carried out by BIS Industrieservice Mitte. Insulation was the responsibility of BIS Industrieservice West; technical building equipment and services were entrusted to J. Wolfferts GmbH, which is part of Bilfinger Berger Facility Services. The project entails the installation of about seven kilometres of piping throughout the plant, and about 230 kilometres of cabling. Harald Hofmann, who supervises the installation work at the construction site for BIS Industrieservice Mitte, is very pleased with progress to date. "In addition to the BIS companies, my job is to accommodate the activities of another five service providers on the construction site. This requires a substantial amount of organisation and coordination. However, collaboration with all the site managers for the various service providers has been outstanding."

Acknowledged competence in planning

The Ludwigshafen-based BIS company **Peters Engineering,** with a workforce of about 360, is an important partner for the chemicals, pharmaceuticals and petrochemicals industries. The company provides highly specialised planning services for plant and piping system construction. It has extensive know-how in IT as well as vast experience in the deployment of innovative planning tools. Peters Engineering constantly endeavours to keep abreast of the latest technological developments. "The evaluation of new technologies," says Bernd Bodeit, with Eugen Heim joint managing director of Peters Engineering, "is a fundamental requirement for forward-looking, efficient planning." Which is precisely what BASF has been counting on for years: Peters Engineering played a leading role in the construction of a new citral plant at their Ludwigshafen location. Citral is the raw material for producing vitamins A and E, carotinoids and a range of aroma chemicals. The new plant will produce 40,000 tons of citral per year. Peters Engineering was awarded the contract for the entire planning for the pipework – from the extended concept plan to the subsequent detail engineering – and was responsible for the planning of most of the machinery and equipment in the detail phase. The PDMS planning software was used in this project. The entire planning effort covered about 2,300 pipes and 220 items of machinery and equipment. The BIS company also handled the procurement engineering for the project. The large BASF project presented a number of challenges. One of them was that the deadlines set by BASF were very tight. The problem was overcome primarily through highly flexible personnel deployment planning. "The planning of the pipework was also extremely demanding," reports Eugen Heim. "The confined spaces around the equipment and the large scale of the equipment and pipework together with the high operating temperatures meant that we often had to come up with custom solutions. The use of state-of-the-art planning technology combined with the creativity and competence of the project team meant that we overcame these obstacles as well."

The planning of the pipework for a citral plant at BASF's Ludwigshafen location represented a challenging task for Peters Engineering.

Perfectly timed prefabrication

The name says it all at **BIS Rohrleitungsbau:** the manufacture of plant and pipework is what this BIS company headquartered in Bitterfeld does best. The company provides a range of services associated with the manufacture and installation of industrial pipework for the chemicals and petrochemicals industries and for the energy sector. The services include project management/project control, supply of components, piping materials, pipe brackets and special supports, installation, engineering, final documentation, commissioning support and coordination of associated services such as insulation, corrosion protection and scaffolding. Another key competence is the prefabrication of piping spools in the company's own workshops. Three manufacturing halls with a total floor space of 2,800 m², an indoor crane and a 3,000 m² storage area with crane track are available for this purpose. The rental equipment service and calibration workshop offers customers and affiliated companies a complete range of tools and equipment (4,500 items) for work on industrial piping. All tools and equipment are tested, maintained and provided with test certificates in accordance with applicable operational safety rules.

The mixing plant exhibit demonstrates the range of services offered by the BIS companies represented at the ACHEMA.

The Bitterfeld company's competence in all matters relating to plant and piping manufacture have stood it in good stead when it comes to establishing a fruitful business relationship with Linde in Pullach near Munich. Linde is currently building a new air separator unit for the steel manufacturer at the ArcelorMittal site located north of Bremen. This type of plant is used to extract gases, such as nitrogen and oxygen from the air. As part of the contract, Linde commissioned BIS Rohrleitungsbau to carry out the mechanical equipment installation for air coolers, process vessels and pumps, filter systems, tanks and pipework. Associated services included in the contract are painting, insulation, scaffolding and non-destructive materials testing. The insulation work is handled by BIS Industrieservice Nord, and scaffolding by BIS arnholdt. "Work at the construction site is proceeding on schedule and will be completed on time by August 2009," according to Klaus Ehrhardt from Engineering/Sales of BIS Rohrleitungsbau. Prefabrication has been under way at the Bitterfeld facility since December 2008. The scope of the contracts provides for the manufacture and installation of about 270 tons of piping and brackets.

Individually tailored solutions

BIS E.M.S., based in Cloppenburg, provides services covering the entire life cycle of industrial plant. The range includes consultancy, development, planning, manufacture, construction, installation and commissioning, as well as maintenance. The company's Buseck location specialises in the planning, manufacture and supply of dosing pumps, loop mixers, odorisation systems as well as complex dosing systems.

Around 500 employees focus on individual customer requirements at all times – both in the project and the service business. Custom solutions involving everything from one-off services to complete, integrated service packages are developed in close consultation with principals in the natural gas and petroleum industries and in the food and beverage sector. One example is the project to optimise a newly developed component unit for PVC production. A heated stream of gas containing the raw materials for the manufacture of PVC is fed into a quencher, a system designed to cool heated exhaust or flue gases, where it is cooled and partially condensed. The fluid stream created in this way contains both sludge and the input product for the manufacture of PVC, which in the past was disposed of. To extract the product from the fluid stream, the existing quencher is replaced with a specially developed column. A simulation model (ASPEN PLUS) is used to determine the optimal design and operating parameters for different grades of sludge stream. Trend analyses are carried out, and the results are evaluated and plotted in diagrams. This process allows the best design in terms of engineering and commercial operation to be determined. ■

CURRENT ORDERS INDUSTRIAL SERVICES

Customer	BIS companies involved	Project name	Place/country	Service provided by BIS	Implementation schedule
CENTRAL EUROPE					
Shell Hamburg	**BIS arnholdt GmbH, NL Nord**	**Plant shutdown Block 1-3 at Shell Nord in Hamburg**	Hamburg, Germany	Erection of 230,000 m³ of Layher scaffolding system at three plants	02/2009 - 11/2009
Alstom	**BIS arnholdt GmbH, Karlsruhe**	**Rheinhafen steam power plant Block 8 (RDK 8)**	Karlsruhe, Germany	Erection of scaffolding	10/2008 - 12/2012
Technip Düsseldorf	**BIS Rohrleitungsbau GmbH, Bitterfeld; BIS Industrieservice Ost, Leuna**	**New Kero HDS Unit; TOTAL Leuna**	Leuna, Germany	Installation of 290 t of piping, incl. pipe supports; insulation for a new desulphurisation plant	09/2008 - 07/2009
Linde Engineering, München	**BIS Rohrleitungsbau GmbH, Bitterfeld**	**Air separator plant**	Bremen, Germany	Installation of 280 t of piping, equipment installation	02/2009 - 09/2009
ROMGAZ	**BIS E.M.S. GmbH, Cloppenburg**	**Construction of seven gas dehydration plants in Romania**	Romania	Planning services, supply and installation of materials for the construction of seven gas dehydration plants	10/2008 - 10/2010
Outec GmbH	**BIS OKI GmbH, Pforzheim**	**Ma'aden – Saudi-Arabia**	Pforzheim, Germany	Supply of more than 750 t of insulation for the world's largest sulphuric acid plant in Saudi-Arabia, engineering, supervision	09/2008 - 03/2009
Shell Deutschland GmbH	**BIS Heinrich Scheven GmbH, Erkrath**	**Supply pipelines 2009 RRS Wesseling**	Wesseling, Germany	Feasibility studies, planning and detail engineering, incl. all services; 800 m² of reinforced concrete, 2,200 m³ of excavation; overhaul of 1,000 m of piping systems, some of it duplex steel 1.4462; pouring of 900 m³ of concrete for four drainage basins	2008 - 2011
INEOS Vinyls GmbH, Wilhelmshaven	**BIS E.M.S. GmbH, Cloppenburg (Main Contractor); BIS Industrieservice Nord GmbH, Hamburg (Subcontractor)**	**Main contractor agreement for the handling of maintenance work**	Wilhelmshaven, Germany	Associated services: mechanical engineering, E/I&C, insulation and scaffolding	01/2009 - 12/2011
WESTERN EUROPE					
ExxonMobil	**BIS OHARE Ltd., Cheshire, United Kingdom**	**Project and revision**	Fawley, UK	40,000 person hours for the construction of piping, steel work and equipment; fabrication and installation	01/2009 - 03/2010
ConocoPhillips	**BIS Salamis Ltd., Loughborough, United Kingdom**	**Maintenance agreement for the Conoco-Humber refinery**	Immingham, UK	Insulation, painting and asbestos removal for maintenance and shutdown service	2008 - 2011
INEOS Feluy	**BIS Industrial Services België N.V., Schoten, Belgium**	**Maintenance agreement for both Horizon and Superflex projects**	Feluy, Belgium	General scaffolding, insulation, supervision, asbestos removal, noise control and fire protection services	01/2009 - 01/2010
Air Products	**BIS Industrial Services Nederland B.V., Zwartewaal, Netherlands**	**Europoort and Botlek industrial areas**	Rotterdam, Netherlands	Contract for the provision of scaffolding, insulation and painting services in industrial areas	01/2009 - 01/2012
AkzoNobel	**BIS Industrial Services Nederland B.V., Zwartewaal, Netherlands**	**Maintenance agreement**	Delfzijl and Botlek, Netherlands	Scaffolding	01/2009 - 01/2012
Isolux Corsán	**BIS Multiservicios Industriales S.A., Madrid, Spain**	**Bio diesel plant**	Castellón, Spain	Insulation for 38,500 m² of piping; equipment and storage tanks	08/2008 - 02/2009
Nervión Montajes	**BIS DIASA S.A., La Coruña, Spain**	**Power station**	La Coruña, Spain	240,000 m³ of scaffolding for power station construction site	11/2007 - 06/2009
Navantia	**BIS DIASA S.A., La Coruña, Spain**	**Ship newbuild**	Ferrol, Spain	150,000 m³ of scaffolding for ship newbuilding	11/2005 - 10/2009
Imasa, Sodes	**BIS DIASA S.A., La Coruña, Spain**	**Cellulose plant**	Navia, Spain	140,000 m³ scaffolding for plant expansion	04/2008 - 03/2009
Metso	**BIS Prefal - Isolamentos Térmicos Lda., Lisbon, Portugal**	**Boiler insulation**	Figueira da Foz, Portugal	28,000 m² of boiler insulation	10/2008 - 05/2009
NORTHERN & EASTERN EUROPE					
Chemoprojekt	**BIS Czech s.r.o., Most, Czech Republic**	**Butadiene, installation of columns and integrated equipment**	Kralupy, Czech Republic	Erection and insulation of 13 columns (700-Koch-Glitsch column tray)	11/2008 - 04/2009
BorsodChem Zrt.	**BIS Hungary Kft., Budapest, Hungary**	**TDI-II project phosgene operation**	Kazincbarcika, Hungary	307 t of piping and 210 t of equipment components	09/2008 - 05/2009
Kronospan Romania	**BIS Hungary Kft., Budapest, Hungary**	**OSB board plant**	Braşov, Romania	Erection of 1,500 m³ of scaffolding, insulation and cladding for 8,700 m² sheet metal	11/2008 - 03/2009
Preem Petroleum AB	**BIS Isenta AB, Kungälv, Sweden**	**PreemRaff 2008-2011**	Göteborg and Lysekil, Sweden	50,000 person hours per year; maintenance agreement for three years, based on two components and small projects on construction units	09/2008 - 09/2011
Forsmark Gruppen AB	**BIS Isenta AB, Kungälv, Sweden**	**Nuclear power station Forsmarks**	Östhammar, Sweden	Power station maintenance; insulation, cladding and fire protection, 40,000 person hours per year	06/2008 - 06/2010
Ringhals AB	**BIS Isenta AB, Kungälv, Sweden**	**Nuclear power station Ringhals**	Väröbacka, Sweden	Power station maintenance; insulation, cladding and fire protection, 70,000 person hours per year	06/2008 - 06/2010
Foster Wheeler Energia Polska Sp. z o.o.	**BIS IZOMAR Sp. z o.o., Warsaw, Poland**	**Solvay Sodi**	Devnya, Bulgaria	Insulation for 20,000 m² of piping and boilers, 450 t of fire-proof lining, lighting enclosure	08/2008 - 01/2009
Timber Plant Barlinek	**BIS IZOMAR Sp. z o.o., Warsaw, Poland**	**Noise control for a plant**	Barlinek, Poland	47 ventilator enclosures	09/2008 - 04/2009
Vattenfall Heat Poland S.A.	**BIS MainServ Sp. z o.o., Warsaw, Poland**	**24-hour stand-by service for five co-generation power plants in Warsaw and surr. region**	Warsaw, Poland	Repairs, maintenance and analysis in all industrial areas	01/2009 - 06/2010
Kurotec-Polska Sp. z o.o.; Fabryka Kotłów RAFAKO S.A.; INSTAL Warszawa S.A.	**BIS plettac Sp. z o.o., Ostrzeszów, Poland**	**Electricity-generating power station**	Bełchatów, Poland	Scaffolding for anti-corrosion and installation works on desulphurisation plant in Block 858 MW; erection of 15,000 m² of scaffolding for pump aggregate and industrial sewage system	08/2008 - 06/2009
KB Pomorze Sp. z o.o.; Mostostal Warszawa S.A.	**BIS plettac Sp. z o.o., Ostrzeszów, Poland**	**Lotos refinery**	Gdańsk, Poland	Erection of scaffolding for overhaul of piping system for an elevated road	09/2008 - 06/2009
Boccard and Prochem S.A.	**BIS Multiserwis Sp. z o.o., Krapkowice, Poland**	**Biotanol**	Goświnowice, Poland	Scaffolding; insulation of 14,000 m² desiccators and piping	11/2008 - 03/2009
Mostostal Warszawa	**BIS Multiserwis Sp. z o.o., Krapkowice, Poland**	**Anwil**	Włocławek, Poland	Scaffolding; insulation of 29,000 m² of equipment and piping	06/2009 - 05/2010
TECHNICAL NOISE CONTROL					
Sonelgaz	**BIS Gerber GmbH, Dortmund**	**Hamma 2**	Algeria	Supply and installation of exhaust silencers	2009
MAN Turbo	**BIS Gerber GmbH, Dortmund**	**Villa de Arnedo**	Spain	Supply of intake systems and exhaust stacks	2009


Technip

Assembly and installation of piping on the pipe bridge started as early as December 2008. The pipe bridge holds all the different pipes needed to link up the individual equipment components.

TOTAL invests in Leuna refinery

Rising demand for low-sulphur heating oil

The new "New Kero-HDS" desulphurisation plant is currently being built at TOTAL Raffinerie Mitteldeutschland GmbH. The engineering firm Technip is in charge of the project. BIS Rohrleitungsbau and BIS Industrieservice Ost are providing proactive support.

The annual capacity of the new desulphurisation plant, scheduled for commissioning in the autumn of 2009, will be around one million tons. In building this plant, TOTAL Raffinerie Mitteldeutschland GmbH is responding to the growing demand for kerosene, and especially low-sulphur heating oil (sulphur content ~0.005 per cent). The move was prompted partly by an increase in aviation fuel required at the Leipzig/Halle airport, and partly by the growing demand for low-sulphur heating oil EL, which has been subject to preferential tax treatment since the beginning of 2009.


Technip

The reactor, measuring almost 20 metres in length and weighing 115 tons, travelled about 5,000 kilometers from France before arriving at Leuna.

The newly built plant will consist of four main components: a reactor, a stripper column and two reformer furnaces. Additional equipment includes air cooler units, heat exchangers, tanks and pumps. At the end of September 2008, Technip and TOTAL awarded the contract for installation of equipment and piping to BIS Rohrleitungsbau GmbH. The Bitterfeld company carried out work for both companies in the past. For example, last summer BIS Rohrleitungsbau together with other companies in the BIS Group played a lead role in the refinery's successful turnaround. The company also participated in the construction of the refinery in the period from 1994 to 1997. In addition, the Bitterfeld company, working together with Technip Benelux was responsible for the construction of a hydrogen plant at the Schwedt refinery in 2002.

High-level coordination effort

BIS Rohrleitungsbau stood out as a result of its competence and know-how in terms of piping system manufacture and installation in all their past projects. No doubt the same will be true with the desulphurisation plant project at Leuna. Some 300 tons of piping to link individual plant components and ancillary equipment will be manufactured and installed as part of the project. Prefabrication has been in full swing at the workshops in Bitterfeld since October 2008. An average of 20 staff are involved during this stage of the project.

As part of the assembly and installation at the construction site, scheduled to take place in the period from January to the end of May, the professionals from Bitterfeld also implement comprehensive quality control measures. Radiographic testing is used to examine all welded seams for flaws. Following the successful installation, the systems are subjected to pressure and leakage testing, before the documentation is handed over. "Only once quality assurance testing has been carried out successfully and the piping systems are properly installed will the green light be given for the work of the insulation crews," said Sven Narkus, Technical Project Manager for BIS Rohrleitungsbau. "The effort that needs to go into coordination is correspondingly high. For every piping system, the insulators must not only be scheduled for the right point in time, but their time frame needs to be calculated precisely as well. This is because immediately afterwards, TOTAL will begin the preparations for the commissioning," adds Klaus Ehrhardt, commercial project manager. All insulation work is carried out by BIS Industrieservice Ost. As well as scheduling the insulation work, BIS Rohrleitungsbau is also responsible for the coordination of additional services, such as scaffolding. Undivided attention is given to occupational safety in this project as well, since accident prevention is a guiding principle for the entire Group of companies: "Zero is possible".

Heavy equipment unavoidable

Special highlights during this project are the heavy-lift installation operations for the reactor, the column and the air-cooling units. BIS Rohrleitungsbau was awarded the contract for these jobs as well. The Bitterfeld company and its partner, which specialises in the installation of such plant components, won the contract during the final stages of the negotiations. The success has vindicated all those involved. "In mid October 2008, the almost 20-metre long reactor weighing 115 tons was put in place without any problems," said Sven Narkus. Two cranes with individual lifting capacities of 650 and 300 tons were used in the operation.

Shortly before Christmas 2008, a 37-metre column weighing about 58 tons was unloaded at the site. Since January this year, the process of fitting the column with pipes, platforms, stair-heads and railings has been under way. The next steps will involve all the electrical work, followed by the insulation of the column. At the end of March 2009, the column – its weight by then having increased to 103 tons – is expected to be moved into the plant on special transport vehicles and erected using a lattice mast and hydraulic cranes.

In early 2009 the three air coolers were installed also. They weigh between 15 and 51 tons, and were also erected by means of hydraulic cranes. Immediately prior to the scheduled completion of the project, a further challenge will come in the form of the two reformer furnaces that need to be installed. Klaus Ehrhardt: "The furnaces will arrive in separate sections. Including the steel chimneys, the furnaces reach a height of 50 metres. During the core installation period, around 100 employees covering all the services will be working at the construction site – 50 of them will be welders and pipe fitters. ■

Main supplier for central Germany

The TOTAL refinery at Leuna, commissioned in 1997, is one of the most modern plants of its kind in Europe. Its annual capacity is around 12 million tons of crude oil. The refinery, which is the main supplier of petroleum products for the German states of Saxony-Anhalt, Saxony and Thuringia, covers an area of around 250 hectares, the equivalent of 400 football fields. The facility includes a distillation plant capable of processing about 30,000 tons of crude oil per day, desulphurisation plants, a reformer and a cracker, sulphur recycling plants and a power station, as well as a tank farm for crude oil and petroleum products, loading facilities and a wastewater treatment plant. The refinery's main products are petrol, diesel, heating oil, liquid gas, naphtha, aviation fuel, bitumen and methanol. ■

Good performance acknowledged

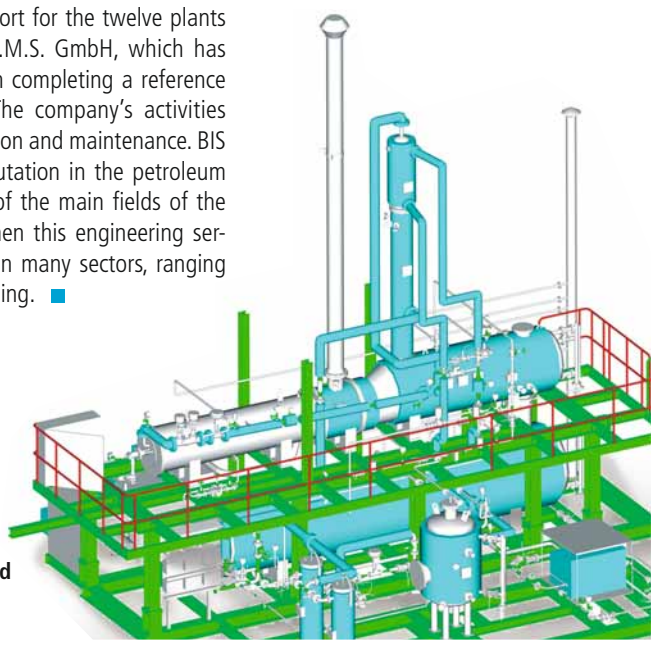
BIS E.M.S. awarded major contract by ROMGAZ

Thanks to many years of successful cooperation with ROMGAZ, the Cloppenburg-based company BIS E.M.S. GmbH was awarded yet another contract for the planning, construction, supply and commissioning of seven gas dehydration plants. Satisfaction with the performance of BIS E.M.S., its compliance with safety requirements, and completion of work on time in previous contracts were crucial in determining the customer's decision.

With an output of some 6 billion m^3 a year – around a third of Romania's requirements – ROMGAZ is one of the country's largest suppliers of natural gas. ROMGAZ had advertised a tender for additional gas dehydration plants in order to boost its capacities. BIS E.M.S. succeeded in gaining the contract for building another seven plants against fierce competition. The contracts were signed in October 2008 in Mediaş, Romania. Completion of the plants is scheduled for 2009/2010. The scope of the contract for BIS E.M.S. covers all the activities in basic and detail engineering, procurement, construction, coordination with local partner companies in Romania, transportation, construction supervision, commissioning and documentation.

Good partnership

As far back as December 2004, BIS E.M.S. signed a first contract with the Romanian ROMGAZ Group for the supply of twelve gas dehydration plants. All the plants were successfully supplied, installed and commissioned without incident by the end of 2006. ROMGAZ expressed a high level of satisfaction with the quality of the work performed under this contract. "This successful performance was made possible thanks to the good cooperation in the mutually beneficial partnership with ROMGAZ as the customer and the local assembly company INSPET," a spokesperson for BIS E.M.S. pointed out. In June 2008, INSPET awarded BIS E.M.S. a four-year contract for maintenance support for the twelve plants it had supplied earlier. Thus BIS E.M.S. GmbH, which has about 500 employees, succeeded in completing a reference project in its very first contract. The company's activities include engineering, plant construction and maintenance. BIS E.M.S. initially earned its good reputation in the petroleum and natural gas industry, still one of the main fields of the company's activities today. Since then this engineering services provider has been operating in many sectors, ranging from manufacturing to food processing. ■



Gas dehydration plants eliminate the bulk of the water that natural gas contains in the form of formation water and condensation. Dehydration prevents corrosion and blockages in long-distance pipline systems.

Highly successful collaboration between three BIS companies

Overhaul of natural gas compressor station

The Achim natural gas compressor station owned by ExxonMobil Production Germany GmbH (EMPG) is undergoing a comprehensive overhaul and upgrade. The work includes the replacement of the exhaust gas lines. Three BIS companies shared the responsibility for the work: BIS E.M.S. as main contractor, and BIS Gerber and BIS Industrieservice Nord as sub-contractors. All three companies work closely together.

The city of Achim, located about 20 kilometres from Bremen, is one of the economic powerhouses in northern Germany. The city is also home to the Achim natural gas compressor station of EMPG, a subsidiary of the world's biggest U.S. oil corporation, ExxonMobil. The purpose of compressor stations is to compress the gas arriving at the station, i.e. to increase the pressure lost during transportation to previous levels, before the gas is transported onwards.

The plant in Achim consists of four compressor aggregates. It has been in operation for about 30 years – which means the time has come for a complete overhaul. EMPG awarded the contract for the overhaul of the compressors to MAN Turbo, based in Oberhausen. Man Turbo, for its part, is entrusting the work to replace and simplify/standardise the exhaust stacks of compressor units 3 and 4 to the competence of BIS. BIS Gerber, of Dortmund, is responsible for the design, manufacture and supply of the exhaust lines. The dismantling and removal of the old exhaust lines and the installation of the new exhaust stacks is carried out by BIS E.M.S., based in Cloppenburg. The insulation work is handled by BIS Industrieservice Nord, of Wilhelmshaven. BIS E.M.S. is the main contractor for this project, despite the fact that MAN Turbo Oberhausen is one of the key accounts of BIS Gerber. The reason: "BIS E.M.S. has been working closely and successfully with EMPG for over 30 years," explains Jens Sülzle, Head of Sales of noise suppression jackets/exhaust systems for BIS Gerber: "As BIS E.M.S. is also in a direct contractual relationship for other conversions which the end customer, ExxonMobil, we decided to let central communications run via BIS E.M.S."

Complex preparations

Even though the two companies, BIS Gerber and BIS E.M.S., had rarely been in contact in the past, the collaboration was very open and constructive right from the start. This ability to work together soon became an absolute requirement, as the preparations for the project, which is headed by Josef Brundiers from BIS E.M.S., turned out to be more extensive than usual. "The lead-up work needed to prepare a binding quotation alone was difficult and took about half a year," said Roland Päplow, Head of Mechanical Engineering and fully authorised officer [Prokurist] of BIS E.M.S.: "Because of the age of the plant, we only had a very limited amount of data to work with." Jens Sülzle from BIS Gerber adds: "Prices and warranted specifications were based on different types of turbine, and their accuracy could therefore not be verified. It was only by taking measurements at the construction site and performing reverse calculations that we could produce approximations of the real, original data." These measurements and evaluations were also carried out by the Technical Head of BIS Gerber, Thomas Meyer. The original data was verified by taking measurements on the new turbine in the testing bay, at a time when Unit 4 was already being built.

The collation of the data, meetings held on site in Achim, and drawing up of the dimensions were handled jointly by BIS Gerber and BIS E.M.S. Preparation of the layout and the engineering drawings were the responsibility of the design department of E.M.S. In the next phase of the project, the exhaust stacks for compressor units 3 and 4, each measuring about eleven metres in height, were manufactured by BIS Gerber.

Deployment of of heavy-duty equipment

Following the calculation and planning phase, the project presented yet another challenge. The existing recuperator on compressor unit 4 had to be replaced with a "normal" exhaust stack. After a preparatory phase of three weeks, the technical personnel from BIS E.M.S. and BIS Industrieservice Nord had succeeded in dismantling the insulation and removing threaded bolts and anchoring points. "The operation to lift the recuperator, which weighed about 35 tons, out of position had be carried out with great precision, so as avoid the risk of damaging the roof of the structure," explained Roland Päplow. A crane with a lifting capacity of 400 tons was used to remove the recuperator, and then to put the new exhaust line in place, and the operation went without a hitch. Thanks to the lower weight of the new exhaust duct it was possible to use the existing steel structure within the building. Once the new exhaust stack was anchored in place, it was time to assemble the piping and fastenings. The last step saw the specialists from BIS Industrieservice Nord install the outer insulation of the exhaust stack.

Follow-up order in the bag

The BIS threesome has completed the work on compressor unit 4. Despite the difficulty in obtaining the relevant data for the dimensioning, the new exhaust line manufactured by BIS Gerber was a perfect fit, and all the work within the project was completed on schedule and without accident. The replacement of the exhaust line for unit 3 commenced in February 2009. The three BIS companies received a special impetus in terms of motivation in the form of a letter of appreciation from MAN Turbo, praising the professionalism of their work. Among other things, the letter stated that, "Our customer (EMPG) has expressed appreciation for the work we have done to date, and we would like to share this compliment with you and take the opportunity to thank the entire team for the work done on this project to date, which has exceeded our expectations. We will contact you in

The operation to lift the 35-ton recuperator went smoothly, as did the installation of the new eleven-metre exhaust terminal.

coming months to discuss a possible follow-up order for the Achim compressor station." This follow-up contract has since been signed. It provides for this successful BIS trio to be responsible for the replacement of the exhaust lines for compressor units 1 and 2 as well. "The scope of delivery is identical," said Jens Sülzle, from BIS Gerber. "What will be easier this time is the planning phase, since the original data from units 3 and 4 can be adopted here. All that will be required before we have the go-ahead for the production is a final control measurement on site, to ensure that the new units 1 and 2 actually are identical." The projects carried out at the Achim natural gas compressor station are likely to represent the starting point for a closer working relationship between BIS Gerber and BIS E.M.S. Thanks to the successful completion of their contracts, the two companies have already intensified their level of cooperation. "This connection could well endure in the long term," said a visibly pleased Roland Päplow from BIS E.M.S. ■

World's largest solar power station going into operation

Solar energy from the south of Spain

Located in the province of Granada in southern Spain, the world's largest solar power station is currently undergoing trials. Collectors spread over an area of more than 510,000 m² – equivalent to 70 football fields – use the sun's radiation to generate enough emission-free electricity to supply up to 200,000 people. BIS Multiservicios Industriales S.A. from Spain and BIS Multiserwis Sp. z o.o. from Poland were also involved in the project. The two BIS companies were responsible for installing thermal insulation on the large-diameter piping system.

The Spanish and Polish BIS affiliates were responsible for insulating the large-diameter pipes during the construction of Andasol 1.

Conditions in the southern Spanish province of Granada could hardly be more favourable: the sun shines on more than 320 days of the year, cloud-free skies in the summer with temperatures often soaring to over 40 °C, and plenty of space, as the elevated plateau of Guadix is otherwise used only for a small amount of agriculture. Moreover, like countries such as Italy or Greece, Spain is located in the world's sun belt, making it an ideal place to build a solar power station.

Andasol 1, as it is known, went into trial operations at the end of 2008. With an output of 50 megawatts, the plant is able to supply around 200,000 people with electricity for a year. The energy is to be used primarily during peak periods in summer, when air-conditioning systems in Spain are turned up to full power. The set-up is perfect, in that the period in which electricity consumption is highest – the early afternoon – is also the time at which solar radiation is at its strongest, and the solar power station therefore achieves its maximum output.

Andasol 1 uses trough-shaped reflectors which focus the sun's rays onto a pipe running along the collector's focal point. The pipe contains a heat transfer fluid which absorbs the sunlight and is then used to produce steam by means of heat exchangers in a power station block. As with conventional power stations, the steam is used to drive a turbine which generates the electricity. In this way, the sun's energy can be used efficiently and inexpensively. Parabolic-trough power generation is a recognised, reliable technology and has been in commercial use in California for over 20 years.

But the US is not the only place where parabolic trough technology is important. Further power stations of this type are planned in Spain. Looking ahead over the next two years, 15 more projects are set to start up. Already under construction are Andasol 2 and Andasol 3, each designed to deliver the same output as Andasol 1. Whereas these two facilities are still being built, construction of Andasol 1 was completed last autumn. The contract awarded to the Spanish company BIS Multiservicios Industriales S.A. and the Polish company BIS Multiserwis Sp. z o.o. by the Spanish construction group Cobra Plantas Industriales and the SENER engineering company comprised the insulation of the large-diameter pipelines. This covers piping with diameters ranging from 15 to 61 cm. The steel pipes were insulated using two layers of mineral wool, enclosed in aluminium cladding.

Insulation protects heat transfer oil

All told, the two BIS companies provided 11,000 person/hours at the construction site, supplying 40,000 m² of mineral wool and 61,500 kg of aluminium cladding. While the Spanish BIS employees handled the procurement and supply management for the materials as well as the prefabrication of the aluminium cladding, their Polish colleagues were responsible for installing the thermal insulation. Good insulation of the pipes is crucial for efficient operation of the solar power station. The heated thermal oil as close to a constant temperature of 400 °C as possible, because higher temperatures would cause the oil to decompose while a drop in temperature would make heating of the water in the heat exchanger less efficient.

One particular challenge posed by this project was the size of the construction site: the materials had to be distributed across an area of 2.25 km² with absolute precision in terms of timing and location. Explains Antonio Martín Arroyo of BIS Multiservicios Industriales: "We unloaded the insulation material as close as possible to each pipe. and two employees were responsible for distributing the rest of the equipment and the cladding material. In this way, we were able to avoid any interruptions to the work flow as a result of a shortage of materials." ■

The sun – an infinite source of energy

The energy potential of the sun is practically infinite. Each year, it sends around 1.08 billion terawatt/hours of energy to the Earth's surface, which is the equivalent of 60,000 times the electricity requirements of the entire globe. This means that solar energy has the greatest potential of any source of renewable energy. The critical advantage is that the sun's power is available precisely where the power station is located, so that it is only necessary to invest in the construction of the power station and the transportation of the electricity, but not in the infrastructure or logistics of fuel supply. Countries located in the earth's sun belt are particularly suitable as sites for solar thermal power stations. Not only does the sun shine more frequently in these latitudes, but the intensity of its radiation is also greater. The sun belt stretches along the equator between the latitudes 40 degrees North and 40 degrees South, i.e. between South Spain and South Africa. Within the sun belt, deserts such as those in North Africa in particular provide almost limitless space. ■

BIS ROB meets complex requirements

Plant shutdown projects completed in record time

The law requires that all large-scale processing plants halt production and are shut down at 5-yearly intervals for the purpose of carrying out inspections, cleaning and maintenance. This general inspection and overhaul became due both at the Lanxess Rubber plant in Belgium and at the YARA ammonia production plant. BIS ROB Montagebedrijf N.V. was responsible for the maintenance work on piping systems in both these plants. In a third major project, the Belgians were able to successfully replace a 330-ton styrene reactor at a BASF plant in Antwerp.

BIS ROB, headquartered in Beveren near Antwerp, specialises in prefabrication, assembly, installation and maintenance of industrial piping systems. At the end of 2008, the company with about 560 employees had the opportunity to demonstrate its expertise in two major plant shutdown projects.

The shutdown phase at YARA in the Netherlands lasted 21 days. The equipment at the Sluiskil location includes three ammonia plants, two nitric acid plants, two urea granulation plants, a prilled-urea plant and two nitrate granulation plants. This makes YARA Sluiskil the biggest ammonia and fertiliser plant in Europe. During the shutdown, maintenance had to be carried out on one of the three ammonia plants. The work involved contributions from 45 different companies, including BIS ROB. Some 180 employees of the Belgian BIS company worked on the shutdown and completed a total of 29,500 person hours without accident. In addition to mechanical work, such as the removal of cladding and the opening and re-sealing of equipment, BIS ROB was also responsible for all welding on piping systems. This required the welding of pipes with external diameters of 30 inches (76 cm) and a wall thickness of up to 45 mm. Subcontractors were engaged to ensure that this task was carried out meticulously.

Tight timeline

The second shutdown was carried out at the Belgian rubber production plant owned by the specialty chemicals group Lanxess Rubber. In addition to the usual turnaround services, BIS ROB was also responsible for the connecting of a new thermal power plant to the existing steam network. The turnaround represented a special challenge overall because, instead of the usual four weeks, the customer specified that the shutdown had to be completed in only three weeks. The great advantage was that, since BIS ROB had also carried out the preceding inspections, the company's specialists were already familiar with the processes and the organisation.

In view of the tight schedule, the different parts of the job needed to be organised with great precision, and certain structures had to be defined in ways that differed from the way it had been done in the past. One measure taken to deal with the tight schedule was to increase the number of employees working on the shutdown to about 120. They worked 10 hours a day, for six days a week. The next step was to plan the activities as accurately as possible. "We prepared a total of eight job folders and distributed them among the site managers," said Frans Fret, a work preparation expert working for BIS ROB. The job folders contained the necessary isometric drawings as well as all the relevant safety and quality information. "The advantage of this system was that each site manager knew exactly what had to be done, the materials needed, and the number of employees that were required for each activity," explained Frans Fret.

Louis Speek was given a special responsibility: the construction specialist, who was in charge of the project, assigned the necessary workers to the teams and supplied them with required materials. Each day he organised a meeting between the principal and the site managers in order to measure progress. This allowed measures such as the deployment of additional staff to be implemented quickly and efficiently.

Extensive testing procedures

In order to keep within the restrictions of both schedule and budget, welding and testing activities on site were kept to a minimum. The bulk of the welding work was therefore carried out off site. The result were so-called golden welds – weld seams that are subjected not merely to the usual water pressure testing, but to special, expensive non-destructive testing, using magnets as well as visual examination. There was also radiographic testing, where X-rays and gamma rays are used to produce an X-ray image of the part being tested.

BIS ROB was also able to demonstrate its competence in the construction of piping systems in another project. At the BASF chemicals plant in Antwerp, a styrene reactor weighing 330 tons needed replacing. The job the BIS ROB specialists were asked to carry out was to disconnect the old reactor from the existing piping, split it into two sections, and then install the new reactor. The vessel then had to be connected to the existing piping system.

Connecting segments made to measure

The crew involved in this project received instructions on the strict safety precautions before the work started. This included the special protective measures used for plasma arc cutting, which was used to split the old reactor. This method allows the cutting of all materials that are electrical conductors, such as steel, nickel, copper, brass, bronze, aluminium and their alloys. Plasma arc cutting generates high levels of UV radiation likely to burn exposed parts of the human body. Special protective work clothing and a protective shield must therefore be worn. There is also the risk of sustaining electric shocks during plasma arc cutting – especially where workers come into contact with the metal parts of the reactor, as was the case with the BASF project. Special rubber mats were therefore used to protect the BIS ROB workers from injury.

Once the old reactor had been split and removed using a special crane, the new reactor vessel had to be connected to the existing piping system. Initial measurements taken revealed large differences in the dimensions of the connections between the new reactor and the existing piping. "Nothing matched, neither in terms of height nor diameters," said Etienne De Jonghe, site manager at the BASF construction site. "We had no choice but to produce made-to-measure connecting pieces."

The next challenge the BIS ROB experts were confronted with was the welding work. Due to the high nickel content in the alloy from which the pipes were made, two workers had to work simultaneously while welding each seam: one from the inside, the other from the outside. Another two crew members were needed to move the segments into the right position. And finally, there was extensive grinding that needed to be carried out. Etienne De Jonghe: "It is thanks to the high level of the qualifications attained by our fitters and welders that we were able to deliver under this contract within the prescribed schedule and without the need for any kind of follow-up work to repair defects." ■

The 330-t styrene reactor requires the use of a special crane at the BASF plant in Antwerp.

Status and size of BIS Industrial Services instil trust

Air Liquide opts for quality and safety

Air Liquide, the manufacturer of gases for technical and medical applications, has been a customer of the Dutch company BIS Industrial Services for more than ten years. Numerous projects carried out successfully in the past have now resulted in the award of a maintenance contract for Air Liquide plants in four locations. The contract comprises the provision of scaffolding and insulation.

Founded in 1902, the Air Liquide Group is the world leader in gases for industrial and medical use. The Group has a workforce of over 40,000 in 75 countries. The company produces primarily air gases such as oxygen, nitrogen, argon, as well as noble gases and hydrogen.

The Group thus also makes a contribution to the manufacturing of products we use every day: as well as oxygen used in hospitals and by patients in home-based therapy, ultra-pure gases for the semiconductor industry and hydrogen for the desulphurisation of combustion fuels, the company also produces carbon dioxide for use in carbonated beverages.

Rolf Klein from Air Liquide Benelux has a clear set of requirements in relation to professional industrial services providers. He has confidence in the competence of BIS Industrial Services.

BIS Industrial Services won the first order from Air Liquide more then ten years ago. Since then, the Dutch BIS company has regularly carried out maintenance and repair work on Air Liquide plants. Thanks to the positive track record, the gas manufacturer has now decided to enter into a long-term maintenance contract with BIS. Under the contract BIS Industrial Services will be responsible for all maintenance activities as well as any planned turnaround projects in Air Liquide plants. About 20 BIS staff will be deployed to provide insulation and scaffolding services in the locations Bergen op Zoom, Rotterdam-Botlek, Rotterdam-Pernis and Terneuzen in the Netherlands.

"BIS Industrial Services delivers services of a high quality and is able to respond flexibly in a range of different situations," said Rolf Klein, Procurement Manager Benelux-North for Air Liquide Benelux, in commenting on the collaboration to date. And he adds: "We only work with companies that are capable of meeting our standards and have proven themselves in the market in the past."

A clear vote of confidence

What counts for the gas manufacturer are consistency and transparency in relation to the activities to be carried out. This includes that all work is performed using the same methods in all locations. For Air Liquide, it is therefore an absolute requirement that all scaffolding and insulation work be carried out by a single contract partner. Other important factors for Air Liquide manager Rolf Klein are a service company's know-how and size: "BIS Industrial Services holds many major maintenance contracts throughout the industry. This creates a sense of trust. Thanks to the size of the company, we can be confident that BIS Industrial Services is capable of handling any type of project." Last but not least, safety considerations were also a major factor in the decision in favour of BIS Industrial Services as a services provider for industry. Thanks to years of experience, the BIS specialists are well aware of the risks involved in working with oxygen, nitrogen and hydrogen at Air Liquide plants. "Safety is a top priority in our operations. The safety standards in force at BIS Industrial Services are a perfect match for our requirements," stressed Air Liquide manager Rolf Klein. ■

Each of the three tanks at the LNG terminal can hold 100,000 cubic metres of liquefied natural gas.

Rising demand for liquid gas

Natural gas is the second most important source of energy after oil. Traditionally natural gas, which is mostly sourced in Russia, is supplied to Europe via pipelines. However, Europe is increasingly looking for supplies of liquefied natural gas (LNG). There are several reasons for this. For one thing, natural gas production in the EU is declining steadily. For another, the unilateral dependence on Russian supplies is considered problematic, given the growing demand for natural gas. Moreover, it is necessary to reduce CO_2 emissions swiftly and on a sustained basis. The use of natural gas as a fuel is far less harmful to the climate than oil.

LNG is shipped in tankers from North and Western Africa, the Middle East, Trinidad and Tobago as well as Norway. Special gas import terminals are required for transferring the natural gas, which is liquefied by the exporting countries for transportation by ship, to the pipelines. From special discharge cranes, the LNG flows through these pipelines into storage tanks. As liquid gas has a lower volume, large quantities can be stored in these tanks and be held in reserve in the event of any supply shortages. LNG is heated to revert to its gaseous form for supply as needed. ■

Major project for BIS OKI and BIS Prefal in southern France

Proven team installs ultra-low-temperature insulation for LNG terminal

Once again, BIS OKI GmbH and the Portugal-based BIS Prefal Lda. have successfully completed work on fitting out an LNG terminal with ultra-low-temperature insulation. As a result, the liquefied gas plant in Fos Cavaou on the French Mediterranean coast is now set to go into operation in mid-2009.

The cooperation between BIS Prefal and BIS OKI started in 2004, when the two companies joined forces for a project at an LNG terminal (Liquefied Natural Gas) at Sines in Portugal. This was followed by an LNG project in Mugardos-Coruña in Spain, where the two BIS companies installed insulation covering a total surface of 22,000 m². The current project, a natural gas terminal in Fos Cavaou near Marseille dwarves all the previous contracts, however. The team was responsible for fitting the entire pipeline system as well as the tanks at the terminal site with ultra-low-temperature insulation. More than 240,000 person hours were needed to insulate a surface area of 52,000 m².

However, the dimensions of the entire project are also gigantic: it is one of the largest of its type in Europe. A terminal was built on a site covering more than 75 hectares. The facility boasts a regasification capacity for an initial 8.25 billion m³ of LNG per year. There are plans to increase its annual capacity to 16.5 billion m³. The gas is stored in three enormous tanks with a capacity of 100,000 m³ each. Ships holding more than 200,000 m³ can be unloaded here. To illustrate these dimensions: 150,000 m³ of liquefied gas is sufficient to supply around 34,000 households for one year.

Proven track record

In addition to the large quantity of material required and the sheer size of the terminal site, the local conditions posed a particular challenge for the BIS companies. These included the Mistral, a gale lashing the area at speeds of up to 150 kilometres an hour on an average of one to two days a week. "On days like that, the air is filled with sand, making it impossible to work outside," says José Gonçalves, Branch Director at BIS Prefal. What is more, the strong wind makes for hazardous working conditions, as sheets of metal or insulation materials could easily be hurled through the air. For this reason, a factory workshop was erected right at the beginning of the project, directly adjacent to the buildings where the piping for the terminal was being assembled. A specially designed rail system was used to transport the pipes into the workshop. Especially pipes with a length of around 16 metres were transported in this way. Inside the hall, they were then coated with a multi-layer plastic hard foam called polyisocyanurate (PIR), a particularly robust insulation material with extremely low heat-conducting properties that make it especially suitable for ultra-low temperature insulation, where temperatures can go as low as minus 193°C.

The close and trusting working relationship between the Portuguese company BIS Prefal and its German affiliate BIS OKI once again played a crucial role in the successful completion of the insulation project. Thus, the German company, based in Oberhausen, was primarily responsible for conducting the negotiations with the customer SOFREGAZ S.A., as well as for project management and supply of the insulation material. BIS Prefal oversaw the operation on site. On average, 150 BIS specialists were on duty at the construction site on the Mediterranean coast, with this figure peaking at 200 at times. Looking back, José Gonçalves is very pleased with the performance of the two companies: "With this contract, we were again able to demonstrate the two companies' competence, and we hope that we will be able to continue these joint efforts in other projects of this type in the future." ■

With an area of 75 hectares, the Fos Cavaou facility is one of the largest LNG projects in Europe.

Pipeline construction and insulation activities in southern France require shelter from the Mistral.

Worker safety on scaffolding is a top priority for BIS. This is something customers appreciate.

Recognition from all quarters for Spanish BIS companies

Customers honour HSEQ efforts

In the fierce competition within the industrial services sector, technical know-how alone does not guarantee commercial success. The Spanish BIS companies BIS Multiservicios Industriales and BIS DIASA S.A. are also ahead of their competitors by virtue of having the highest safety standards throughout the industry.

The capacity to quickly assess and then eliminate the risks inherent in certain situations and course of actions in the course of a project requires a great deal of awareness on the part of employees at all levels. The entire Group of companies is therefore guided by the objective of making every effort to avoid incidents and accidents. The Spanish BIS companies have been facing up to this challenge consistently and with great success. As a consequence of these efforts, in October of last year BIS DIASA became the first scaffolding company in Spain to be granted OSHAS 18001:2007 certification in recognition of the successful implementation of its safety systems and other measures designed to protect the health of its employees. The new standard for occupational health and safety management systems, OSHAS 18001:2007 (Occupational Health and Safety Assessment Series), was officially released at the end of July 2007. In comparison with OSHAS 18001:1999, the standard still in force until 30 June 2009, greater importance is given to health protection under the new standard.

Awards speak for themselves

The swift implementation of the revised standard for occupational health and safety management systems serves as a good example of the efforts undertaken by the BIS Group in Spain in the area of HSEQ. Moreover, these efforts have repeatedly been given recognition by customers. For scaffolding work carried out in Asturia, BIS DIASA was presented with the Safety Award Of The Month for April, July and October 2008 by the principal DuPont. In recognition for insulation work on the coking facility at the BP plant in Castellón, BIS Multiservicios Industriales earned the award as the company with the best safety performance at the construction site for the month of October 2008. Iberdrola Generación congratulated several BIS DIASA employees in writing for their exemplary conduct in terms of occupational health and safety in the course of carrying out scaffolding work. And finally, following the completion of maintenance, insulation and scaffolding activities at BASF in May 2008, the safety officers responsible for BASF Sonatrach PropanChem in Tarragona presented BIS Multiservicios Industriales with a "Certificate of Appreciation" in recognition of the their efforts to prevent occupational hazards.

Ramón Oliver, spokesman for the BIS companies in Spain, said it well: "Prizes and awards recognising our efforts in the area of HSEQ represent confirmation that we are seen as role models in the industry. For us, this acts as an incentive as well as an obligation for the future." ■

BIS LONG-SERVING STAFF

GERMANY

25th Anniversary in 2009

Andres, Werner	1 Aug
Babacan, Dilaver	1 Sept
Baumgart, Brigitte	1 Sept
Bernhardt, Uwe	1 Sept
Biedermann, Manfred	7 June
Bogatzki, Romuald	6 Aug
Braune, Simone	27 March
Breuer, Klaus Bernd	1 Aug
Bruneit, Dirk	1 Sept
Buettner, Alfred	19 March
Burghardt, Olaf	1 Sept
Butz, Ralf	1 Feb
Čaušević, Fadil	1 Apr
Cichonczyk, Herbert	27 June
Dietze, Jörg	1 Sept
Dressen, Erwin	9 Apr
Engel, Jürgen	9 July
Fehlau, Ruediger	18 July
Finger-Oliva, Markus	1 Sept
Fischer, Volker	1 Sept
Frank, Roland	1 Aug
Gauger, Erwin	25 July
Gerhards, Holger	10 Dec
Gerlich, Jörg	1 May
Giebels, Helga	1 Jan
Gimber, Reiner	15 Oct
Gimpel, Uwe	1 Sept
Godo, Hans-Juergen	3 Sept
Goergen, Hermann-Josef	25 July
Hanauer, Christof	1 Sept
Happ, Rüdiger	3 Sept
Harzheim, Klaus	1 July
Heffels, Willi	1 Oct
Henn, Norman	1 Sept
Heun, Alexander	1 Sept
Hoffmann, Heidi	8 Oct
Inamoglu, Metin	1 Sept
Jacob, Andreas	1 Aug
Jansen, Freddy	1 Oct
Jungbluth, Inge	1 Sept
Kaya, Ramazan	30 July
Klocke, Dirk	26 June
Knopf, Peter	3 Sept
Koch, Rainer	1 Feb
Kopp, Karsten	10 Sept
Korthals, Peter	1 Sept
Kratzer, Günter	19 July
Kremers, Hermann-Josef	10 Sept
Krings, Anton	1 Oct
Krusche, Eberhard	1 Dec
Kubel, Martin	1 Aug
Kunert, Michael	1 Sept
Lauer, Peter	19 June
Lennartz, Heinz	1 Oct
Linnert, Walter	20 Aug
Meinzer, Joachim	13 Aug
Melder, Heinrich-Peter	27 March
Mirković, Dušan	9 July
Mustajbegović, Ismet	4 Dec
Nauert, Gisela	1 May
Pfannes, Roberto	1 Sept
Pinarbasi, Aydin	1 Oct
Poschen, Theodor	16 July
Potthoff, Robert	6 Feb
Puljić, Boško	7 May
Rabe, Bernd	1 Sept
Radek-Lehmann, Frank	1 Sept
Ranko, Heinz Dieter	12 Jan
Reuken, Arndt	1 Aug
Richter, Jens	1 Sept
Richter, Jörg	1 Sept
Schilcher, Friedrich	1 Aug
Schlebusch, Werner	1 Aug
Schmelz, Matthias	1 Sept
Schmidt, Dieter	2 Apr
Schmidt, Klaus	1 Apr
Schmitt, Waldemar	3 Dec
Schneidewind, Thomas	2 July
Schöber, Ingo	16 July
Schubert, Herbert	1 Sept
Schubert, Robert	1 Sept
Sepak, Ivan	3 Sept
Seven, Manfred	2 June
Sollmann, Frank	17 Dec
St Maria Schmeier, Alexander	1 Sept
Stolz, Dieter	30 July
Tekbicak, Paşa	1 Sept
Terwei, Matthias	5 Nov
Theile, Jens	1 Sept
Thierjung, Harald	9 July
Turpcu, Süleyman	1 Sept
Vocke, Holger	1 Sept
Vojnov, Svetomir	1 Apr
Wagner, Klaus	1 Apr
Werner, Volker	1 Aug
Wessinghage, Gregor	1 Sept
Wiesmann, Lutz	1 Aug
Wohlfahrt, Bernhard	1 Sept
Woog, Rolf	1 Feb
Zausinger, Maximilian	2 Jan
Zielske, Michael	1 Sept

40th Anniversary in 2009

Barkmann, Peter	1 Sept
Berns, Klaus	20 Nov
Bormann, Dietmar	1 Sept
Borowka, Christoph	19 May
Bruckner, Albert	13 Oct
Burgmann, Hubertus	13 Nov
Christ, Dieter	1 Sept
Disque, Lothar	15 Oct
Drolic, Reinhard	1 Aug
Durović, Ljubisa	1 Oct
Eberling, Peter	1 Sept
Edelberg, Martin	29 Jan
Fackelmann, Wolfgang-Dieter	29 Sept
Fieger, Franz	2 Jan
Finger, Horst	20 Oct
Geiser, Peter	1 Dec
Gratzl, Karl	1 Sept
Grüning, Bernd	1 Aug
Güttler, Waldemar	1 June
Haase, Klaus	1 Aug
Hamacher, Heinz	4 Aug
Hauth, Werner	3 Feb
Henrich, Günter	1 July
Hensgens, Franz	4 Aug
Hochmuth, Gerhard	1 Sept
Hochrein, Klaus	1 Sept
Huber, Horst	1 Sept
Jansen, Helmut	4 Aug
Kremer, Dieter	6 Oct
Lambertz, Johannes	4 Aug
Lang, Klaus	28 Apr
Lechner, Dieter	1 Sept
Liebrecht, Klaus	1 Sept
Menz, Gottfried	2 Jan
Mobers, Gerd	15 Dec
Mueckschel, Franz	4 Aug
Neumann, Erhard	1 Sept
Nix, Hans	3 Feb
Palm, Siegfried	1 Sept
Pfaud, Peter	1 July
Piplak, Kurt	1 Oct
Ricker, Peter	1 Sept
Römisch, Manfred	1 Sept
Rücker, Werner	7 Nov
Schneider, Josef	1 Sept
Stevens, Dietmar	18 Aug
Stickel, Franz-Peter	1 Sept
Streubel, Manfred	1 Sept
Turba, Günter Albin	1 Sept
Uhl, Friedhelm	1 Apr
Willhardt, Dieter	1 Nov
Zdobinsky, Peter	1 Sept
Zender, Heinz	21 Nov
Zuehlke, Klaus-Juergen	4 Aug

50th Anniversary in 2009

Suckrau, Wolfgang	1 Apr

OTHER COUNTRIES

25th Anniversary in 2009

BELGIUM

Antheunis, Jos	19 Nov
Cordeel, Ronny	3 Jan
Marchouh, Mohammadi	1 Oct
Swerts, Guy	15 Oct
Van Exaerde, Werner	28 Aug
Van Rijswijk, Willem	3 Jan
Vleeschouwer, Peter	3 Sept

UK

Best, Clarence	1 March
Fisher, David	10 May
Haigh, Harry	30 Apr
McDonald, Patrick	7 Feb
Morgan, John	1 Jan
Seddon, Peter	25 Apr

THE NETHERLANDS

de Hoon, Hans	8 Oct
de Vos, Adrianus	3 Sept
Kuijpers, Albert	8 Oct
Leeggangers, Franciscus	3 Sept
Mol, Chiel	15 Aug
Roossien, Alfred	9 Jan
Tu, Jimmy	17 Dec
van den Berg, Arie	20 Feb
Visscher, Berend	9 Jan
Wedda, Jakob	10 Sept
Willemse, Cor	10 Sept
Willemse, Hans	14 June

NORWAY

Olafsen, Johnny Olaf	20 Aug
Selfors, Svein Aksel	25 June

POLAND

Czartoszewski, Andrzej	23 Oct
Fidler-Szczepańska, Monika	12 Dec
Jeziorski, Zbigniew	1 Sept
Kordos, Roman	3 Dec
Kościjańczuk, Kazimierz	11 Jan
Kulikowski, Dariusz	23 Oct
Porębski, Krzysztof	5 Jan
Szostak, Tomasz	5 Sept
Tarkowski, Mirosław	11 May
Zasiewski, Paweł	11 Sept

PORTUGAL

Gonçalves, José	11 June
Silva, Maria	11 Dec

SWEDEN

Granskog, Leif	20 Aug
Hansson, Bo	22 Oct
Hedvall, Roland	15 Dec
Malmqvist, Mikael	1 Dec
Nilsson, Joacim	26 Nov
Nilsson, Gustav	1 Sept

CZECH REPUBLIC

Baldrych, Václav	5 May
Pochobradský, Zdeněk	30 Nov
Valeš, Milan	8 March

HUNGARY

Egresi, Sándor	16 July
Kocsis, Miklós	14 Aug
Meixner, Zoltán	4 Sept

USA

Aly, Khalid	21 Aug
Campbell, Kenneth	1 July
Christianson, David	4 Apr
Claverie, John	7 May
Coffey, James	4 Sept
Ellis, Matthew	19 March
Jackson, Terry	1 July
King, Shawn	27 Apr
Lange, Carlos	11 June
Mitchell, Harrison	7 Sept
Pepple, Daniel	14 May
Schmidt, Francis	1 Sept

40th Anniversary in 2009

THE NETHERLANDS

Lukasse, Dirk	8 Dec

NORWAY

Kleven, Helge	27 Oct

POLAND

Bednarczyk, Krzysztof	20 Sept
Białkowski, Zdzisław	22 March
Bloch, Franciszek	14 July
Chełchowski, Kazimierz	2 Dec
Kania, Henryk	23 Oct
Koluśniewski, Marek	23 June
Kowalewski, Jerzy	2 Apr
Kuzka, Henryk	9 Dec
Łanczont, Zbigniew	24 Jan
Misiejuk, Zygmunt	3 Aug
Obrembowski, Kazimierz	13 Apr
Pasternak, Józef	20 March
Topczewski, Marek	17 Aug
Żółtowski, Bogdan	4 Nov

SWEDEN

Persson, Jan	10 Oct

SPAIN

Garcia Colorado, Fulgencio	19 May

CZECH REPUBLIC

Buben, Vladimír	17 July
Vraný, Bořivoj	16 May

HUNGARY

Koller, Istvánné	2 Jan
Pócs, János	3 Feb

USA

Schenkelberg, Paul	16 Dec

BIS Frucon Industrial Services recipient of several awards

Industry Leading Performance

US company BIS Frucon Industrial Services Inc. received no less than three awards last year as a result of their work for Procter & Gamble. The awards are in recognition of its outstanding performance and particularly also its industry-leading safety standards. Global conglomerate Procter & Gamble is one of BIS Frucon Industrial Services's most important customers. For over 60 years now, it has been providing construction, industrial, maintenance and turnaround management services, among other things, at the 14 Procter & Gamble facilities across North America.

The trust which Procter & Gamble (P&G) places in the BIS experts is now also reflected in several awards. Thus, BIS Frucon Industrial Services won the "2008 Supplier of Excellence Award", which was officially presented at the two-day supplier summit at Procter & Gamble's headquarters in Cincinnati, to which 350 of the group's total of 80,000 suppliers had been invited. "This award was presented for the first time in 2008 and we are very proud of being one of the recipients," says Andy Donnelli, President and CEO of BIS Frucon Industrial Services. Rick Hughes, Vice President of Global Purchases at Procter & Gamble, explained the background to the award: "We want to recognise the outstanding commitment and service of our suppliers."

P&G awarded BIS Frucon Industrial Services the "2008 Supplier of Excellence Award" in recognition of its outstanding services. From left: Jeff Koop, Senior Vice President and CFO of BIS; William R. Campbell, Director Global Capital Purchases at P&G; Andy Donnelli, President and CEO of BIS; Greg Fox, Senior Purchasing Manager, NA Capital Purchases at P&G.

Whereas BIS Frucon Industrial Services received the "Supplier of Excellence Award" for the first time, the St. Louis, Missouri-based company was presented with the National Maintenance Agreements Policy Committee (NMAPC) "Zero Injury Safety Award" for the seventh time at the NMAPC Safety Awards Dinner on October 29, 2008 at the National Building Museum in Washington, D.C. This award recognises the fact that BIS Frucon Industrial Services completed its services at the Procter & Gamble plant in Iowa City with no accidents in 2007.

400,000 zero-injury person hours

The high occupational safety standards are also acknowledged in the receipt of the "Construction Industry Safety Excellence (CISE) Award". Presented at the Annual Construction User Round Table Conference in November 2008, this award recognises the joint safety programme which BIS Frucon Industrial Services pursues with Procter & Gamble at their plant in St. Louis. As a result, no accidents have occurred in the past three years, during which the BIS Frucon Industrial Services experts have completed more than 400,000 person hours. In addition, the "SafeStart Programme" was implemented with the aim of heightening each individual employee's safety awareness and encouraging them to take the initiative in ensuring zero injuries.

BIS Frucon Industrial Services joined the BIS Group in January 2008 and is one of the ten oldest companies of its type in the United States. With just under 2,000 employees, it operates in the areas of industrial services, maintenance, turnaround management and construction as well as planning and engineering. Many other renowned companies in the US process industry alongside Procter & Gamble also rely on the experience and expertise of BIS Frucon Industrial Services. ■

PRODUCTION CREDITS

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Bilfinger Berger Industrial Services AG, Munich

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The GLOBE is available in English, Czech, German, Hungarian, Polish, Spanish and Swedish.

For more than 20 years many European countries have been supplied with natural gas and condensate via the natural gas processing plant at Kårstø in Norway. This site, which also houses a gas-fired power plant, is to undergo modernisation over the next few years.

Gas from the North Sea

Gas from the Statfjord, Gullfaks and Heimdal fields and the Troll/Sleipner project is transported to Kårstø via the Statpipe pipeline system. This pipeline made it possible to cross the Norwegian trench, which is over 300 metres deep, for the first time. In Kårstø, propane, butane and benzene are separated from the gas. The resultant dry gas is then pumped to the Ekofisk complex through a further part of the Statpipe system. The gas is then transported from Ekofisk to the terminal near Emden via the Norpipe pipeline system. Statpipe has a total length of around 850 kilometres. Located some 250 kilometres to the west of Stavanger, the Sleipner gas field was discovered in 1974. In the years that followed, gigantic rigs were assembled, with gas production commencing in 1996. Together with Troll, Sleipner is one of the largest gas fields in the North Sea. Whereas the processed gas reaches the European continent by means of a pipeline system, the gas condensate is transported by ship from Kårstø. ■

BIS Industrier exclusive supplier of scaffolding services at Kårstø

Greater safety and efficiency for Norwegian gas terminal

Over the next three years, Norwegian company BIS Industrier will be exclusively responsible for all scaffolding activities for the KEP 2010 project at Kårstø gas processing facility. Signed last year with StatoilHydro, the contract provides for the delivery of all the equipment as well as the provision of expert personnel.

Kårstø, which is located on the west coast of Norway, is a key centre in the gas industry, supplying many European countries, including Germany, with gas and gas condensate. The gas is extracted from fields located in the North Sea and fed into the distribution network via a terminal which went into operation in 1985. StatoilHydro, the largest supplier of gas to Western Europe after the Russian company Gazprom, is responsible for the technical operation of the terminal. In addition, there is a gas-fuelled power station in Kårstø.

To render the site fit for the coming years, the "Kårstø Expansion Project 2010" (KEP 2010) was launched last year with the aim of enhancing safety and efficiency at the site. This consists primarily in modernising the plant facilities and equipment directly related to the Statpipe pipeline system and the Sleipner gas field (see supplementary report). This equipment is to be brought into line with the latest technological developments. All told, the efforts to modernise the gas terminal will cost 6.5 billion Norwegian Kroner (NOK, around EUR 680 millions).

Working at great heights

BIS Industrier has been selected as the exclusive supplier for all scaffolding work for the KEP 2010 project. As well as supplying all the equipment, it will also be furnishing the necessary staff, primarily local specialists. This is not an easy job for the BIS Industrier employees as 90 percent of the work will have to be performed at great height, thus making extreme demands on site safety. "We are very much looking forward to this job and will be giving it our complete and utter attention," says Jens Chr. Terjesen, managing director of BIS Industrier.

With a term expiring in January 2011, the contract has been signed directly with the Norwegian energy group StatoilHydro, which is a major advantage, as Sigve Aaboe, director of tenders & contracts at BIS Industrier, explains. "Frequently, we operate as a subcontractor. In this case, however, we have the advantage of direct contact with the customer. This permits more efficient communications, thus allowing us to gain a better understanding of the customer's requirements. At the same time, the two parties have greater scope for implementing improvements and enhancing the consultation process."

The contract, which includes an option for renewal until September 2011, is of great strategic importance for the Norwegian BIS company. For one thing, BIS Industrier was able to prevail over strong competitors while, for another, the company hopes to obtain further projects thanks to the protracted duration of this contract. As well as this, Kårstø has a favourable strategic location for BIS Industrier as it is close to Haugesund and also Stavangar – "the capital of Norway's oil industry" as well as BIS Industrier's headquarters. The company has successfully completed numerous jobs for the local industry in the Haugesund-region in particular, where around 150 employees are assigned to long-term projects. "Here we have been able to demonstrate our entire expertise covering insulation and scaffolding as well as surface treatment and industrial cleaning," explains Sigve Aaboe. ■

Large-diameter pipelines for compressor station in eastern Hungary

No compromises when it comes to quality

In an effort to secure the gas supply for Hungary and the neighbouring countries to the south for the long term, the Hungarian oil and gas group MOL upgraded its compressor station at Beregdaróc. BIS Hungary was awarded the contract for the prefabrication and installation of the pipelines.

Hungary receives the bulk of its gas deliveries from Russia. The gas is pumped through long-distance gas pipelines via Ukraine to Beregdaróc. This town in eastern Hungary is located only a few kilometres from the border with Ukraine. A compressor station that has been in operation for 20 years compresses the gas and pumps it into Hungary's gas supply network. Some of the gas also supplies neighbouring countries further south, such as Serbia, Croatia and Bosnia.

To double the flow capacity of the pipeline from Ukraine, MOL upgraded the station with the addition of three new compressors. These compressors are capable of pumping around 30 million cubic metres of gas into the country's supply network each day. Of the three new compressors, two are in operation, while the third is held in reserve in case of an equipment failure. The responsibility for prefabrication, assembly and installation was given to BIS Hungary, as the company not only has adequate experience with large-diameter pipelines for the gas industry, but was also involved in a project to increase the capacity of the Beregdaróc station some years earlier. In this new project, which was completed in November 2008, the focus was on the installation of underground and above-ground large-diameter pipelines. The pipelines were made of weather-resistant steel, with diameters ranging from 600 to 1,200 mm and wall thicknesses between 17 and 30 mm. The fittings were of similar proportions, with the largest weighing 26 tons.

Good results out of workshops

The work required a high level of organisational effort, as well as state-of-the-art welding processes. Project Manager Lajos Szabó explains: "Producing some 1,300 welding seams on pipelines with a wall thickness of up to 30 mm is not a simple task. As the pipelines were running close to each other, the welders did not have much room to work in. Furthermore, time was short, and the quality standards in the gas industry are very strict. The Hungarian BIS company therefore decided to carry out the bulk of the prefabrication not on site, but in their workshop in Tiszaújváros – some 150 kilometers from the construction site. They succeeded in welding 60 per cent of all the seams there. "This resulted in welding seams of better quality," said Lajos Szabó, "because neither rain nor wind nor cold hamper the work. Moreover, at the workshop the pipelines can be rotated, and this eliminates the need for working overhead. The pipeline sections weighing many tons were then transported to the compressor station by truck.

The pipelines and fittings for the new compressors are impressive in their dimensions.

BIS Hungary also broke new ground in the welding of the seams. While the root layers inside the pipeline were produced using the so-called WIG process (Wolfram inert gas welding), metal active gas welding using filled-wire electrodes was employed for the first time on the cover layers. The welders had undergone comprehensive training at the company's own welding training workshop in the lead-up to the project work. "Filled-wire welding is a high-performance welding process that results in better seam quality as well as greater efficiency," explains Lajos Szabó. "The high melting rate not only speeds up the welding process, it also produces better results." And he adds: "The success proved us correct. In the 100-per cent radiography testing, the seams were rated as 'very good'."

Some 35 welders were working during the peak period, and the entire project required between 40 and 60 BIS Hungary employees. All the work was carried out to a high standard of quality, on time, and to the fullest satisfaction of the principal. And the reward for this toil: BIS Hungary will be a leading participant in the construction of Hungary's largest gas storage facility in Szőreg. ■