Perstorp Fjärrvärme P6

Application: Heat and power plant
Efficiency solution: Infrasound Cleaning
Cleaning area: Economizer

General info

Plant: Heat and power plant
Boiler: Kvaerner (Metso), CFB
Fuel: Biomass, wood residue, residual methanol
Capacity: 58 MW_{th}

Installation

Type: 1 x APX7000
Year of installation: 2012

Situation description

Steam soot blowing was previously used six times per day in the economizer and there were also two unplanned stops per year for manual cleaning.

Unplanned stops are costly and are preceded by an increased differential pressure, which increases the flue gas velocity, leading to increased erosion and uneven flue gas distribution. The frequent use of steam soot blowing is also costly and results in tube erosion.
It was decided to install an Infrasound generator from Heat Management to reduce costs, increase availability, and extend the life of the economizer.

The installation was made in 2013, and the Infrasound generator was placed on the soot pocket below the economizer, as seen in Figure 1.

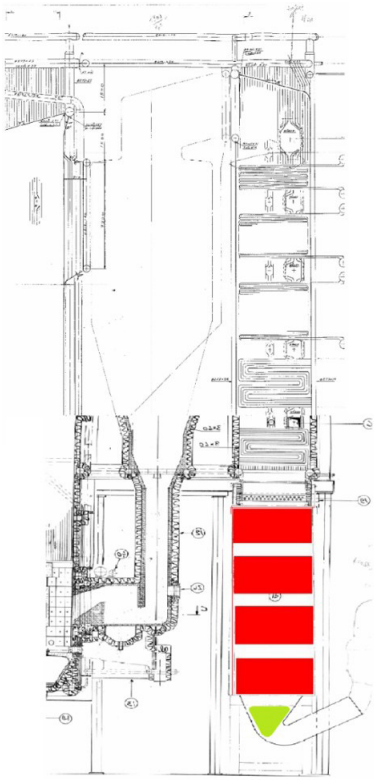


Figure 1. Overview showing the economizer (red) and the Infrasound generator located on the soot pocket below the economizer.

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Results

- **Reduced need for steam soot blowing in the economizer from six to one times per day**, which has resulted in reduced wear of the tube bundles, reduced steam consumption and reduced maintenance costs.

- **Eliminated need for manual cleaning**, which has resulted in increased boiler availability, reduced costs for additional firing and maintenance as well as reduced tube erosion and thereby increased tube life-time.

Under references at www.heatmanage.com, you can read about our technical and economical results for many of our projects.

We have gathered our knowledge based on our long experience of infrasound technology compared to conventional methods such as steam soot blowing, shot cleaning, compressed air soot blowing and audible sound (sonic or acoustic horns) in several "white papers" available under references.

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