

Clyde Bergemann's Bottom Ash Handling System DRYCON Gains a Foothold in Japan

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After winning several contracts in its home markets, German Clyde Bergemann GmbH now secured its first order for the supply of a dry bottom ash handling system in Japan. DRYCON will be deployed to automatically convey and cool the bottom ash of the new-build 1,070 MW coal-fired power plant Taketoyo 5, situated in the middle eastern part of Japan.

Chubu Electric Power Co., Inc., the owner and operator of the plant, is one of the biggest power generating and electricity supplying companies in Japan. The new highly efficient ultra-supercritical (USC) plant Taketoyo 5 is supposed to replace three old oil-burning units. Chubu awarded Japanese Sumitomo Heavy Industries, Ltd. (SHI), Clyde Bergemann's long-term partner in Japan for dry bottom ash handling solutions, with the delivery of all ash handling systems.

For handling and cooling of the bottom ash, Clyde Bergemann's patented DRYCON technology will be deployed. DRYCON is a pan belt conveyor, an eco-friendly system that eliminates water usage completely utilizing ambient air for cooling the bottom ash only. The air streams along the conveyor and in counter flow to hot ash, transferring heat back into the boiler.

The DRYCON technology makes it possible to easily transport the bottom ash to the silo top over a distance of 75 m at an incline of 40° with a single stage conveyor. Other commercially available dry bottom ash handling systems have to apply a second conveyor for inclines of more than 35°. That not only increases the cost of

purchase but also has a negative effect on follow-on costs, like spare parts and service provision.

Alongside environmental compatibility and low operating and maintenance costs, DRYCON also delivers a by-product – dry bottom ash – that is saleable to other industrial markets.

“Securing this order is based on an exceptional collaboration with SHI. With Chubu Electric Power’s acceptance, DRYCON now also gains a foothold in Japan”, states Dr. Christian Mueller, President & CEO of the Clyde Bergemann Power Group.

About Clyde Bergemann Power Group:

The Clyde Bergemann Power Group is a globally operating company offering innovative products and services for companies focusing on energy related production processes. Relying on its worldwide organization, Clyde Bergemann supplies process-critical products and system solutions, which are key to an efficient and environmentally sound energy and base material generation.

The Group's main activities lie in the following areas:

- Energy efficiency solutions,
- Boiler cleaning systems,
- Materials handling systems for fly and bottom ash,
- Flue gas cleaning equipment,
- Damper and bypass technologies as well as exhaust gas handling systems for gas turbines,
- Vacuum belt filter systems for the treatment of gypsum from flue gas cleaning processes,
- Combustion air systems, and
- Heat exchangers and energy recovery systems

Used in thermal power plants, industrial boiler systems and similar combustion processes as well as in extractive industry applications,

Clyde Bergemann technology makes important contributions for optimised more efficient and low-emission operations.