Operative Management Structure

Bilfinger Berger AG

Bilfinger Berger Power Services GmbH

Boiler Technology

Boiler Technology South Africa

Power and Environmental Engineering

Piping Technology

Mechanical Engineering and Process Engineering and Vessels

Babcock Borsig Service GmbH

Steinmüller-Instandsetzung Kraftwerke Gesellschaft für Energie- und Umwelttechnik mbH

Deutsche Babcock Middle East FZE (UAE)

Duro Dakovic Montaza d.d. (Croatia)

Bilfinger Berger Power Holdings (Pty) Ltd.

Steinmüller Africa (Pty) Ltd.

Steinmüller Engineering Services (Pty) Ltd.

KOG Group

BHR Hochdruck Rohrleitungsbau GmbH

PKS Planungsbüro Rohrleitungs- und Anlagentechnik GmbH

BHR Piping Systems (Pty) Ltd., Pretoria (South Africa)

MCE Berlin GmbH

MCE Maschinen- und Apparatebau GmbH & Co. KG (Austria)

MCE Industrietechnik Aschersleben GmbH

Power Services Competence Technologies

References

Product and Competence Spectrum

Human Resources

Addresses

Locations

Imprint

Contents

Letter of the Management 3
Key Data 4
Management and Advisory Board 6
Management Report 7
Overview of Divisions 12
Bilfinger Borsig Service GmbH 13
Bilfinger Berger Power Holdings (Pty) Ltd. 14
Deutsche Babcock Middle East FZE 15
Duro Dakovic Montaza d.d. 16
Steinmüller-Instandsetzung Kraftwerke Gesellschaft für Energie- und Umwelttechnik mbH 17
BHR Hochdruck Rohrleitungsbau GmbH 18
Babcock Noell GmbH 19
MCE: Backing for the Group 20
Power Services Competence 22
- Technologies 24
- References 30
Product and Competence Spectrum 38
Human Resources 40
Addresses 44
Locations 47
Imprint 48

Status March 2010
Dear Ladies and Gentlemen,

For the previous fiscal year Bilfinger Berger Power Services GmbH (BBPS) is once again able to present an altogether gratifying balance sheet for all divisions. In view of the still difficult overall situation in 2009 this cannot be taken for granted. But in spite of a few political irritations concerning the construction of new power stations one thing is still for sure: The power demand continues to rise all over the world, for demographic reasons alone. There is in particular a continued demand for clean, efficient and environmentally friendly power stations. Whether this target is reached by the construction of new plants or by conversions – the companies of the Power Services Group, as specialists in both areas as well as in power station service, have also in 2009 played a substantial role in sophisticated power station constructions and conversions. Successfully completed projects have led to interesting follow-up orders.

In order to be well equipped for the challenges of the future energy market the Group focuses on the continued strengthening and development of its engineering competence in its divisions of boiler technology, piping technology and power and environmental engineering. In view of the stable financial situation of the Group BBPS has once again been able to position itself even better in various markets on the basis of substantial investments.

In South Africa the acquisition of the majority stake in KDG Fabricators (Pty) Ltd. and the establishment of BHR Piping Systems (Pty) Ltd. have taken our Bilfinger Berger Power Holdings (Pty) Ltd. a great step forward towards becoming number one in the African market of power station components.

With the opening of a new building complex of offices and workshops in the United Arab Emirates Deutsche Babcock Middle East FZE (DBME) has pointed the way for the still young Deutsche Babcock LLC. The opening ceremony in Abu Dhabi in the presence of the local partner and high-ranking guests showed the determination of DBME to commit itself in the long term to the strong growth market of the Gulf region. This perspective remains extremely promising.

A sign of the consistent development of the future market of Southeast Europe in 2009 was the acquisition of the majority stake in the Croatian installation service provider Duro Dakovic Montaza d.d. which specializes in power stations. This strengthens the position of Power Services in the region and secures additional qualified staff. There is no doubt that this team will also in future be very busy. Within the Group there continues to be a high demand for installation capacities, the market keeps asking for these, and in Romania, Poland, Bulgaria, Hungary and the Czech Republic as well as the countries of former Yugoslavia there is a great demand for the modernization of power stations.

A step in the same direction is the acquisition of the Austrian power station and industrial service provider MCE by Bilfinger Berger AG. The incorporation of the companies MCE Maschinen- und Apparatebau GmbH & Co. KG, MCE Industrietechnik Aschersleben GmbH and MCE Berlin GmbH into the Power Services Group which started on February 1, 2010 involves further advantages.

Bilfinger Berger Power Services therefore remains on a growth course with a sense of proportion. This also applies to the continuing investments in personnel and training. Our entire team of excellent employees once again expresses its thanks to you: our customers and suppliers. We will also in future be a reliable partner to you.

With kind regards and best wishes for 2010.

Gerd Lesser
Chairman of the Executive Board
Bilfinger Berger Power Services GmbH (BBPS) represents one of the three service segments of the Bilfinger Berger AG Multi-Service Group. In 2009 numerous companies at home and abroad operated under the umbrella of Power Services with the main companies being: Babcock Borsig Service GmbH, Bilfinger Berger Power Holdings (Pty) Ltd. in South Africa, Deutsche Babcock Middle East EZE, the youngest group member Duro Dakovic Montaza d.d., Steinhüller-Instandsetzung Kraftwerke Gesellschaft für Energie- und Umwelttechnik mbH, BHR Hochdruck-Rohrleitungsbau GmbH as well as Babcock Noell GmbH.

A close network of branch establishments links the activities of BBPS in the markets of Germany and Europe as well as in the Middle East and in South Africa. In fiscal year 2009 the Group had approx. 3,500 employees, thereof approx. 3,200 in Germany. At the end of the past fiscal year a good 200 apprentices were included in the number of German employees. Power Services achieved a group performance of approx. € 1.017 billion in 2009. With its subsidiaries and participations Bilfinger Berger Power Services GmbH is counted among the market-leading service companies of the power generating industry. About half of the business volume is realised in the German market. In the area of power services BBPS is now an important factor in the European market, this applies increasingly also to Eastern Europe.

The core business of the Power Services Group basically concentrates on boiler technology, piping technology and power and environmental engineering. In these segments it offers maintenance, repair and upkeep and in particular demanding measures for the service life extension, efficiency increase and rehabilitation of power stations. In addition, the company is actively involved in the construction and conversion of power stations and in the supply of components – partly from its own manufacturing facilities. It goes without saying that the company possesses all the required certificates, and its high project management competence and comprehensive engineering know-how make it a competent partner for its customers. This has been impressively demonstrated once again in 2009 by numerous important reference projects at home and abroad.

Further information on the group of companies is available on the Internet at: www.bbps.bilfinger.de.

### In thousd. €

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2008</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order receipt</td>
<td>1,053,075</td>
<td>1,091,049</td>
<td>1,042,799</td>
</tr>
<tr>
<td>Orders on hand</td>
<td>1,137,446</td>
<td>1,101,107</td>
<td>792,447</td>
</tr>
<tr>
<td>Performance</td>
<td>1,016,936</td>
<td>782,190</td>
<td>693,774</td>
</tr>
<tr>
<td>Balance sheet total</td>
<td>577,341</td>
<td>501,657</td>
<td>415,356</td>
</tr>
<tr>
<td>Employees</td>
<td>7,497</td>
<td>4,582</td>
<td>3,917</td>
</tr>
</tbody>
</table>

Bilfinger Berger Power Services GmbH in 2009
Management Report

The Power Services division as part of the Bilfinger Berger AG Multi-Service Group continued its extremely successful business development also in 2009 in spite of continuous turbulence in the global economy. The individual companies once again achieved good results in all business areas. The motto is growth with a sense of proportion. With investments in the Middle East, in South Africa, Croatia and Austria the Group has positioned itself even better now in decisive markets for a steady future development.

Management

Gerd Lesser
Chairman of the Executive Board of Bilfinger Berger Power Services GmbH

Ronald Diehl
Managing Director of Bilfinger Berger Power Services GmbH

Alexander Neubauer
Managing Director of Bilfinger Berger Power Services GmbH

Advisory Board

Chairman
Dr. Jürgen M. Schneider
Former Member of the Board of Bilfinger Berger AG

Deputy Chairman
Kenneth D. Reid
Member of the Board of Bilfinger Berger AG

Prof. Dr. Harald Giesel
Former Member of the Board of Ruhrkohle Holding AG

Dr. Hans-Dieter Hang
Former Chairman of the Board of E.ON Energie AG, Hannover

Prof. Dr.-Ing. Werner Hlubek
Former Chairman of the Board of RWTÜV e.V.

Dr. Manfred Kehr
Managing Director RWE Power International / RWE GmbH & Senior Technical Advisor for Nuclear Projects RWE Power

Report about the position of Bilfinger Berger Power Services GmbH
Business activities
Bilfinger Berger Power Services GmbH (BBPS) is one of the market-leading companies in the business areas of boiler technology, piping technology and power and environmental engineering. For its customers from the power station sector BBPS plans and manufactures power station components, partly supplies these from its own manufacturing facilities, and repairs and maintains power stations.

When it comes to service life extension of power-generating plants, their efficiency increase or basic rehabilitation, the company is a competent business partner. With its know-how and its continuous research and development work the Power Services Group also provides a considerable contribution to the reduction of CO2 emissions of power stations. The group of companies mainly operates in Germany, Europe, South Africa and in the Gulf region.

Position of the company
Order receipt in fiscal year 2009 amounted to approx. € 1 billion and was thus at the same level as in 2008. Orders on hand also remained at the previous year’s level. Performance increased from € 782 million to about € 1.06 billion. Negative tendencies in the market were counteracted in due time by working capital management – which turned out successful. Net liquidity improved against the general trend, the cash flow remained positive. The high results of the previous year were increased once again in absolute and percentage terms.

Development of the business segments
All business segments of the Bilfinger Berger Power Services Group once again took advantage of the continuously increasing power demand all over the world and the necessary modernization of existing power stations. The Group still participates in the construction of the Finnish nuclear power station of Oikiluoto but also in the new French power station of Flamanville. Steinmüller Africa of Bilfinger Berger Power Holdings (Pty) Ltd. (BBPH) is already working on several large orders at its new production facility near Pretoria. By the incorporation of BHR Piping Systems (Pty) Ltd. and the acquisition of a majority stake in XGC Fabricators (Pty) Ltd. BBPH has positioned itself also in South Africa as a piping specialist and is on its way to becoming the leading multi-service provider in the southern hemisphere. The acquisition of the majority stake in the Croatian installation service provider Duro Dakovic Montaza d.d. (DDM) which specializes in power stations strengthens the market position of the Group, especially in Southeast Europe.

In the German market all companies of the Group participated in the processing of demanding projects and profited from new orders. In 2009 Babcock Noell GmbH (BNG) started with the building site stage of two large projects: The flue gas desulphurisation plants (FGD plants) for the power stations of Boxberg and Moorburg of Vattenfall Europe AG. BHR Hochdruck-Rohrleitungsbau GmbH (BHR) is involved with its technologies and engineering competence in the construction of almost all new power stations in Germany. Steinmüller-Instandsetzungsfertigwerke Gesellschaft für Energie- und Umwelttechnik mbH (SIK) was primarily engaged in the inspection and upgrading of several coal-fired power stations in Germany and East Europe. Babcock Borsig Service GmbH (BBS), for example, is one of the technology leaders in the market with its development of the most modern hard coal pulverizers in the world.

Capacity utilization
The above described development of the business segments in 2009 once again resulted in a good capacity utilization. For the numerous large orders Power Services will also in future use the full scope of its human resources. Where delays occurred in power station projects, in particular caused by political uncertainties, these were balanced by assigning the employees to other orders. Due to a favourable arrangement of contracts the Group did not run any project risks in these cases.

Investments
Investments in 2009 amounting to a good € 26 million were at the same level as in the previous year. They were fully covered by our own cash flow and were thus not affected by the global financial crisis. For 2010 further investments are planned: after completion of the large extensions in South Africa, however, they will be reduced to about € 20 million, largely for the modernization of machinery.

Training and human resources development
In 2009 the favourable business development and order situation once again led to increased personnel requirements in some areas. Where required, the workforce was increased in selective areas. In view of the reduced growth the Group was a little more cautious than in the previous year with regard to the employment of new personnel. The aim is to fill vacant positions with junior staff from within the company. For this purpose BBPS consistently carries out training and once again employed 166 new apprentices, almost as many as in the previous year. Advanced training is also promoted in order to provide employees with even better qualifications for the changing requirements of our business.

Expected development of the company
Bilfinger Berger Power Services GmbH will continue to grow even if this growth will be clearly slowed down in some regions – primarily due to political decisions concerning the construction of new power stations. However: The need for the rehabilitation of power stations continues to be high. In spite of the cyclical slowdown the demand for clean and safe energy will continue. The Group therefore has an optimistic attitude with regard to 2010 and the long-term future. Due to the consistent maintenance and extension of our competence and based on targeted investments in sound markets BBPS is well prepared for the years to come.

In South Africa 18 young trainees started their training-on-the-job in 2009 (training of several months).

Gerd Lesser
Chairman of the Executive Board

Ronald Diehl
Managing Director

Alexander Neubauer
Managing Director

Bilfinger Berger Power Services GmbH, Oberhausen, March 2010
“Bilfinger Berger Power Services remains on a growth course – with a sense of proportion.”
Babcock Borsig Service GmbH

Babcock Borsig Service GmbH (BBS) is a market-leading service provider in Germany for the power generating industry. The focus is on the project business and engineering-driven power station service. BBS has the largest German power station installation team at its disposal, has its own manufacturing facilities and competent engineering units. This enables it to offer development, construction, manufacture, installation and commissioning from one source.

Many of our customers rely on the full life cycle management of BBS. In spite of the tense economic situation the company was able in fiscal year 2009 to clearly extend its maintenance and inspection business, especially abroad. In Germany the major projects of the year include the installation of a combustion chamber in the new Steag power station in Duisburg-Walsum as well as a low-NOx firing system at Basell Wesseling. A heat displacement system is supplied to the Polish power station of Belchatow, a coal feeding plant to Belgium and a superheater to Brazil. Together with Steinmüller Engineering Services (Pty) Ltd. BBS erects an air heater for the SASOL refinery.

Linking of economy and ecology
Research and development are the basis for progress and growth. In this respect BBS places particular emphasis on the strengthening and extension of its engineering competence in all business areas. As far as the construction of new power stations as well the rehabilitation and conversion of power stations for performance, service life and efficiency increase is concerned priority is given to sustainability and efficiency. Especially for the reduction of emissions BBS offers innovative solutions according to the state of current technology.

Technological pioneering work
With its progressive POWERISE® system for the recovery of flue gas heat in power stations BBS uses the full optimization potential on the flue gas side. The advantages: Increase of electrical energy by 3% “green megawatt”, increase of efficiency, reduction of waste heat and reduction of CO2 emissions.

With its development of one of the most modern hard coal pulverizers in the world BBS is counted among the pioneers and market leaders in pulverizer construction. For low-NOx firing systems this pulverizer is of decisive significance. BBS offers its own pulverizer technology and services not only for its own makes but also for all third-party makes.

Comprehensive service all over the world
As an internationally operating company the Oberhausen based company BBS offers a comprehensive service concept for power stations, waste incineration and industrial plants. The parent company in Oberhausen as well as a large number of agencies, technical offices and supply factories in all parts of the world guarantee full service geared to the customers’ requirements.

Figures & Facts 2009:
- In 2009 the company had 595 employees.
- The performance in the fiscal year amounted to € 228 million.

Management:
- Gerd Lesser (Chairman of the Executive Board)
- Andreas Michalke
- Alexander Neubauer
Bilfinger Berger Power Holdings (Pty) Ltd.

Bilfinger Berger Power Holdings (Pty) Ltd. (BBPH) deals with the maintenance, modernization and conversion of South African power stations with focus on hard-coal-fired plants. In addition, it offers service works to other industrial branches. BBPH has recently extended its offering through the incorporation of BHR Piping Systems (Pty) Ltd. and the acquisition of a majority stake in KOG Fabricators (Pty) Ltd.

The largest subsidiary: Steinmüller Engineering Services (Pty) Ltd.

In the centre of the activities of BBPH is the largest company Steinmüller Engineering Services (Pty) Ltd. (SES) offering engineering services to industrial companies of the energy, petroleum, chemical, iron, steel, paper and cellulose sector. In addition, SES renders administration and management services to the other companies of the Group.

Steinmüller Africa (Pty) Ltd.

The new manufacturing facility for pressure parts near Pretoria has already started to support BBPH. Steinmüller Africa received an order for the manufacture of the roof and vertical walls for the power stations of Medupi and Kusile plus further options. Intervalve (Pty) Ltd. manufactures the tube coils for these two power stations.

KOG Fabricators (Pty) Ltd.

At the end of October 2008 BBPH acquired a 75% stake in KOG Fabricators which specializes in the design and manufacture of expansion joints; it recently added Lisega pipe supports to its range.

BHR Piping Systems (Pty) Ltd.

The pre-production of high-pressure pipes is the main business of BHR Piping Systems. With its new plant and the new inductive bending machine which is unique in Africa (an investment of over €15 million), the know-how and the capacity of BHR Piping Systems, BBPH has now an excellent chance to gain a foothold in the South African market with piping systems and expansion joints for power generation, for the petrochemical industry, mining, the process industry, the water treatment, iron and steel sector.

Service, personnel and training

Further subsidiaries of BBPH in South Africa: Intervalve (Pty) Ltd. manufactures, sells, repairs and maintains valves. Eduardo Construction (Pty) Ltd. provides qualified installation and service personnel. EBS Training Academy (Pty) Ltd. ensures the future availability of qualified technical staff.

Management:

- Hermann Brümmel (Chairman of the Executive Board)
- Salvador von Neuberg
- Tony Unstead

Figures & Facts 2009:

- In 2009 the company had 1,449 own employees.
- The performance in the fiscal year amounted to €140 million.

Deutsche Babcock Middle East FZE

The Gulf region has been a prospering business area for many years. The companies of Deutsche Babcock Middle East FZE (DBME) have been represented in the Gulf countries since the eighties and have also recently been able to participate in the rapid economic development. The financial crisis also took its toll in the Gulf region. For DBME, however, the year 2009 was entirely dominated by the orders on hand which had been previously received during the period of strong growth.

Still a strong market

The activities under the umbrella of the intermediate holding company extend, apart from power generation, also to the support of on-shore plants for oil and gas production as well as to the construction of sea water desalination plants. Especially Abu Dhabi and Saudi Arabia are still regarded as a strong market which is driven by government investments in the infrastructure as well as in oil and gas projects.

Successful reorganization

DBME has completed its reorganization from a branch-specific structure to a regional holding company. The young Deutsche Babcock LLC has opened a new location in Abu Dhabi. This new complex of offices and workshops offers a solid basis for the future which is driven by government investments in the infrastructure as well as in oil and gas projects.

Growth in several emirates

In the United Arab Emirates, DBME participated in several major construction projects. Its concentration on installation work which was added to its busy service and maintenance activities secured considerable growth. Contracts carried out for the oil and gas industry also remained at a high level.

Babcock Borsig Service Arabia Ltd., the new DBME subsidiary in Saudi Arabia, was also able to increase its sales volume with emphasis on the refurbishment of steam generators and pressure parts. Babcock Borsig Service Arabia is the leading local service company for the existing steam generators.

In Qatar DBME also increased its performance by its participation in DEBAI, a joint venture with the Al Jaber Group of Abu Dhabi. As in previous years the market is driven by enormous growth. The focus of DEBAI was on the installation and construction of gas turbine-driven power stations. However, DEBAI also strengthened its market position by its participation in the Shell GTL project. At peak times DEBAI employs more than 2,500 persons.

Management:

- Martin Schalkowski (Chairman of the Executive Board)
- Clemens Wolters
- Peer Maluck

Figures & Facts:

- In 2009 the company had 1,923 own employees (4,010 including DEBAI).
- The performance in the fiscal year amounted to €106 million (€168 million including DEBAI).
DDM, Vlatko Blekic, sees his company in good hands now: “We are very satisfied that our long search for a strategic partner has come to a successful end and that Bilfinger Berger Power Services, with whom we have successfully cooperated in the European market for many years has now become our new strategic partner.”

Successful company with tradition
DDM with headquarters in Slavonski Brod (Croatia) is a Europe-wide supplier of full installation services in the power station sector. Construction, installation, disassembly as well as manufacture and engineering. The regional focus is on Croatia and Germany. In 2009 the attention was mainly turned to projects for the installation of new power stations in EU countries.

Founded in 1926, the company nowadays has a workforce of more than 1,000 employees with many years of international experience. The annual performance amounted to € 48 million. In spite of the economic crisis DDM reached the targeted sales figures also in 2009: 74 % of sales were obtained by projects in foreign markets, partly because of the EU environmental standards which are now also applicable to them.

Tried and tested cooperation
During its 80 years of company history DDM participated in projects in more than 50 countries all over the world, the company has been present in the German market for 30 years. Its most important branch establishment is in Oberhausen. The Bilfinger Berger Power Services Group has cooperated with DDM for many years as a reliable partner in power station projects.

Opening the future market of Southeast Europe
The Power Services Group expects a continued good demand in the power station service sector. Based on this acquisition the Bilfinger Berger Power Services Group secures additional qualified staff for itself and at the same time strengthens its market position in Southeast Europe. With the incorporation into the BBPS Group the future market of the new EU countries will be systematically developed: The countries of the former Yugoslavia, Romania, Poland, Bulgaria, Hungary and the Czech Republic. These countries have a large demand for modernization in the power station sector – partly because of the EU environmental standards which are now also applicable to them.

Steinmüller-Instandsetzung Kraftwerke Gesellschaft für Energie- und Umwelttechnik mbH
Steinmüller-Instandsetzung Kraftwerke Gesellschaft für Energie- und Umwelttechnik mbH (SIK) offers extensive engineering and services to power stations. From the planning, manufacture, supply and installation up to maintenance, repair and inspection. Numerous customers from the industrial and energy sector appreciate SIK as a reliable partner. By service life extensions and efficiency increases of power stations it contributes to cost reduction and efficiency improvement – and at the same time to improved environmental protection. The company has 426 highly qualified employees and is actively engaged in the new German federal states as well as in Central and East Europe with three subsidiaries.

Performance once again clearly above target
In fiscal year 2009 the focus in the area of services was, as in previous years, on inspection measures in lignite-fired power station units in the Lausitz area as well as in Saxony. The services basically referred to the replacement of partial heating surfaces, conversions in the burner area, services on air heaters and electrostatic precipitators as well as the partial replacement of a live steam and re heater line (main reheater). The manufacturing facility at Jänschwalde recorded a good capacity utilization again in 2009 and once again worked 150,000 hours – a similar performance level as in 2008 and clearly above target.

Projects successfully completed
In the project area the focus of work in 2009 was on the continuation of the conversion of a second boiler in Poland which had already been started in the previous year. Installation was completed on October 4 in accordance with the contract. For a power station in East Hungary the first four of twelve firing systems were constructed, supplied and installed. The power station thereby reaches a clear reduction of NOx emissions. In the area of industrial boilers the conversion of a fluidized bed firing boiler was realized at a paper mill in order to increase performance. For a heat and power station in the central German area conversion work on a second boiler was completed.

Figures & Facts 2009:

- In 2009 the company had 1,028 employees.
- The performance in the fiscal year amounted to € 48 million.

Board of Directors:
- Vlatko Blekic
  (Chairman of the Board)
- Drago Cugura
- Darko Katic
- Stjepan Sveric

Management:
- Manfred Rösner
- Udo Wolter
Customers appreciate flexibility, efficiency and independence based over the world must be capable of meeting highest demands. Almost all new power stations.

The company was actively engaged in 2009 in the construction of the renovation of power stations all over the world. In Germany the suitable piping systems BHR therefore has a substantial share in higher temperatures and pressures. As a market-leading supplier of Efficiency improvements can be obtained in power stations by for a reduction of emissions which again requires higher efficiency. That power station owners look for a better utilization of fuels and

Renovation of power stations with high pressure

The huge demand for these piping systems results from the fact that power station owners look for a better utilization of fuels and for a reduction of emissions which again requires higher efficiency. Efficiency improvements can be obtained in power stations by higher temperatures and pressures. As a market-leading supplier of suitable piping systems BHR therefore has a substantial share in the renovation of power stations all over the world. In Germany the company was actively engaged in 2009 in the construction of almost all new power stations.

The piping systems supplied by BHR to nuclear power stations all over the world must be capable of meeting highest demands. Customers appreciate flexibility, efficiency and independence based on own manufacturing facilities. At the BHR factory in Dortmund pipes are currently manufactured for the largest nuclear power station in the world which is Olkiluoto 3 in Finland with careful separation of the austenitic materials from other steel material.

Key to efficiency

The company also has highly specialized know-how in efficient welding techniques such as submerged-arc narrow gap welding, branch welding and cladding at the pre-production site as well as TIG-orbital narrow gap welding during installation. The reliable control of these techniques is an important key to the construction of efficient and thermally highly stressed power stations.

Further segments of BHR are industrial piping systems as well as plant engineering and installation. For the segment of maintenance BHR holds all the required certificates. At the main location of Essen and at the branch establishments and factories all over the Federal Republic a total of approximately 1,400 persons are currently employed. On the whole, the successful performance continued with a large number of orders in spite of the difficult year 2009.

Nuclear engineering: Experience pays off

In the area of nuclear engineering BNG supplies complete plants for flue gas cleaning designed according to the state of current technology. Customers also benefit from the competence of the technology leader in connection with the modernization of existing plants. After completion of the engineering BNG started in 2009 with the building site stage of two large projects: The flue gas desulphurization plants (FGD plants) for the power stations of Boxberg and Moorburg of Vattenfall Europe AG. Further interesting orders were received in particular in the areas of flue gas denitration (DENOX), modernization and efficiency increase. The trial operation of the FGD plant at the Schwarze Pumpe oxyfuel pilot power station with a degree of desulphurization of 99.8% even surpassed the extremely high requirements.

Our competent service team

In the area of nuclear service BNG is a reliable service and installation partner to owners of nuclear plants. Highly qualified crane operators, well-trained cutting specialists at the workshops as well as experienced employees dealing with system and vessel pressure tests are the basis for a steadily growing service volume.

Centre of competence for magnet technologies

In the previous fiscal year the department of magnet technologies received orders from large research institutions such as the Max-Planck-Institute, the research centres in Jülich and Karlsruhe. In addition, the year was characterized by strategic acquisitions in connection with the large international research projects ITER (nuclear fusion reactor in Cadarache, France), X-FEL (DESY in Hamburg) and FAIR (GSI in Darmstadt).

Management:

Ronald Diehl
(Chairman of the Executive Board)

Jürgen Weyers

Thomas Appel

Mario Peper

Gunter Rychlik

Figures & Facts 2009:

- In 2009 the company had 1,272 employees.
- The performance in the fiscal year amounted to €406 million.

Management:

Dr. Ronald Hepper
(Chairman of the Executive Board)

Peter Stephan

Peter Welp

Figures & Facts 2009:

- In 2009 the company had 315 employees.
- The performance in the fiscal year amounted to €66 million.
With the acquisition of the Austrian industrial and power station service provider MCE Bilfinger Berger adds further engineering competence and capacities to the rapidly expanding service business of Bilfinger Berger Power Services. Three MCE companies will be incorporated into the structures of Power Services during the year 2010:

**MCE Maschinen- und Apparatebau GmbH & Co. KG**
MCE Maschinen- und Apparatebau in Linz, Austria (289 employees) supplies components for water, gas and steam turbines as well as for aviation and space travel. Large process engineering equipment and reactors for the chemical industry, pressure pipes, welded constructions, special machines and spare parts are also included in the performance portfolio. The special know-how of the company is the combined processing by welding and sophisticated mechanical processing as well as the installation of large, heavy and complex steel components.

**MCE Berlin GmbH**
MCE Berlin (171 employees) is primarily a life cycle partner to power supply companies and public utility enterprises. It combines the technical know-how of a plant construction specialist with excellent competence for maintenance and repair. New plants are planned, manufactured, installed and commissioned on a turn-key basis. The service offer is also very extensive: Advice, engineering for maintenance and repair processes, optimization, down-time management and support for complete plant areas.

**MCE Industrietechnik Aschersleben GmbH**
MCE Industrietechnik Aschersleben is a specialized company (75 employees) which concentrates on the manufacture of structural steel pipes, dolphins, pressure vessels and pressure equipment, welded fittings, manufacture of spools, offshore foundations and special structures.

**Triple competence asset:**
Integration of MCE into Power Services

Even more service to Power Services customers
The three companies participate in numerous demanding projects all over Europe, quite often together with companies of the Group. The list of references ranges from turbine blades for power stations to tank covers for the Ariane V rocket up to core containers in numerous nuclear power stations and huge reactor containers for the chemical industry. From February 2010 all these services of the MCE companies form part of the range offered by Power Services which will thus be in a position to meet the high demands of its customers to an even better extent.
Power Services Competence

Technologies
- **Boiler Technologies:** Optimum use of fuels – firing and pulverizer technology
- **Piping Technologies:** BHR is a forerunner for orbital welding in installation conditions
- **Nuclear Engineering:** Sought-after competence for the construction of new nuclear power stations

Reference projects
- **Belchatów:** Polish power station giant upgraded with SIK technology
- **Boxberg:** At the Boxberg power station BHR and BNG ensure efficiency and clean conditions
- **Olkiluoto:** At the Finnish nuclear power station of Olkiluoto BHR, BNG and DDM do an excellent job
There are many ways to make power stations more efficient. One of these is an improved fuel management. According to the statements of independent experts this alone leads to a reduction of emissions as well as to a clear reduction of costs. The German Technical Inspectorate TÜV Süd reported that even in Germany investments in the firing technology of an existing 400 MW power station amounting to € 3 to 4 million will lead to savings potentials of a good € 1 million/year. The reason: An efficiently controlled combustion clearly improves efficiency. At the same time CO2 emissions are reduced while the output remains the same. New legal limit values for emissions have given a further incentive to effect the corresponding investments.

Keen on more efficiency
At this point the unique firing technology of Babcock Borsig Service GmbH (BBS) comes in. It provides the proper firing solution for every fuel and every application. In power stations for steam/power generation, for instance, BBS effects an optimum adjustment to each application – based on thermal calculations, modernization concepts with optimum incorporation of the water/steam circuit, selection of fuel type, design of the burner and arrangement of the burners in the furnace.

Advantage BBS: Testing in practice
In research and development BBS successfully pursues its own way: Instead of relying on theoretical simulations of the combustion processes the company explores and tests various systems and new technologies in practice. Within the scope of an experimental setup, for example, BBS has put into practice on a 1:1 basis the results of a computer-supported simulation of the combustion and flow processes in a gas-fired power station. Trials with a 45 MW gas burner of a customer have been running for three years and have led to a reduction in emissions of up to 70%. Practical tests for the optimization of oil firing are also taking place with burners of customers with an output of 20 to 40 MW. Improvements obtained in connection with the adjustment to different fuel qualities – e.g. by changing the outlet angle and the arrangement of bores of the oil nozzles – are immediately put into practice. It goes without saying that these practical tests can be carried out only because trusting customer relations have been built up over many years of cooperation.

At the Voerde location RWE Power AG and EVONIK Industries run two hard-coal-fired Benson boilers with an output of 750 MW each. In future, Units A and B are not to be fired with German hard coal (calorific value 28 MJ/kg) any more for which they were originally designed but with imported coal (calorific value 23 to 28 MJ/kg). If the boiler output is to be maintained this will lead to an increased throughput of coal – and thus to increased demands on the performance of pulverizers and pulverized fuel classifiers.

Adjusting to changed fuel quality
A problem which power station owners in many countries are increasingly faced with is the poor quality of the supplied coal. The fuel with a reduced calorific value and higher ash development leads to a reduced output and an impaired waste gas behaviour of a power station and may even lead to expensive technical malfunction unless the plant is optimized for the changed coal quality. In this optimization a new type of coal pulverizers and classifiers developed by BBS play a decisive role.

At the end of 2007 BBS received an order to replace the existing pulverizers and the static classifier from 1981. This included the planning, manufacture, supply, dismantling, ready-for-service installation and commissioning of the pulverizer plant including the required auxiliary systems for the use of an extended fuel range. Based on its own resources BBS was in a position to offer everything from one source, from the planning via manufacture and installation to commissioning.

Latest technology for pulverizers and classifiers
For the Voerde power station BBS supplied two newly developed BBS pulverizers and eight dynamic classifiers for the two new and the six remaining pulverizers. Special features of the pulverizer and classifier technology developed by BBS are a higher degree of separation, lower pressure loss as well as considerably improved maintenance facilities. BBS rotary classifiers have already been successfully in service since 2006. Together with the two new BBS pulverizers and an optimization of pulverized fuel distribution the required increase in the fuel throughput is achieved. Since June 2009 the new pulverizers have been successfully in operation and clearly meet the requirements.
A few years ago orbital welding compared to manual welding was basically regarded as uneconomical – except in those cases where particularly high demands were made on the quality of the weld. And even then the general opinion was that in installation conditions accompanied by dirt and cold there was insufficient space to move the welding head around the pipe. For this reason orbital welding has so far hardly been used in the installation area of conventional power stations – until BHR made the procedure suitable for building site conditions by further development.

Reproducible welded quality

Two facts induced BHR to initiate a new development: On the one hand a considerable number of hard coal and lignite-fired power station units are currently under construction in Germany. This led to the question how manufacturing and installation capacities can be secured from a qualitative and an economical point of view, considering the large number of building sites to be processed at the same time. On the other hand the increasing steam parameters in modern power station projects result in a wall thickness of more than 100 mm. This again calls for a reproducible welded quality of the round seams to be provided in installation conditions. Apart from the effect on the weld metal the use of a safe welding procedure also secures the progress of construction because welds of these dimensions take up to one week with set-up, welding, heat treatment and testing. As a fully mechanical welding procedure TIG orbital welding in narrow-gap technique was considered as a solution here. However, some questions marks had to be put over this with regard to the reliability and economic efficiency in connection with the conventional use of this procedure. An important step was to clear out the low tolerances in connection with root welding. The ruggedness of the weld preparation as well as the maximum admissible offset of edges and the gap tolerance must come up to the requirements of the building site.

Excellent properties

BHR carried out numerous tests with the new TIG orbital narrow-gap welding systems of the latest technology: Welding of seamless tubes and of forgings made of the modern high-temperature steel X9CrNiMoVNb9-2 (P92) with a wall thickness of up to 180 mm together with the corresponding process testing. Before the orbital technology was put into practice the system was additionally tested in connection with the repair of turbine cross-over pipes with a wall thickness of up to 70 mm. The result was that orbital narrow-gap welding in the new configuration turned out to work extremely reliably and that the use of this system can be justified to a large extent because of its economic efficiency which is comparable to that of conventional manual procedures. The creep-rupture properties of the weld are close to those of the base metal. Ductility values are at an extremely high level and are identical for each weld.

The availability of a sufficient number of qualified plant operators is the basis for the consistent use of this plant technology for large projects. Plant operators are trained in the new technology at the orbital centre in Dortmund in training courses of several weeks and receive a certificate upon successful passing of a test. After this they carry out practical training on building sites which is supervised by experienced staff. BHR has therefore also performed pioneering work in the field of training.

A procedure with a great future

For the construction of the new power stations at Neurath, BoA 2 and 3 as well as Boxberg, Unit R, the orbital technology is used in the machine houses. The result obtained on pipes with a dimension of 550 x 97 mm confirms the reliability of the system used here. For the performance of a regular weld which meets the qualification requirements at all times the fully mechanized welding procedure is an absolute advantage.

The development has made a major leap here. Due to the reproducible high quality, reliability, adherence to schedule and economic efficiency the procedure has a great potential in connection with the future construction of power stations. The practical application results in further optimizations which are developed, e.g. within the scope of associations research. The first tested and confirmed results obtained with ultra-critical nickel alloys for pipes in 700 °C power stations are a proof of success.
Sought-after competence for the construction of new power stations

After many years of standstill the market for new power stations has recently started moving again. For its participation in the construction of the new nuclear power station of Olkiluoto Babcock Noell GmbH (BNG) has reactivated and further developed its competence in the areas of construction, supply and installation of nuclear power station components. This start into the new market was extremely successful.

Success brings follow-up orders

The successful work of BNG at Olkiluoto has already led to the first follow-up orders for the project of Électricité de France in Flamanville. The market leader here in the area of access locks with electro-hydraulic drive. With its experience in the area of machines for hot cells BNG has been able to provide two new components which have so far not existed in power stations: the melt plug for the core melt stabilization system and the RPV closure head equipment. Via remote operation a closure system is installed and fixed in the area below the reactor. This facilitates access to the reactor pressure vessel for inspection purposes. In the event of a core melt incident the closure serves as a rupture joint in order to discharge the melt into the cooling pool.

Varied nuclear engineering competence

These components installed at Olkiluoto are only two examples of the varied hot cell know-how of BNG. In addition, BNG is a very competent partner for the decontamination of steel components which have been exposed to radioactive radiation. The PHADEC process has already proved its value in many cases. The product portfolio of BNG in the area of nuclear engineering also includes the deconstruction of nuclear plants and the construction of various systems for the safe transport of nuclear material.

Experts for safety equipment

With access locks to the internal containment area at the Olkiluoto power station BNG has strengthened its position in Germany. It is the market leader here in the area of access locks with electro-hydraulic drive. With its experience in the area of machines for hot cells BNG has been able to provide two new components which have so far not existed in power stations: the melt plug for the core melt stabilization system and the RPV closure head equipment. Via remote operation a closure system is installed and fixed in the area below the reactor. This facilitates access to the reactor pressure vessel for inspection purposes. In the event of a core melt incident the closure serves as a rupture joint in order to discharge the melt into the cooling pool.

BNG supplies the melt plug systems here as well as calculation services for the containment and the pool including sealing contactors. With the experience gained at Olkiluoto and Flamanville BNG sees itself well equipped for the future market of nuclear power station construction all over the world. The first negotiations for new projects with AREVA and other power station manufacturers are already taking place and point to promising results.
At the power stations in Poland there is still a large demand for fuel-saving and environmentally compatible modernization – in other words, a market with a promising potential for the know-how of Steinmüller-Instandsetzung Kraftwerke Gesellschaft für Energie- und Umwelttechnik mbH (SIK). With the successful completion of the modernization project on a unit of the lignite-fired power station of Belchatow SIK has taken the first step towards this market.

Uninterrupted connection to the supply system and follow-up orders for the Group
The dimensions of the project were impressive: A material mass of 3,200 t were moved in the dismantling stage, during installation the mass even amounted to 3,400 t. The number of welds amounted to about 90,000. SIK spent a total of 900,000 installation hours on this job; at peak times the company had 900 employees working at the Belchatow location. After completion and commissioning the trial run took place until September 2008. Since then the power station has been connected to the supply system without any interruption – and is clearly more efficient and more eco-friendly than before – while observing current European standards.

Due to the owner’s satisfaction with the quality provided by the Power Services Group new orders were placed with two other companies of BBPS: Within the scope of an EU invitation to tender BBS was awarded a contract for the first two turn-key plants of an EDCGAVO flue gas heat displacement system for Units 5 and 6 of the Polish power station. The order includes the engineering, manufacture, supply, installation and commissioning of the heat recovery systems. SIK has also received follow-up orders for Boilers 4 and 5 with the same scope of services.

Unbeatable combination: Best concept and best price
The Belchatow power station (owner: PGE Elektrownia Belchatow) has twelve boilers and turbines with a total nominal output of 4,320 MW. It is the largest lignite-fired power station in the world.

The order included the full modernization of the firing system and the replacement of the pressure part on Boiler 3. This also included the full basic and detail engineering, the manufacture or procurement of the components, dismantling, installation and commissioning. In February 2006 SIK pushed out its competitors with a combination of the best price and the best technical concept. In this connection the well-founded references documenting the experience of SIK with complex plant modernizations and the installation of low-NOx firing systems were decisive factors, too.

Polish power station giant upgraded with SIK technology
The Belchatow power station (owner: PGE Elektrownia Belchatow) has twelve boilers and turbines with a total nominal output of 4,320 MW. It is the largest lignite-fired power station in the world.

The order included the full modernization of the firing system and the replacement of the pressure part on Boiler 3. This also included the full basic and detail engineering, the manufacture or procurement of the components, dismantling, installation and commissioning. In February 2006 SIK pushed out its competitors with a combination of the best price and the best technical concept. In this connection the well-founded references documenting the experience of SIK with complex plant modernizations and the installation of low-NOx firing systems were decisive factors, too.
Before the German reunification the Boxberg power station in the Oberlausitz region used to be the largest lignite-fired power station in Germany and the most important conventional energy supplier of the former GDR. After the reunification the old units were quickly shut down because according to Federal German standards their efficiency was too low and their emissions too high. Nowadays the power station supplies 1,900 MW energy from completely renovated or new plants. Another highly modern Unit R is currently under construction. By placing the order with BHR Hochdruck-Rohrleitungsbau GmbH (BHR) and Babcock Noell GmbH (BNG) the owner Vattenfall got the declared experts of BBPS for efficiency and emission reduction on board.

Highly modern special steel

BHR plans, manufactures, supplies and installs complete high pressure piping systems for Unit R at Boxberg. For the live steam lines and the pipes of the hot reheater system BHR uses the ferritic-martensitic special steel P 92 which has been particularly developed for the high requirements in modern power station construction with high temperatures and high pressures. The design data for the live steam pipes are 605 °C and 315 bar, and those for the reheater lines are 615 °C and 68 bar.

Safety through quality

The order includes 1,450 t of pipework, 70 t of valves and fittings, 230 t of supports and 50 t of forging steel. Since the inductive bending takes place at the company’s own facility in Dortmund BHR saves numerous welds which would otherwise be required. Where welds are required on thick-walled components BHR guarantees highest quality and safety due to the use of automatic welding machines. On the building site which was equipped at the end of 2008 about 85 employees of BHR will be working until the planned project completion early in 2011.

BHR has been involved in power station repair and maintenance for Vattenfall for quite some time in connection with the Boxberg power station. BHR has now for the first time scored against strong competition and obtained the construction order from this important customer. This is a significant strategic step, also towards future orders.

Extensive order for BNG

As a qualified supplier with the most favourable offer BNG prevailed over its competitors and received the order for the supply of the flue gas desulphurization plant for the new Boxberg Unit R. The extensive order ranges from the provision of support with the approval procedure to design planning and construction up to delivery, installation and commissioning. At the building site which was equipped in the middle of 2008 BNG has appointed three employees for project management, two for site management, two for commissioning and ten for engineering until the planned completion early in 2011. At peak times about 70 people will be involved in the installation work carried out by a subcontractor.

State-of-the-art technology for the environment

In its capacity as a technology leader in flue gas desulphurization plants BNG guarantees a high degree of SO2 separation to the owner – while the auxiliary power requirements of the station are reduced at the same time. This means: BNG technology leads to an optimum reduction of climate-damaging emissions and additionally contributes to further protection of the environment by more energetic efficiency.

At the Boxberg power station BHR and BNG ensure efficiency and clean conditions

Before the German reunification the Boxberg power station in the Oberlausitz region used to be the largest lignite-fired power station in Germany and the most important conventional energy supplier of the former GDR. After the reunification the old units were quickly shut down because according to Federal German standards their efficiency was too low and their emissions too high. Nowadays the power station supplies 1,900 MW energy from completely renovated or new plants. Another highly modern Unit R is currently under construction. By placing the order with BHR Hochdruck-Rohrleitungsbau GmbH (BHR) and Babcock Noell GmbH (BNG) the owner Vattenfall got the declared experts of BBPS for efficiency and emission reduction on board.

Highly modern special steel

BHR plans, manufactures, supplies and installs complete high pressure piping systems for Unit R at Boxberg. For the live steam lines and the pipes of the hot reheater system BHR uses the ferritic-martensitic special steel P 92 which has been particularly developed for the high requirements in modern power station construction with high temperatures and high pressures. The design data for the live steam pipes are 605 °C and 315 bar, and those for the reheater lines are 615 °C and 68 bar.

Safety through quality

The order includes 1,450 t of pipework, 70 t of valves and fittings, 230 t of supports and 50 t of forging steel. Since the inductive bending takes place at the company’s own facility in Dortmund BHR saves numerous welds which would otherwise be required. Where welds are required on thick-walled components BHR guarantees highest quality and safety due to the use of automatic welding machines. On the building site which was equipped at the end of 2008 about 85 employees of BHR will be working until the planned project completion early in 2011.

BHR has been involved in power station repair and maintenance for Vattenfall for quite some time in connection with the Boxberg power station. BHR has now for the first time scored against strong competition and obtained the construction order from this important customer. This is a significant strategic step, also towards future orders.

Extensive order for BNG

As a qualified supplier with the most favourable offer BNG prevailed over its competitors and received the order for the supply of the flue gas desulphurization plant for the new Boxberg Unit R. The extensive order ranges from the provision of support with the approval procedure to design planning and construction up to delivery, installation and commissioning. At the building site which was equipped in the middle of 2008 BNG has appointed three employees for project management, two for site management, two for commissioning and ten for engineering until the planned completion early in 2011. At peak times about 70 people will be involved in the installation work carried out by a subcontractor.

State-of-the-art technology for the environment

In its capacity as a technology leader in flue gas desulphurization plants BNG guarantees a high degree of SO2 separation to the owner – while the auxiliary power requirements of the station are reduced at the same time. This means: BNG technology leads to an optimum reduction of climate-damaging emissions and additionally contributes to further protection of the environment by more energetic efficiency.

At the Boxberg power station BHR and BNG ensure efficiency and clean conditions

Before the German reunification the Boxberg power station in the Oberlausitz region used to be the largest lignite-fired power station in Germany and the most important conventional energy supplier of the former GDR. After the reunification the old units were quickly shut down because according to Federal German standards their efficiency was too low and their emissions too high. Nowadays the power station supplies 1,900 MW energy from completely renovated or new plants. Another highly modern Unit R is currently under construction. By placing the order with BHR Hochdruck-Rohrleitungsbau GmbH (BHR) and Babcock Noell GmbH (BNG) the owner Vattenfall got the declared experts of BBPS for efficiency and emission reduction on board.

Highly modern special steel

BHR plans, manufactures, supplies and installs complete high pressure piping systems for Unit R at Boxberg. For the live steam lines and the pipes of the hot reheater system BHR uses the ferritic-martensitic special steel P 92 which has been particularly developed for the high requirements in modern power station construction with high temperatures and high pressures. The design data for the live steam pipes are 605 °C and 315 bar, and those for the reheater lines are 615 °C and 68 bar.

Safety through quality

The order includes 1,450 t of pipework, 70 t of valves and fittings, 230 t of supports and 50 t of forging steel. Since the inductive bending takes place at the company’s own facility in Dortmund BHR saves numerous welds which would otherwise be required. Where welds are required on thick-walled components BHR guarantees highest quality and safety due to the use of automatic welding machines. On the building site which was equipped at the end of 2008 about 85 employees of BHR will be working until the planned project completion early in 2011.

BHR has been involved in power station repair and maintenance for Vattenfall for quite some time in connection with the Boxberg power station. BHR has now for the first time scored against strong competition and obtained the construction order from this important customer. This is a significant strategic step, also towards future orders.

Extensive order for BNG

As a qualified supplier with the most favourable offer BNG prevailed over its competitors and received the order for the supply of the flue gas desulphurization plant for the new Boxberg Unit R. The extensive order ranges from the provision of support with the approval procedure to design planning and construction up to delivery, installation and commissioning. At the building site which was equipped in the middle of 2008 BNG has appointed three employees for project management, two for site management, two for commissioning and ten for engineering until the planned completion early in 2011. At peak times about 70 people will be involved in the installation work carried out by a subcontractor.

State-of-the-art technology for the environment

In its capacity as a technology leader in flue gas desulphurization plants BNG guarantees a high degree of SO2 separation to the owner – while the auxiliary power requirements of the station are reduced at the same time. This means: BNG technology leads to an optimum reduction of climate-damaging emissions and additionally contributes to further protection of the environment by more energetic efficiency.
On the West Finnish island of Olkiluoto the construction of the largest nuclear power station unit in the world with an output of 1,600 MW is making good progress. With BHR Hochdruck-Rohrleitungsbauplattform GmbH (BHR), Babcock Noell GmbH (BNG) and Duro Dakovic Montaza d d (DDM) three companies of the Bilfinger Berger Power Services Group are significantly involved in the construction.

It was certainly not their fault that construction work was delayed again in 2009 in Olkiluoto. On the contrary: In the summer of 2009 the French lead management company AREVA titled BNG as well as BHR as “top AREVA suppliers” for their excellent and timely services on the building site.

Spectacular dome construction

A few weeks later BNG once again attracted attention at Olkiluoto: On September 6, 2009 the dome was installed to complete the steel containment. This component with a weight of 200 t, a diameter of 47 m and a height of 15 m had been pre-assembled by BNG in the Polish harbour of Gdynia and shipped via the Baltic Sea to Olkiluoto within four days.

BNG not only manufactured and supplied the dome for Olkiluoto but also the steel lining for the entire containment. The high-grade steel lining of BNG was also appreciated at Olkiluoto for the fuel element and reactor well for which an extremely high leakproofness is required for the entire service life of the power station. The Würzburg company also supplied the personnel air locks for the reactor building, components for the closure system of the pressure vessel as well as components of the stabilization system for a hypothetically assumed core melt. This means that for decisive and safety-relevant plant components of the huge power station the Finns trust in the technology of BNG.

Adherence to schedule is decisive

With an order volume of almost € 200 million BHR is also one of the essential companies involved in the installation phase at Olkiluoto which started in 2009. The installation of fixed points of four live steam and four feed water lines had priority last year. The total weight of these parts – with a maximum tube diameter of 1,280 mm and a wall thickness of up to 60 mm – amounts to 40 t. Up to 40 welders and fitters carried out this job in multi-shift operation. The customer AREVA had every trust in BHR that the work would be completed by the beginning of 2010 – which was an important prerequisite for time-critical work following immediately after this.

Qualifications acknowledged and praised

In addition, BHR employees installed the cooling water piping system in the safeguard buildings of the new power station unit. A total of 100 fitters, welders and technicians of BHR worked at Olkiluoto until the end of the year. For 2010 it is planned to increase the team to about 450 employees. It is widely known that the BHR team always carries out jobs such as those at Olkiluoto in a reliable and timely manner. During an audit in spring 2009 the customer (AREVA), the owner (TVO) and the Finnish inspection authority (STUK) were provided with an impressive confirmation of the typical competence of BHR. The auditors gave a very favourable reference to the company. The special strengths mentioned here were the transparent safety philosophy, the tight IT-supported project structures and the qualified cooperation of the building site team with regard to quality management.

At the Finnish nuclear power station Olkiluoto

BHR, BNG and DDM do an excellent job

A huge crane placed the dome in a three-hour operation on the cylindrical steel containment with millimetre precision. One of the special features of the dome is its inherent stability: The outer concrete layer can be applied later on without requiring any further support or formwork.

A good 100 employees of DDM were involved in the project until the end of the year. Their duties included the welding and installation of tubes in preproduction as well as their erection.
“The global power demand will continue to rise for demographic reasons alone.”
Overview of our range of supply:

Pressure parts: Headers, heating surfaces, heat exchangers, membrane walls, pressure vessels, HP pipes

Firing system components: Coal, oil and gas burners, pulverized fuel lines, gratings, pulverizing systems for lignite and hard coal, firing systems

Coal feeding and ash removal components: Belt conveyors, wet ash extractors

Machine and plant components: Fans, pumps, gear units, valves and fittings

Electrical plant components: Cabling, connections, sub-distribution boards

Instrumentation and control: Temperature, conductivity, pressure and flow measurement and control, equipment for waste gas and water analysis, electronic components, relays

With regard to the above mentioned components we offer:

- Concept development, design, optimization
- Construction according to the state of current technology
- Manufacture and repair, partly at our own workshops
- Just-in-time delivery for planned inspections
- Trade with standard parts of power station engineering and plant engineering
- Documentation management for efficient warehouse management
- Re-design and/or re-manufacturing for special parts

Manufacturing capacities

The companies of the Bilfinger Berger Power Services Group have efficient domestic manufacturing resources at the locations of Aschersleben, Dortmund, Essen, Oberhausen, Osterode, Peitz and St. Ingbert. Further capacities are available in Croatia, Austria, South Africa and Thailand. Many years of experience, comprehensive manufacturing know-how, highly modern equipment and the required licences in the conventional and nuclear area guarantee high quality standards to the customers of Power Services at each manufacturing facility. Customers can furthermore trust in the reliable manufacture of critical components as well as prompt service, repair and spare parts supply.
In 2009 the number of employees increased again at all companies of Bilfinger Berger Power Services. In some areas such as the further extended division of piping construction the workforce was even considerably increased. On the whole, however, the companies recruited new personnel with reasonable and responsible reticence in view of the changed general conditions.

More than 1,000 highly qualified engineers

Anyone who offers excellent services to his customers needs qualified personnel. The almost 7,500 employees of Power Services include many well qualified technicians and skilled workers and our core competence is rendered by more than 1,000 engineers. They are the ones who control the development of full industrial plants from the planning stage via construction up to their installation. They are also the ones who react with their own innovative developments to increased environmental and efficiency requirements: e.g. with optimized pipes for heat and pressure ranges which have so far not been reached, with efficient coal pulverizers and firing systems for coal with a low calorific value, with intelligent solutions such as heat displacement systems which use the waste heat in other areas of the power station for heating and thereby contribute to an increase in efficiency.

The maintenance of this asset of our personnel’s engineering know-how is a central task of the personnel policy at all companies of the Power Services Group. This means: to retain experienced engineers and to train them according to the developments of the market, to secure the transfer of know-how, to recruit new employees and to build-up junior staff within the company.

### Personnel – maintaining competence

In 2009 the number of employees increased again at all companies of Bilfinger Berger Power Services. In some areas such as the further extended division of piping construction the workforce was even considerably increased. On the whole, however, the companies recruited new personnel with reasonable and responsible reticence in view of the changed general conditions.

More than 1,000 highly qualified engineers

Anyone who offers excellent services to his customers needs qualified personnel. The almost 7,500 employees of Power Services include many well qualified technicians and skilled workers and our core competence is rendered by more than 1,000 engineers. They are the ones who control the development of full industrial plants from the planning stage via construction up to their installation. They are also the ones who react with their own innovative developments to increased environmental and efficiency requirements: e.g. with optimized pipes for heat and pressure ranges which have so far not been reached, with efficient coal pulverizers and firing systems for coal with a low calorific value, with intelligent solutions such as heat displacement systems which use the waste heat in other areas of the power station for heating and thereby contribute to an increase in efficiency.

The maintenance of this asset of our personnel’s engineering know-how is a central task of the personnel policy at all companies of the Power Services Group. This means: to retain experienced engineers and to train them according to the developments of the market, to secure the transfer of know-how, to recruit new employees and to build-up junior staff within the company.

### Personnel Figures

<table>
<thead>
<tr>
<th>Company</th>
<th>2009 incl. apprentices</th>
<th>2008 incl. apprentices</th>
<th>2007 incl. apprentices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilfinger Berger Power Services GmbH</td>
<td>54</td>
<td>47</td>
<td>18</td>
</tr>
<tr>
<td>Babcock Borsig Service GmbH</td>
<td>2,347</td>
<td>1,377</td>
<td>1,430</td>
</tr>
<tr>
<td>thereof Deutsche Babcock Middle East FZE</td>
<td>1,762</td>
<td>785</td>
<td></td>
</tr>
<tr>
<td>Bilfinger Berger Power Holdings (Pty) Ltd.</td>
<td>1,449</td>
<td>821</td>
<td>583</td>
</tr>
<tr>
<td>Duro Dakovic Montaza d.d.</td>
<td>1,028</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steinmüller-Instandsetzung Kraftwerke Gesellschaft für Energie- und Umwelttechnik mbH</td>
<td>416</td>
<td>407</td>
<td>391</td>
</tr>
<tr>
<td>BHR Hochdruck-Behälterbau GmbH</td>
<td>1,372</td>
<td>1,306</td>
<td>915</td>
</tr>
<tr>
<td>Babcock Noell GmbH</td>
<td>312</td>
<td>284</td>
<td>251</td>
</tr>
<tr>
<td>Other Companies</td>
<td>106</td>
<td>340</td>
<td>314</td>
</tr>
<tr>
<td><strong>Bilfinger Berger Power Services Group</strong></td>
<td><strong>7,497</strong></td>
<td><strong>4,582</strong></td>
<td><strong>3,917</strong></td>
</tr>
</tbody>
</table>
Exciting projects and training
The Power Services Group has ideal conditions for all this: It offers interesting work connected with exciting challenges which are often relevant to environmental politics – in a business environment which is characterized by a steady development, even growth, in spite of the generally difficult circumstances. Opportunities to work independently as well as advancement opportunities not only contribute to a fair working climate but also to the fact that the loyalty of the employees at the companies of the Power Services Group is above average.

No matter how valuable it is to have experienced engineers in the team – with regard to the future it is always necessary to recruit also new young members. In this respect the companies always try to arrange their personnel planning on a long-term, strategic basis.

Perspectives for young people
The companies have a large variety of measures at their disposal to convince young people of the excellent job perspectives, especially for engineers. These vary from works tours for pupils to more intensive information about the work for student trainees. The companies of the Power Services Group maintain an intensive cooperation with several universities. Trainee programmes have been established for graduates; for all employees, both new and experienced, numerous advanced training courses are offered according to the principle of lifelong learning.

At a high level and practically orientated
The Power Services Group still regards training as a social obligation. In spite of the limited growth we continue to need more young, motivated and well trained members of staff. In fiscal year 2009 a total of 116 new apprentices were therefore employed – almost as many as the year before (119). At the end of 2009 the total figure of apprentices at the companies of the Group amounted to 216 – which is about one third more than in the year before (152). To be added to these are the 199 apprentices at the BBPH companies in South Africa, 18 of these were hired in 2009.

The contents of training are continuously adjusted. The training requirements of the company are usually well above those of the outline plans of the Chamber of Industry and Commerce. The good marks obtained by our apprentices in the final exams are regular proof of the quality of our training. In order to meet the requirements of the market the Power Services companies frequently introduce new training courses. In this connection increasing importance is attached to social competence since competent customer handling and a good relationship with colleagues are key to success.

Regeneration from within
The potential of our employees was more than ever in the focus of our strategic personnel planning, especially the promotion of junior staff. This ensures that key positions will also in future be preferably filled by employees from our own ranks. In fiscal year 2009 Power Services organized for the first time a seminar for junior staff in Oberhausen in order to further qualify young professionals and to promote the networking between the individual companies. In addition, a series of seminars took place for project managers. The individual companies also continue to invest in strategic personnel development by organizing site manager training, seminars on quality assurance and labour law, in-house training in the data processing area, English lessons relating to special technical fields and many other qualification measures.

The entire training programme of the BBPS Group includes the following occupational fields:

- Bachelor of Engineering (cooperative engineer training)
- Graduate in business administration (FH), (VWA) with parallel training as an industrial business management assistant
- Industrial business management assistant
- Management assistant in office communication
- Management assistant in personnel recruitment services
- Technical draughtsman
- IT specialist specialized in systems engineering
- Systems mechanic
- Industrial mechanic
- Construction mechanic (welding)
- Cutting machine operator
Addresses

Bilfinger Berger Power Services GmbH (BBPS)
Duisburger Straße 375
46049 Oberhausen
Tel.: +49.208.45 75-9
Fax: +49.208.245 61
www.bbps.bilfinger.de

Babcock Borsig Service GmbH (BBS)
Duisburger Straße 375
46049 Oberhausen
Tel.: +49.208.45 75-9
Fax: +49.208.245 61
www.bbs.bilfinger.de

Babcock Noell GmbH (BNG)
Alfred-Nobel-Straße 20
97080 Würzburg
Tel.: +49.931.903-41 01
Fax: +49.931.903-41 71
www.babcocknoell.de

BHR Hochdruck-Rohrleitungsbau GmbH (BHR)
Wolbeckstraße 25
45329 Essen
Tel.: +49.201.36 45-0
Fax: +49.201.36 45-111
www.bhr.bilfinger.de

Bilfinger Berger Power Holdings (Pty) Ltd. (BBPH)
37 Homestead Lane,
Homestead Court, Block D
2128 Bruma
South Africa
Tel.: +27.11.806-30 00
Fax: +27.11.806-35 50
www.steinmuller.co.za

Bilfinger Berger Middle East FZE (BBME)
Deutsche Babcock Office Complex
Plot No. 77/87
Zone M-41, ICAD-1
Mussafah
Abu Dhabi, UAE
Tel.: +971-2-499 59 99
Fax: +971-2-550 20 76
www.babcock.ae

Bilfinger Berger Power Services GmbH (BBPS)
Duisburger Straße 375
46049 Oberhausen
Tel.: +49.208.45 75-9
Fax: +49.208.245 61
www.bbps.bilfinger.de

MCE Berlin GmbH
Landsberger Allee 366
12489 Berlin
Tel.: +49.30.54954-200
Fax: +49.30.54954-100
www.mce-berlin.com

MCE Maschinen- und Apparatebau GmbH & Co. KG
Wahringerstraße 34
Postfach 35
4051 Linz
Austria
Tel.: +43.732.6987-3365
Fax: +43.732.6980-3391
www.mce-map.at

Steinmüller-Instandsetzung Kraftwerke Gesellschaft
für Energie- und Umwelttechnik mbH (SIK)
Teichlandstraße 1
03185 Peitz
Tel.: +49.35601.83-101
Fax: +49.35601.83-100
www.sik-service.de

Duro Dakovic Montaza d.d. (DDM)
Dr. Mile Budaka 1
35000 Slavonski Brod
Croatia
Tel.: +385.35.448-267
Fax: +385.35.442-297
www.ddm.bilfinger.com

MCE Industrietechnik Aschersleben GmbH
Güstener Straße 18
06449 Aschersleben
Tel.: +49.3473.887-211
Fax: +49.3473.887-100
www.mce-ag.com

MCE Maschinen- und Apparatebau GmbH & Co. KG
Wahringerstraße 34
Postfach 35
4051 Linz
Austria
Tel.: +43.732.6987-3365
Fax: +43.732.6980-3391
www.mce-map.at

Steinmüller-Instandsetzung Kraftwerke Gesellschaft
für Energie- und Umwelttechnik mbH (SIK)
Teichlandstraße 1
03185 Peitz
Tel.: +49.35601.83-101
Fax: +49.35601.83-100
www.sik-service.de
Imprint

Publisher
Bilfinger Berger Power Services GmbH, Oberhausen

Arrangement
Benning, Gluth & Partner GmbH, Oberhausen

Text
Kommunikations-Agentur Mäuser, Essen

Photography
Bilfinger Berger Power Services GmbH, Oberhausen
Christian Schlüter, Essen
LICHTSCHACHT – Studio für Fotografie, Essen
Photo AREVA NP / Päivi Bourdon
TVO Image Gallery, www.tvo.fi
Ulf Philipowski, Neukirchen-Vluyn
Josh von Staudach, Stuttgart

Print
Basis-Druck, Duisburg

Information on this report
Bilfinger Berger Power Services GmbH
Duisburger Straße 375
46049 Oberhausen
Tel.: +49.208.45 75-9
Fax: +49.208.45 75-561
info@bbps.bilfinger.de
www.bbgs.bilfinger.de

This Annual Report is also available in the German language. In addition, a German and an English version are available on the Internet for download.