A Case study from Heat Management

Ahlström-Munksjö Aspa Mill, Sweden

Application: Pulp and Paper mill, Recovery Boiler
Product: High Impact Sootblowing System (HISS™)
Cleaning area: Superheater, Boiler Bank, and Economizer

Aspa Mill

Application: Recovery Boiler
Product: HISS™ Advanced

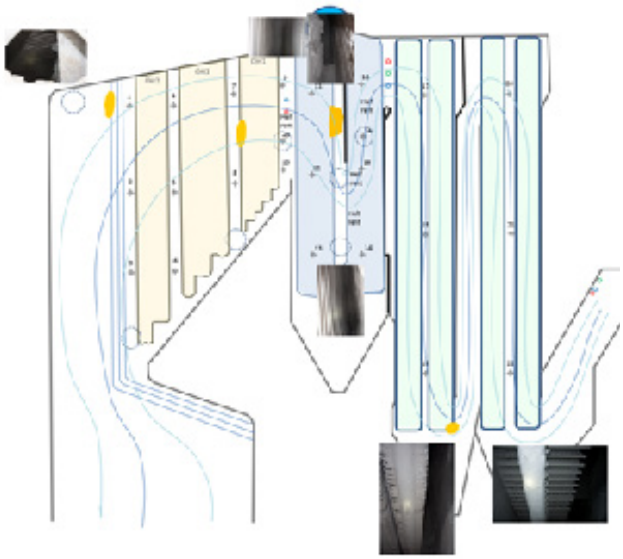
General info

Plant: Pulp and paper mill
Boiler: Götaverken/Kvaerner
Capacity: 1 200 tDS/day
Fuel: Black liquor

System installed

Type: HISS™ Advanced
Number of sootblowers: 25
Sootblower type: Diamond IK 525
Cleaning area: Superheater, Boiler Bank, Economizer

Situation description



The boiler was built in 1973, and was originally designed for a maximum load of 515 tDS/day with a steam production of 73 t/h. After two reconstructions, it is now running at 1200 tDS/day with a steam production of 165 t/h. The increased load implied issues with plugging in the Superheater and Boiler Bank.

The goal with the HISS™ project was to run the boiler at maximum load, and increase the cleaning effect in the boiler with maintained steam consumption. The problems with plugging in the Superheater and the Boiler Bank created a need for frequent explosion cleaning. HISS was installed with the intention to reduce the need for explosion cleaning and to reduce the number of stops for water washing. The boiler initially used 24 sootblowers but added a 25th sootblower in 2017 to increase the cleaning effect further.

Results

- The customer is satisfied with the HISS™ installation.
- After the installation of a 25th sootblower in 2017, many issues have been mitigated.
- The sootblowers are running at 200% with HISS and have reduced the plugging in the superheater and boiler bank.
- HISS™ has reduced the number of stops for water washing to only one stop per year.
- The number of explosion cleanings has been reduced by more than 50%, the custo mer believes that this is partly because of the 25th sootblower.
- The boiler runs at maximum load and the customer claims that HISS™ is necessary to maintain boiler availability.

Heat Management

Heat Management was founded in 2016 following a merger between Infrafone AB and Soottech AB. The purpose of the merger was to create a world-leading cleantech company with a superior product portfolio in energy conversion adapted for industrial boilers and incinerators.

Heat Management's primary customers include power and heat plants as well as pulp mills and marine companies. Today, Heat Management has patented solutions installed in a large number of applications around the world.

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