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NEWS

CLYDE BERGEMANN Power Group

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Our Cover Story:

On the Move: Energy Production in Japan

For more than 50 years, nuclear power was the key to Japan's energy policy. In 2011, the installed generation capacity (54 reactors) was 49 Gigawatt (GW) – about 30 percent of the country's electricity. At that time, Japan's Democratic Party (DPJ) led a national energy policy that strongly supported the growth of the nuclear industry. The official strategy emphasizes an increased use of domestic nuclear power generation that will account for 50% of Japan's electricity needs by 2020.

Japan After Fukushima

When the Fukushima disaster happened in March 2011, the Japanese government urgently needed to reconsider and change their energy roadmap. Almost immediately, all of their nuclear power stations were switched off. The government found itself in a dilemma: they needed to ensure a sufficient supply of affordable electricity, guarantee base-load security and deal with a mood-shift in the Japanese society, which became anti-nuclear overnight.

Fossil-fueled power, supplied by coal-, gas- and oil-fired plants, was required to fill the gap resulting from the shutdown of the nuclear plants and took over immediately.

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Responsible for content: Franz Bartels | **Editorial:** Claudia Denniger, Marketing & PR, **e-mail:** claudia.denniger@denniger-marketing.com
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Innovative Energy and Environmental Strategy 2012

In May 2011, the DJP began to review the country's mid- to long-term energy policies. They examined the potential of renewable energy sources, combined cycle power plants, highly efficient gas turbines and coal-fired plants, as well as the question of how to deal with nuclear power.

They concluded that Japan could not totally turn away from nuclear power, considering the need for a stable supply of affordable energy. In September 2012, the DJP administration announced an "Innovative Strategy for Energy and the Environment", that included a nuclear phase-out by the 2030s. The solution suggested a mix of renewable power and advanced conventional fossil power to supply the energy needs by 2030.

The Basic Energy Plan 2014

After the elections in December 2012, the Liberal Democratic Party (LDP) regained leadership of the government. In the many years in power before, the LDP was a consistent proponent of nuclear power. In March 2013 they started to work on a new energy plan. Again they faced the dilemma of nuclear power being essential to keep electricity costs low versus the public's anti-nuclear opinion and fear.

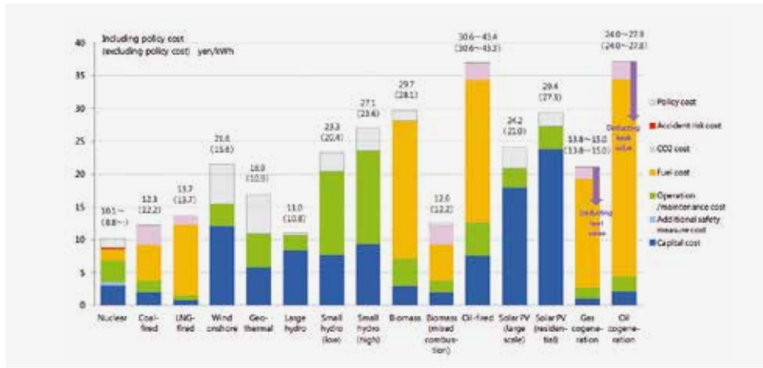
Japan's "Basic Energy Plan 2014" published in April intended to meet the country's "3E + S" energy goals: Energy Security, Economic Efficiency, Environment and Safety"*. It positioned nuclear power as an important base-load source of electricity but also documented the need to include coal-fired plants equipped with the latest technology, ensuring highly efficient and environmentally sound power generation.

2015: The Power Generation Cost Verification Group's Report

After publishing the plan, the LDP entered the next phase by setting up the "Long-Term Energy Supply and Demand Outlook Subcommittee". They initiated discussions on numerical targets for each power source and submitted their final report in November of the same year to pursue the "best energy mix for Japan"**. The report seeks "to access nuclear, thermal (fossil fuel-fired) and renewable energy power generation costs in Japan as fairly as possible". The committee included decommissioning costs, additional safety measures, reprocessing of spent nuclear fuels, disposal of high-level radioactive wastes, plant location, R & D and accident risks, exchange rate and additional policy costs in their considerations. It became clear that there is not only one answer – and never will be. The circumstances permanently change and some issues, like how to assess the grid stabilization costs, still needed to be included.

* Bruce C. Buckheit, Kiko Network, April 2015, www. kikonet.org
** Yuji Matsuo for Institute of Energy Economics, Japan (IEEJ), November 2015

Example of Estimation Results



Model 2030. Source: Power Generation Cost Verification Group (2015)

The chart shows some example results of the Power Generation Cost Verification Group. "Model 2030" means that the plants would start operation in 2030 and continue operation for a period of time before being shut down and decommissioned. The average unit power generation cost is assessed for a lifecycle of each plant in 2014 real prices. The estimation results of course vary depending on preconditions. In any case, coal-fired power plants are at the forefront when it comes to costs comparisons and – not less important – base-load security.

Strong position in Japan

In the meantime (after setting new safety regulations) two nuclear power reactors, Sendai power plant's reactors 1 and 2, passed inspection and restarted on August 11 and October 15. In April 2015, it was reported that 43 coal-fired power projects were said to be planned or under construction, totaling 21.2 GW capacity. ***

The Clyde Bergemann Power Group has had a presence in the Japanese market for decades and is a key player when it comes to process technology for efficiency improvement in the power industry. With a powerful portfolio of products and systems for improved boiler efficiency, effective on-load boiler cleaning and ash handling, reliable combustion gas control and cleaning and sustainable energy recovery we serve as a helpful and knowledgeable partner for new build plants as well as modifications and rebuilds.

Franz Bartels | President & CEO

Franz Bartels, CBPG
franz.bartels@cbpg.com

*** World Nuclear Organization, "Nuclear Power in Japan", December 2015

Clyde Bergemann Supplies Boiler Cleaning Technology for New 2000 MW Coal-Fired Power Plant in Malaysia

Clyde Bergemann in Wesel, Germany was recently awarded with the delivery and installation of process technology for efficiency improvement of a new 2000 MW power plant. The scope of supply includes the entire boiler cleaning systems as well as SMART Furnace, a sensor-based software for continuous monitoring and evaluation of the deposit situation in the furnace and the associated sensors.

To meet the growing demand for electricity and be able to flexibly adapt to the needs, the Malaysian government has drawn up a comprehensive development plan to ensure sufficient power generation and supply until 2020. The country remains focused on fossil fuels – coal and gas each with around 45%.

The plan foresees the expansion of a 2 × 700 MW coal-fired power plant south of Kuala Lumpur with two additional ultra super-critical (USC) 1000 MW units. USC technology adopted for this project enables the plant to achieve high efficiency through extremely high steam temperature and pressure, which results in reduction of fuel consumption as well as CO_2 emission.

An economic and ecological sound solution was needed for efficient on-load boiler cleaning. Ash deposits can create significant challenges during the operation of a boiler. Deposits on heat transfer surfaces reduce boiler efficiency and can lead to extensive operational problems. Without the use of on-load cleaning systems, frequent outages and low boiler efficiency are inevitable.

When the first two 700 MW units were built in 2009, Clyde Bergemann was already chosen for the delivery of the boiler cleaning technology. After an intense competition between the global suppliers, the German-based company again won the contract based on a comprehensive technological solution and its high-performance products for successful and demand-oriented cleaning.

For cleaning of the furnace, use is made of four SMART Cannon water cannons per unit. The immediate combustion process and the prevailing high temperatures result in deposits and difficult to remove clinkers on the membrane walls. Utilizing a powerful water jet and combining different nozzle sizes and blowing pressures, SMART Cannon cleans the sides and opposite walls of the furnace with precise and reproducible cleaning patterns. With its large cleaning area and flexibility the SMART Cannon is unbeatably efficient in the furnace.

Additionally, SMART Furnace, a sensor based optimization system, continuously monitors and assesses the deposit situation in the furnace and determines suitable and demand-oriented cleaning actions. SMART Furnace automatically adjusts the water jet pressure and progress velocity to minimize the tube thermal impact on the basis of the feedback from 27 SMART Flux sensors.

Next to that, 28 modular RSM-H retractable sootblowers with a travel range of 14.2 meters (app. 46 ft) are installed for the cleaning of each superheater/reheater area. Their reinforced dual track design is particularly suitable for cleaning areas with heavy fouling and flue gas temperatures of up to 1,500 °C (app. 2,730 F).

All these actions and measures result in extended boiler availability, an increased boiler efficiency and a reduction of steam consumption, thereby leading to an effective and efficient operation of the plant.

With this order, a new chapter will be added to the success story of the SMART Cannon water cannons. With more than 2800 installations worldwide, the system has proven itself and now conquers the Asian market – after an installation in Thailand – with another reference, Malaysia.

Delivery and commissioning are scheduled for the end of 2018.

Steve Bowmar, CBEU
steve.bowmar@uk.cbpg.com

Clyde Bergemann Wins Two Contracts from Doosan for the Delivery of Boiler Efficiency Equipment for New-Built Power Plants in Korea

Clyde Bergemann Germany continues to advance its position as a global leader in process technology for efficiency improvement in power plants. The company was recently awarded by Doosan Heavy Industries & Construction (Doosan) with an order for the delivery and installation of approximately 900 boiler efficiency systems and the associated controls technology for two 2000 MW new-built coal-fired power plants in Korea.

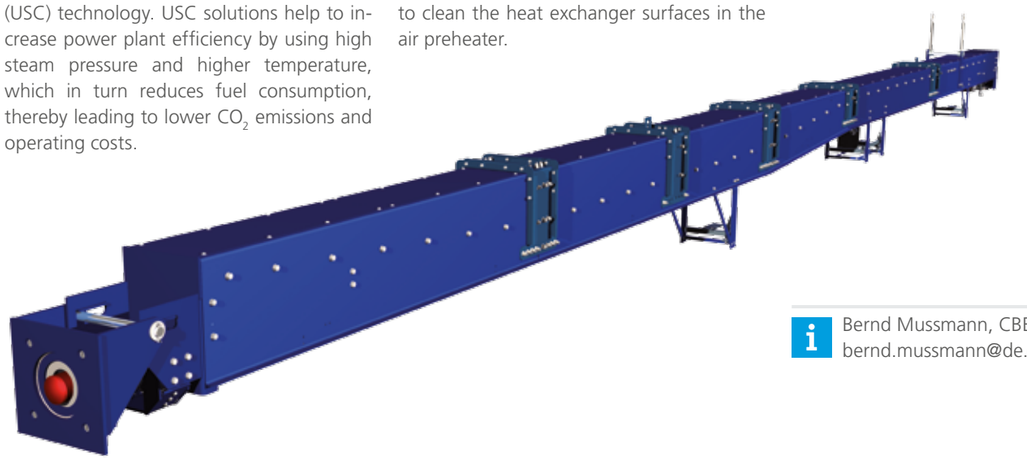
Between March and December 2015, Doosan announced winning two contracts to supply the boilers and turbines for new build projects within Korea. Both projects each consist of two 1000 MW units, developed with the company's ultra-supercritical (USC) technology. USC solutions help to increase power plant efficiency by using high steam pressure and higher temperature, which in turn reduces fuel consumption, thereby leading to lower CO_2 emissions and operating costs.

One of the projected plants is located on South Korea's East coast, the Gangneun Anin power plant, the other one will be built on the Southern tip, the Goseong Hai thermal power plant. The projects are scheduled to be completed between December 2019 and should read and the end of 2021.

After nearly two years in the planning and bid phase, Clyde Bergemann received the order to deliver and install the boiler cleaning equipment and related controls technology for all four units. The scope of supply for each unit includes 86 VS-H wall blowers to remove heavy slagging from the furnace walls. Additionally, 68 retractable, reinforced dual rack sootblowers RXM-H will be applied in the superheater and reheater area and four PS-A axial sootblowers will be used to clean the heat exchanger surfaces in the air preheater.

With this order, Clyde Bergemann expands its leading position in the Korean market. The company has already delivered the technology for the first Korean USC boiler in Shin Boryeong in 2015. Overall, Clyde Bergemann holds a total market share for boiler cleaning equipment of about 80 percent of all power plants in the country.

"We are very pleased to win this important contract and about the confidence shown by Doosan in our ability to supply and support them", says Franz Bartels, President & CEO of the Clyde Bergemann Power Group. "Since 1980 we have served the Korean Power industry with our state-of-the-art equipment and we look forward to further improving efficiency and reducing emissions with the help of our process technology."



Bernd Mussmann, CBEU
bernd.mussmann@de.cbpg.com

Boiler Cleaning Optimization with SMART CLEAN™ Intelligent Sootblowing (ISB)

Using SMART Clean™ and SMART Cannons at Alliant Energy's Edgewater Facility Improves System Reliability and Plant Heat Rate.

Alliant Energy's Edgewater Generating Station Unit 5 is a Powder River Basin coal-fired 380-megawatt power plant that is equipped with a wall-fired Babcock & Wilcox boiler. The original boiler cleaning system installed in 2000 was a first generation water lance blower WLB90 supplied by Clyde Bergemann. In 2011, Clyde Bergemann provided a control system upgrade for sootblower controls. Last year, the operator was considering replacing and updating the WLB90 technology to take advantage of recent high-tech advancements and again turned to Clyde Bergemann for advice.

In early 2015, the Clyde Bergemann Boiler Efficiency specialists initiated first service inspections and the technology experts took a deeper look on a longer-term solution to improve the boiler performance and reduce the heat rate. The plant's Engineering, Operations, and I&C leads were pulled into the discussion to make sure all key stakeholders buy-in was realized for the larger scope.

In follow up meetings, the Clyde Bergemann team recommended a full upgrade system with WLB100, SMART Cannons, and VFD driven modernized Carver Pump skid.

Over the last seven years, Clyde Bergemann has worked on improving the water lance blower's mechanics and programing, thereby increasing the reliability and reducing the overall maintenance associated with the Cannon System. The successor model – WLB100A – uses a newly developed controls system, supported by Clyde Bergemann, that offers significant improvements to the operation and reliability.

The additionally deployed SMART Cannon was especially designed for the targeted use of water to remove slagging. The main advantage gained is the increased coverage in the boiler from 30% with traditional wall blowers up to 90% with SMART Cannons. The SMART Cannon is designed as a three-dimensional cleaning device with "X" and "Y" axis control. Designed with self-contained, modular linear drives, they travel approximately 45 degrees in each direction and the "Z" axis, controlled through varying water pressure during operation "X".

Furthermore, a non-standard pump skid that limited the system performance was replaced by a VFD driven modernized Carver Pump skid.

With the collaboration of Sales, Business Development, and Technology teams, this project turned from a simple "parts upgrade fix it" type of project into a 100% technology upgrade including SMART Cannons.

With the 0.4% plant heat rate improvement potential, finally SMART Clean™ optimization system was added into the project scope. SMART Clean™ is designed to intelligently respond to the real-time heat transfer in the boiler and target areas that are fouling. With the full scope of SMART Clean™ tying the furnace and convective pass cleaning equipment together, Clyde Bergemann is able to integrate the furnace and convective sections cleaning operations into a global intelligence designed to deliver the best cleaning strategy based on Edgewater's key performance indicators.

The SMART Clean™ system utilizes a Thermodynamic Model (TDM) that runs a "what if" simulation continuously in the background. Based on this feedback the system is able to predict the outcome of any given cleaning event and target the cleaning activities that will have the greatest effect on maintaining the plant goals. This revolutionary approach eliminates the need for zone clean and dirty set points and human intervention as opposed to traditional ISB systems.

Ray Reno, CBPG
ray.reno@us.cbpg.com

Improving Plant Safety with Effective Isolation Dampers

A "penny wise, pound foolish" approach is costly in the long run

Coal-fired power plant duct systems are designed so that emissions control systems, such as precipitators, desulphurization systems, fans, and selective catalytic reduction systems can be inspected and maintained while the main process remains online. Essential to achieving this is the installation of effective, safe, reliable and easy-to-operate isolation equipment at the auxiliaries' inlets and outlets.

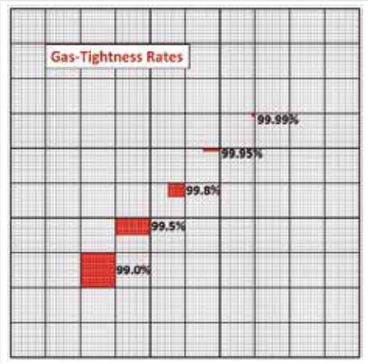
The long-term effectiveness of isolation equipment – dampers – is a prime consideration for the end-user. The damper leakage rate is a critical focal point, both in terms of operating efficiency and personnel safety.

The degree of isolation required depends upon the damper's primary function in a system. If the function does not require 100% isolation, then various types of dampers could be used to provide sealing efficiencies ranging from 99.00% to 99.99%.

Isolation of flue gas can be accomplished utilizing a guillotine, louver, or diverter/flap damper, and the different damper types provide different leak-proof capabilities.

Choosing the wrong type of damper for isolation can be problematic or even catastrophic. Even a small amount of leakage can have serious implications.

If the damper must isolate a portion of the system for occasional maintenance, the damper must provide 100% isolation in order to be considered "man-safe."



Consider this: Although a damper providing 99% sealing efficiency seems a very high value, only a 1% leakage area in a typical duct may represent a hole large enough to get a man's head and shoulders through. Just a 1% leakage area would actually allow leakage of 3 – 10 % of the flow through the full-open damper at the full load rating of the device being isolated or controlled. (Under typical plant conditions, a damper is considered to have "low" leakage if leakage is less than 2% of its wide-open flow.)

Sealing performance is the key criterion in a specification for isolating equipment. A critical side effect of the concept of sealing efficiency is the assessment of the method by which a vendor achieves, and guarantees, 100% isolation.

All dampers leak to some extent, and anyone who states otherwise is not being truthful.

For a damper to be considered a "zero-leak" device it requires an air-purge system. A clean air barrier is introduced between the tandem sealing elements at a pressure greater than the greatest differential on either side of the blade, preventing cross-blade leakage of untreated gas and simultaneously ventilating the isolated area.

All too often, a vendor will use a large volume of seal air to hide the shortcomings of the basic sealing system. Large seal air fans are sometimes fitted in duplicate. This, however, does not factor that the most probable reason for fan failure is a loss of power, whereupon, neither fan will run. Thus, the seals must be capable of providing, over an extended period, a high sealing efficiency without external assistance so that maintenance personnel can be sure of leaving an isolated section safely in the event of an emergency.

A heinous error when purchasing isolation equipment is to set aside the superior design of an experienced supplier on the grounds of capital cost alone.

Decades worth of evidence make it abundantly clear that well-functioning isolation equipment cannot be bought for "bargain basement" prices, and the long-term implications of buying inferior equipment is always far more expensive and riskier than buying the right equipment from the start.

Before any price comparisons are made, the evaluating engineer must be satisfied that the equipment meets the end user's needs and can actually achieve the guarantees claimed. He should assess the claims made on the basis of the information provided and his, and other users', experience.

To determine true operational value and safety, equipment evaluation must be on the basis of sound engineering principles, not just on initial cost.

Mark Martel, CBAU
mark.martel@us.cbpg.com

Maintaining the Performance and Reliability of an Electrostatic Precipitator

Clyde Bergemann has partnered with a large US American power producer for over 14 years on their electrostatic precipitator semi-annual maintenance. The key? Outstanding customer service.

The serviced unit is a 580 MW base load plant powered by coal with 2.8 – 3.8 M actual cubic feet per minute (ACFM) and the flue gas stream is treated by two Joy Western electrostatic precipitators (ESP). In 1995 the unit was converted from a hot side to a cold-side ESP configuration. The plant has been in operation since 1982 with no major internal rebuilds. Due to the importance of its generation capacity, in 2001, the operator embarked on a program to improve mechanical reliability by performing annual outage maintenance using specially trained ESP personnel.

Typical Procedure

For 15 years, Clyde Bergemann's ESP maintenance team has partnered with the customer to maintain this unit with quality workmanship, on-time completion of work, and a spotless safety record. Typical work includes replacement of failed or damaged parts, alignment of cells to gain electrical clearances and servicing of all high voltage components such as insulators, controls and bus ducting. At the end of an outage, a formal report is provided which details work completed and recommendations for the next outage. Equally important are the relationships at every level that have fostered a strong element of trust. The customer knows with confidence that if they have a problem, Clyde Bergemann will fix it.

Clyde Bergemann has nurtured the relationship with the customer through the years by helping to correct deficiencies with the aging ESP. These deficiencies relate to both age and design changes of the equipment that caused the performance of the unit to degrade. Besides finding and replacing broken discharge electrodes and straighten collecting electrodes, the maintenance team has repaired the corroded ceiling, side walls, and hopper panels and installed a new purge air system.

Some of this work was performed on an emergency basis and Clyde Bergemann provided immediate mobilization to support the station during forced outages. Currently, Clyde Bergemann has been requested to help evaluate and provide a plan to improve performance of the ESP for the long term. This request is being supported by providing options with both technical and budgetary details for rebuilding the unit.

Carrying forward the success, Clyde Bergemann has recently added a sister station to their customer list and was awarded three-year agreements at both locations for all of the routine ESP maintenance.

Warren Booth / Lance Jost, CBAM
warren.booth@us.cbpg.com
lance.jost@us.cbpg.com

Clyde Bergemann Power Group Receives Order for ELG & CCR Related Ash Handling Systems for a Maior Utilitv in South Carolina (USA)

The Clyde Bergemann Power Group continues to advance its position as the global leader in clean environment solutions for the power market with an awarded contract for environmental friendly bottom ash handling equipment by Santee Cooper in South Carolina, USA.

Clyde Bergemann will engineer, supply, and commission a series of ash handling systems to aid Santee Cooper in complying with the USA Environmental Protection Agencies (EPA) Effluent Limitation Guidelines (ELG) and Coal Combustion Residuals (CCR) regulations at their Winyah and Cross Generating Stations. The systems will handle bottom ash, pyrites, and economizer/SCR ash for the eight coal fired boilers that have a combined power generation output of 3,600 MW. Additionally at Cross, the project will include multiple pump additions and piping modifications to create a closed loop pyrite handling system and eliminate the need for pyrites to be sent to the existing ash pond.

The main equipment for this project includes Clyde Bergemann's Submerged Scraper Conveyors (SSC), and Remote Submerged Scraper Conveyor (RSSC) technology.

Elimintating Ash Ponds

Environmental drivers have produced a need to eliminate the use of ash ponds and minimize or eliminate water discharge. Clyde Bergemann's RSSC technology can do both. The design intercepts the existing bottom ash slurry by using large overflow troughs, similar to dewatering bins, and submerged scraper style equipment to separate the ash from the water. The discharge of the RSSC provides a moist ash that can be handled in a dust free disposal.

Engineering work, which will be performed out of Clyde Bergemann's Material Handling product division in Malvern, PA, has already commenced for this project and deliveries are scheduled to start in January 2017.

"We are happy to help Santee Cooper with this significant environmental project", said Dominick Garton, President of Clyde Bergemann Power Group Americas (CBAM). "CBAM's comprehensive offering of solutions for wet to dry ash handling and our highly talented project team will allow us to meet all of this project's technical and scheduling requirements".

Gary Mooney, CBMAL
gary.mooney@us.cbpg.com

Dome Valve Solution Helps Muja Power Station, Western Australia to Reduce Costs of Maintenance Drastically

Muja Power Station, Western Australia operates four 215 MW coal fired boilers 250 km south of Perth in Western Australia (approximately 155 miles). In 2015 they approached Clyde Bergemann Australia (CBA), outlining an ongoing high cost and the regular occurrence in replacing pinch valves on their ABB Flakt ash handling system (photo below). The customer experimented with a variety of materials with the existing valves but could not come up with a satisfactory long-term solution to reduce the cost of maintenance and regular replacement.

The pinch valve life would last between four and six weeks with an annual cost of maintenance in excess of $100,000 for all four units (32 valves installed in the system).

Clyde Bergemann Doncaster, UK (CBD) assisted CBA in providing an 80 mm Dome Valve for a three month trial to the customer with the aim of replacing all 32 Dome Valves.

The Dome Valve features simple but robust construction allowing reliable, unrestricted full-bore material flow that minimizes the possibility of material build-up within the valve body. It is a pressure tight compressed air operated valve, capable of returning over one million maintenance-free cycles, even in abrasive, hazardous or toxic applications. The fast-closing cut-off valve incorporates a unique inflatable sealing mechanism. This is done using an inflatable rubber seal, which is pressurized when the valve is in the closed position and is then deflated when the valve is opened. For opening and closing, a pneumatically operated actuator is used. The instrument air source chosen to operate the actuator is also used to inflate the seal, which provides the pressure tight seal against the dome surface when in the closed position.

After the trial the customer removed the dome valve insert seal (photo above), which showed no wear at all. As a result of the successful trial the customer has committed to replacing all 32 pinch valves providing a payback on their investment of less than one year.

The Dome Valve offers a safe, reliable and long-term low cost option to the power plant. The customer has recognized the benefit of removing an expensive ongoing maintenance item from their system.

The success of this installation can help other customers around the world with their aging competitor installed systems proving immediate effect and a very short return on investment.

Gerard Grant, CBA
gerard.grant@au.cbpg.com

Emphasizing Safety and Reliability of Boiler Cleaning Equipment with Regular Inspections

With the implementation of a new "Service Checklist" that tracks mill outages, the Clyde Bergemann Power Group is focusing its efforts on scheduling and completing equipment walkdowns to help customers prepare for their outages. The key goal is to help the customer become aware of the need to replace certain sootblower components and the hidden costs associated with inaction of the inspection results. The focus is on safety and reliability related issues, including:

- Lance tube thinning and proactive replacement prior to catastrophic failures
- Packing leaks: safety and cost of lost steam and performance
- Upgrades to improve performance and lower total cost of ownership over the product life cycle

Plant walkdowns include full inspection of the mechanical components as well as thickness testing of the sootblower lance tubes. We also offer some new improvements and upgrades for specific applications, including third-party equipment, like "Max Packing", "SMART Set" energy chain and/or limit switch conversion.

Improvements and upgrades to existing equipment

Max Packing

Max Packing was originally designed for heavy-duty applications that demand the sootblower packing to be leak-free in a harsh environment. The benefit of Max Packing in integrated gasification combined cycle (IGCC) syngas cooler sootblowing applications is now being made available for pulp & paper recovery boilers.

Max Packing consists of an 8-ring set: six braided sealing rings made with graphite coated carbon fibers and two high density end rings.

Benefits of Max Packing

- Low maintenance and lasts 5 – 10 times longer than regular packing
- Less re-tensioning is needed after installation
- Visual indicator to help the maintenance personnel determine when repacking is needed

Max Packing

SMART Set Poppet Valves

Another time-consuming task is setting of the poppet valve pressure to achieve full cleaning. With older internal adjustable style valves the process for setting could take considerable time due to the lockout/ tagout of the steam supply lines. New SMART Set valves can be easily set with the steam on by adjusting a nut on top of the valve stem in a matter of minutes.

Energy Chain and Limit Switch Conversions

With a energy chain and traveling limit switch conversion, the operator can remove existing inside canopy power supply systems and upgrade to exterior power supply as well as traveling limit switch design. This eliminates the heat and boiler blowback of gasses and ash taking toll on electrical components.

The traveling switch design eliminates the forward limit switch from being permanently mounted in the forward or "hot" position, thereby limiting failure due to excessive heat.

Edmund Wolters
edmund.wolters@de.cbpg.com

Mission: Boiler Efficiency!

For more than 15 years, Timo Schulz has traveled the globe to present and implement solutions for efficiency improvements in power plants.

Customers count on his experience and commitment when it comes to commissioning and downtimes.

We interviewed Timo and found out some interesting and surprising details.

Timo, what's your main role?

I'm mainly assigned as a commissioning start-up engineer. Thanks to my many years being part of the final assembly team, I know each and every sootblower down to the last screw. I can build upon my detailed knowledge and can flexibly carry out diverse tasks.

How many assignments far from home do you have per year and how long do you stay on average?

In 2015, I had 32 assignments abroad. The duration of a stay depends on the plant and task. For full commissioning, I would be with a customer for a maximum of 4 weeks. Then, I'll be replaced.

I was told circumstances can be rough?

That's true! When I worked in Russia last time, the thermometer showed -42 °C (-44 °F): it had reached its limit! I experienced the exact opposite in Mundra, India; where I worked under extreme heat with +46 °C (115 °F). When I solve a problem and can get the plant running again, I don't care about the conditions any more. That's a sense of pure happiness! Satisfied customers are extremely important to me, as that substantiates my work.

Do you work as part of a team or on your own?

I mostly travel alone, but when it comes to commission, a mechanic will join me. Additionally, people on-site will support, starting with warehouse staff providing materials, or electricians contributing their advice. There is also constant contact within our team, e. g. between the programmers. We don't care about weekends, vacations or the time of day: we can call any time and help each other.

How do you communicate, e.g. in Russia?

In the larger cities, one can of course communicate in English. But in the small villages, where the construction sites are located, you can't get far without an interpreter.

How do you spend your spare time to re-charge your batteries?

I go to the gym, that's my way to relax and a must. Other colleagues go out to have a beer or explore the area a bit further. Depending on where we are, of course.

Thanks a lot for letting us look behind the scenes! We would like to wish you much success, accident-free work and great times wherever you are!

Timo Schulz, CBG
timo.schulz@de.cbpg.com

Greater Presence in Russia

Since August 2001, Clyde Bergemann has had a presence in the Russian capital with its own office. Although Evgeny Kruglov manages all projects – whether new installations or service business – from Wesel, Germany, local coordination and support are indispensable. The team consists of Elena Lapshinova (interpreter and assistant to Evgeny), Evgeny Khvatov (service engineer) and Denis Grudachev (sales and service engineer). Together they work on 150 to 200 inquiries and orders per year.

Mr. Kruglov, which tasks are mainly managed from Moscow?

As a skilled interpreter, Elena deals with the translation of project-related documents and correspondence and takes care of Marketing tasks, e.g. the Russian webpage and the organisation of fairs or lectures. The service technicians support their German colleagues or carry out commissioning work independently. The same applies for complaint management or maintenances.

You recently moved offices. What was the reason?

Being present in Moscow for 15 years now, Clyde Bergemann has established itself in the market. Based on that, we were able to upgrade our office and not only grow further but also be better accessible.

How would you assess your business in Russia?

Russia presently is caught in a deep recession. In 2015, the gross domestic product was down by 3.8 % and the forecasts do not look promising either. Nevertheless, we managed to perform well. We were able to strengthen the contact with our customers and focus on a medium-term recovery of the market.

Contact Data:
Marschalla Rybalko 2,
Building 6, 13. level,
Office 1303,
Moscow, 123060, RF
Tel.: +7 495 367 04 20
Fax: +7 495 367 04 11
Email: info@ru.cbpg.com

Clyde Bergemann Scandinavia and Endat Operate Under One Roof

Since January 1st, 2016, Clyde Bergemann Scandinavia Oy (CBSK), responsible for customer service and spare parts supply in the Nordic power market and Endat Oy, specialist for thermal power plant simulations, share a common office.

The new facility is located in the city of Vantaa, conveniently accessible via Helsinki Airport. It includes not only office spaces but also a warehouse for CBSK.

"The idea was to use synergies wherever possible, be it cooperation, accessibility or communication – and offer room to grow", explains Ralf Pettersson, Managing Director of CBSK. Specializing in Boiler Efficiency solutions with additional expertise in the areas of Energy Recovery and Material Handling, CBSK will continue to supply new equipment and spare parts and offer a full range of after-sales services. Its customers range across areas as diverse as Utility and Industrial Power, Waste-to-Energy and Biomass plants and Pulp & Paper mills.

Oy Endat Ltd is specialized in power plant process simulation. Processes, such as combusting coal, bio-fuels and waste as well as HRSG-processes and power plants of kraft pulp process can be modeled with Endat's modular simulation software. Endat's software core products are based in intelligent sootblowing applications.

Contact Data:
Tuupakankuja 1
FI-01740 Vantaa, Finland
Phone +358–9-8330 0600
Mail: info@fi.cbpg.com or info@endat.fi

Events Diary

DATE	NAME OF EVENT	COUNTRY, LOCATION
May		
3 – 5	International Powder & Bulk Solids	USA, Rosemont, IL
16 – 19	AISTech	USA, Pittsburgh, PA
16 – 19	IEEE-IAS/PCA Cement Conference	USA, Dallas, TX
June		
21 – 23	Power Gen Europe	Italy, Milano
September		
26 – 28	MINExpo	USA, Las Vegas, NV
October		
18 – 19	48. Kraftwerkstechn. Kolloquium	Germany, Dresden
December		
13 – 15	POWER-GEN International	USA, Orlando, FL

Personnel

Dominick Garton
… has taken over the position of Group VP & COO of Clyde Bergemann Power Group Americas (CBAM) in January 2016. In addition to his responsibility for CBAM, Dominick will keep his responsibility as MD for the Boiler Efficiency Product Division in Atlanta (CBAT).

Slawomir Horodyski
… joined CBAM as Finance Director CBAM & CBAT in March 2016 and is based in the Atlanta office. He will be responsible for overseeing all financial aspects of the business, including financial reporting, management accounting and cost reduction strategies.

Dave Coffey
… has taken over the position of CBAT Director of Treasury & Controlling effective from March 2016.

Volker Pantosky
… was appointed Director of Finance & Projects for the Clyde Bergemann Power Group with effect from January 1st, 2016. He will be responsible for controlling large-scale projects and taxation, and will support the CFO as well as the finance team with general finance functions.

Dietmar Kessler
… joined Clyde Bergemann Germany (CBG) as Finance Director in January 2016. He will be responsible for the organization and supervision of all financial aspects of CBG including financial reporting and controlling.

Jeremy Kirsch
… was appointed as new Managing Director of Clyde Bergemann Africa (CBZ) with effect from October 29th, 2015. Jeremy has been with Clyde Bergemann for almost 15 years and is also holding the position of Executive Director responsible for Sales and Business Development.

Kofi Ayensu
… took over the position as Director of Project Management for Clyde Bergemann Americas Air Pollution Control Division (CBHAN) in Hanover, MD in February 2016. In his new role, Kofi will direct Project Management efforts in addition to maintaining oversight of the Engineering Department.