



CASE STUDY

DRYCON Compact Ensures Optimized Ash Handling at Schoellershammer Paper Mill in Germany

Situation

In order to double its paper production capacity from 250,000 to 500,000 t/a, Schoellershammer paper mill (Dueren, Germany) invested in a new papermaking machine. Heat and electricity needed for the production is generated in a lignite-fired power station with a steam output of 70 t/h and combined heat and power generation with a total efficiency of 80 %.

Next to an increase of the production capacity, Schoellershammer decided to modernise the power plant's bottom ash discharge handling and replace the existing system by Clyde Bergemann's DRYCON Compact dry bottom ash handling solution. The previous system was subject to ecological restrictions and no longer met the requirements for an environmental friendly, economic and efficient bottom ash discharge system.

Our Solution

DRYCON Compact, Clyde Bergemann's patented dry bottom ash handling system, provides a technically and financially beneficial solution for the handling and cooling of the ash. The system does not need any water for cooling and conveying of the ash, thereby not only saving water but avoiding all water related treatment costs. Furthermore, a re-burning effect of heat energy from the ash increases boiler efficiency. Other advantages of DRYCON Compact include low operating costs and a saleable dry ash by-product.





DRYCON Compact – Designed for Maximum Efficiency

The dry bottom ash handling system has been in commercial operation at Schoellershammer paper mill since March 2015. It conveys bottom as well as fly ash over a distance of 22 metres.

The entire ash is collected immediately behind the DRYCON Compact and can, due to its low moisture content, directly be loaded into trucks and transported to a landfill for power plant residues. The conversion from wet to dry bottom ash handling already shows measurable results and a short return on investment.

The water saved is now used to operate Schoellershammer's the new paper machine.

Mr. Duwe, head of the Schoellershammer power plant, states: "We are happy that we have replaced the old ash handling system with DRYCON Compact. The monthly operating costs is showing promising savings compared to the wet bottom ash system and is confirming our return on investment calculations."

❖ Benefits

- No water requirement for ash cooling and conveying and avoidance of all water related treatment costs
- Reduction of unburned coal in bottom ash
- Re-burning effect of heat energy from ash increases boiler efficiency, reduces coal usage and CO₂ emissions
- Substantial lower operating and maintenance costs
- Reduction of ash transport costs, as the ash does not contain water



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