A Case study from Heat Management

# Södra Wood Långasjö, Sweden

Application: Smoke Tube Boiler
Boiler manufacturer: URBAS
Fuel: Biofuel (tops and branches)
Product: Infrasound cleaning

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## General info

Industry: Sawmill
Boiler: 2x URBAS, built 2013
Capacity: 10MW$_{th}$

## Infrasound generator

Type: 2x APS150
Location of installation: Between 1st and 2nd tube passes on both boilers
Year of installation: 1st 2018, 2nd 2019

## Situation description

The two smoke tube boilers are identical and produces hot water for drying and other applications at the sawmills.

Before installing Infrasound Cleaners, there was no automatic cleaning system installed. Compressed air lances were used every 0.5 to 2 weeks to remove deposits at the inlet of the tube passes. The turning chamber between the two tube passes was also accumulating deposits. Thorough cleaning of tubes and turning chamber was performed at yearly revision.

The boiler required auxiliary firing with oil to keep up the production.

Results

The installation of two Infrasound Cleaners (see Figure 1) resulted in a significantly reduced need for manual cleaning with compressed air. Which in turn also reduced the need for auxiliary firing due to the reduced number of stops, resulting in a reduced oil consumption.

The client is very satisfied with the cleaning effect and the fact that the noise generated from the Infrasound Cleaners is lower compared to audible sound sootcleaning.



*Figure 1 - One of the two Infrasound installations*

Figure 2 shows typical soot accumulation in the boiler before the installation of an Infrasound Cleaner, when it looked like this, it was time for manual cleaning. Figure 3 shows the results after preventive cleaning with Infrasound Technology for a few weeks. Before the installation, manual cleaning would be required after this time of operation.



*Figure 2 - Typical soot accumulation*



*Figure 3 - After preventive cleaning with Infrasound*

# 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.