Newsletter
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BOSCH
Invented for life

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A newsletter – why?

We are pleased to present the first issue of the 'Newsletter' from Bosch Industriekessel. Our Newsletter will keep you informed on developments in our division: practical examples, the latest products, trade fair dates and exciting news from our industry segment.

If you would like to be one of the first to read the latest news straight from the source, you can subscribe to our free digital Newsletter using the attached fax reply. We hope you enjoy browsing through this issue.

Bosch Industriekessel delivers the first boiler under the Bosch brand

Bosch Industriekessel has delivered the first boiler under the Bosch brand and in the new colour design. After the company name had been changed to Bosch Industriekessel in 2011, the next step followed at the beginning of July 2012 with the brand changeover: all boilers ordered from this point in time onwards will bear the Bosch logo when they are delivered. The boiler colours are changing with the new brand: to date dark blue was employed, now anthracite and red are to be used. The customer-specific manufacture, the contact persons, the sales channel via plant construction companies, the product quality and the extensive range of services all remain unchanged however.

The recently delivered Bosch Universal UL-S steam boiler will provide the future energy requirements for the 'convenience poultry products' production line at the speciality food manufacturer, Allfein GmbH & Co. KG in Lower Saxony. The company which ordered the Bosch boiler is AEU (Anlagen zur Energie und Umwelttechnik Consulting GmbH), a plant construction company based in Kaltenkirchen. The managing director and owner of AEU, Erhard Renken,

The first industrial boiler in the Bosch colour design is unloaded at the speciality food manufacturer, Allfein, in Dannenberg.

confirms: ‘We have been working successfully with Loos – now Bosch Industriekessel – for decades now. The new Bosch brand and the fresh colour design perfectly suit Europe‘s leading manufacturer of industrial boilers’.

Thanks to the modular design and the ‘ready to connect’ modules, AEU were assured of a quick and problem-free installation of the steam boiler immediately after it had been brought into the boiler house. The commissioning was entrusted to Bosch Industriekessel‘s customer service.

The boiler has a steam capacity of 3000 kilograms per hour and it is equipped with a natural gas firing system and an integrated economizer for flue gas heat recovery. The WSM-V water service module was installed for water treatment. The module supplies the steam boiler with degassed and chemically conditioned feed water and it disposes of the desalted and blow-down water. The optimum setting and the control of the boiler is performed by the BCO boiler control.

Erhard Renken, owner and managing director of the plant construction company AEU, knows and appreciates the benefits of the range of modular boiler systems from Bosch (formerly Loos).

Universitätsklinikum Marburg: reliable energy self-sufficiency

According to the Federal Statistical Office, Germany's medical centres spent a total of more than EUR 2 billion on energy, fuels and water in 2010. This represents a huge savings potential; costs can be cut significantly by investing in a modern energy architecture.

The given situation

Until 2010, the hospital was supplied with steam and hot water from the district heating plant of the University of Marburg. Essentially for economic and ecological reasons, the medical centre then decided to become self-sufficient in energy. In September 2010, Bosch Industriekessel provided the required technology. Two steam boilers and heating boilers each were commissioned already at the end of October of the same year.

The technology

Two Universal steam boilers UL-S with a steam output of 3000 kilograms per hour now supply steam to the kitchen, laundry, cleaning and disinfection devices/systems, e.g. for the processing of beds or sterilisation. Fuelled with natural gas, the boiler ensures low-emission, environmentally friendly combustion.

Efficient supply of heat and steam: The UT-L heating boilers as well as one UL-S steam boiler.

An integrated economiser increases the boiler efficiency through fuel gas heat recovery. The WSM-V water service module supplies degassed and chemically conditioned feed water to the steam boilers and disposes of the desalting and waste water. The WA water analyser fully automatically measures and monitors the boiler water quality.

Two Unimat boilers UT-L with a heat output of 7.7 megawatts each heat the domestic and heating water. The boilers use low-emission natural gas – one of them is a dual-fuel boiler that can also run on light fuel oil. They achieve a standard efficiency of up to 95 percent without flue gas heat exchanger. The four boilers are controlled via the SCO system control and BCO boiler control units. All operating data can be stored and displayed in the form of clear curve or summary charts on the touch panel displays. An integrated monitoring and security function prevents maloperation.

The result
State-of-the-art boiler and modular technology from Bosch Industriekessel enabled the Universitätsklinikum Marburg to become self-sufficient in energy. The investment in a modern energy architecture pays off in about as little as four years.

The water service module WSM-V ensures fully automatic water treatment. The main components of the module are a steam-heated feed water tank with trickling deaerator, chemicals dosing device, blow-down and expansion tank, a water sample cooler as well as a modern control panel. The WA water analyser ensures optimum water quality.

Immergut Molkerei – four-pass boiler paves the way to a modern energy concept

The Operator

The origins of the Immergut GmbH & Co. KG, a manufacturer of dairy products go back to the founding of the Molkerei Stavenhagen in 1883. The company's works in Schluechtern, Hesse followed 11 years later. 1930 saw the opening of the Molkerei A. Ziegler in Schluechtern, which took over the Immergut 'West' brand in 1964. 13 years after German reunification, the Immergut 'West' and 'East' brands finally came together, followed shortly by the foundation of Immergut GmbH & Co. KG in Elsdorf.

The Project

The dairy products manufacturer has relied on boilers from LOOS INTERNATIONAL (now Bosch Industriekessel GmbH) for the production of process steam since 1970. The steam is employed primarily for sterilisation in Immergut production processes under strict consideration of the company's quality criteria. Following an extensive site analysis, and in collaboration with Helmut Herbert GmbH & Co., plant engineers from Bensheim, the company decided to take advantage of combined heat and power generation to satisfy their extreme energy requirements. A CHP system was chosen for on-site power generation. The exhaust heat from the motor of this system is transformed into process heat in a series-connected, self-fired four-pass boiler from Bosch Industriekessel. With this option, peak-load boilers may frequently be omitted due to self-firing. The investment costs, the space required for installation and costs for ancillary equipment are reduced to an enormous extent.

The result

On-site power generation with the CHP in conjunction with waste heat exploitation by the high-efficiency steam boiler and heating system leads to a considerable increase in efficiency in comparison with separate electrical power and heat generation.

We would be pleased to arrange a personal meeting to determine an optimum heat concept to meet your specific needs or discuss project-related issues.

In addition to the four-pass boiler, the system also includes modular components for water treatment and heat recovery from Bosch Industriekessel.

The waste heat from the CHP systems is transformed into process steam by an additional exhaust heat string in the boiler system.

The Bosch Thermotechnology press conference reviewed: **Greater efficiency in the large systems business**

The International Press Conference of the Bosch Thermotechnology Division took place in September. 'Energy-efficiency in the industrial and large systems segment' was the theme of discussion at the event, and Bosch Thermotechnology presented an overall view of their activities in this field.

'On a global scale, the industrial sector is responsible for almost one third of all power consumed and the corresponding CO_2 emissions. If the best available technologies were installed, industrial power consumption could be reduced by 20 to 30%', emphasised Thomas Bauer, member of the divisional board of Bosch Thermotechnology. The company is ideally positioned in the global market for large thermo technological systems* and has the required technologies:

- Industrial boilers as shell boilers for up to 38 megawatts or 55 tonnes of steam per hour
- Water tube boilers up to a maximum steam output of 220 tonnes per hour
- Heat pumps with an output of 4.8 megawatts
- Large solar thermal plants with collector areas of up to 10000 square metres
- Ventilation and cooling systems with airflow rates of up to 165000 cubic metres per hour
- Combined heat and power units: as CHP systems with power ratings of up to 2145 kW (electrical) and as ready-to-install modules rated from 19 to 400 kW (electrical)
- ORC systems for waste heat power generation with ratings from 40 to 375 kW (electrical)
- In addition to the actual products, Bosch Thermotechnology also offers ideally optimised ancillary modules for the creation of complete systems, for instance heat storage modules or modules for wastewater disposal in the industrial bolier sector

The constant optimisation of existing solutions and the development of new solutions for efficient power generation is a key priority at Bosch Thermotechnology. One example from the large systems segment is the range of ORC systems for waste heat power generation currently available on the market. An important target for future developments is the combination of different technologies and systems from a single provider and, in turn, the more efficient provision of energy. This involves, for example, the optimum integration of large industrial boilers and CHP systems. With its sales and service network, long-established collaboration with planners and plant engineers and the worldwide presence of the Bosch Group, Bosch Thermotechnology is ideally positioned and networked to serve a global market.

*The product portfolio may vary in individual markets.

Trade fairs in November

Bosch Industriekessel will be exhibiting its range of products and services under the Bosch brand for the first time at the Brau Beviale and Get Nord fairs. The boiler manufacturer has been part of the Bosch Group since 2009 and it now markets its systems worldwide under the Bosch brand.

Bosch Industriekessel offers solutions for efficient and environmentally-friendly energy supply, which is tailored to individual requirements. The range of products consists of steam boilers in the output range of 175 to 55000 kilograms per hour and hot water boilers with an output of up to 38 megawatts. Modular boiler house components, together with intelligent control and regulating technology, ensure that the overall system operates to optimum energy efficiency. Comprehensive service support from one source rounds off the innovative portfolio.

Come and see Bosch Industriekessel at the Brau Beviale and Get Nord fairs. We will be glad to advise you on all of the options available to you for economical, environmentally-friendly power generation.

Brau Beviale Nuremberg
November 13 - 15, 2012, Hall 4, Stand 315/410

Get Nord Hamburg
November 22 – 24, 2012, Hall B6, Stand 561

Fax reply

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