



Intermediate Layer: PRB



Convection Pass 1300 MW



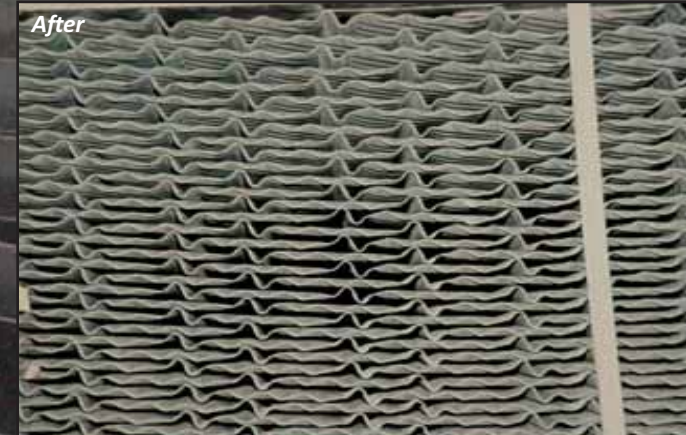
CO-boiler: FCC Catalyst Fines



33 1/2 VIT with PRB deposits: Before



33 1/2 VIT with PRB type deposits: After



After



3022 Shepperd Rd.
Monkton, MD 21111 USA
+1 (410) 472 3000
mail@soniccleaning.com
www.soniccleaning.com

Advanced Acoustic Technologies, LLC

Industrial Boilers

Rothemuhle and

Ljungstrom Air Preheaters

Convection Passes

Always-on low intensity volume cleaning, with the existing sootblowers in a remedial role. ...you can call it Intelligent Boiler Cleaning.

We are not horns!



WaveMaster™ Acoustic Cleaner in service for an Economizer Application

WaveMaster™ Acoustic Cleaning

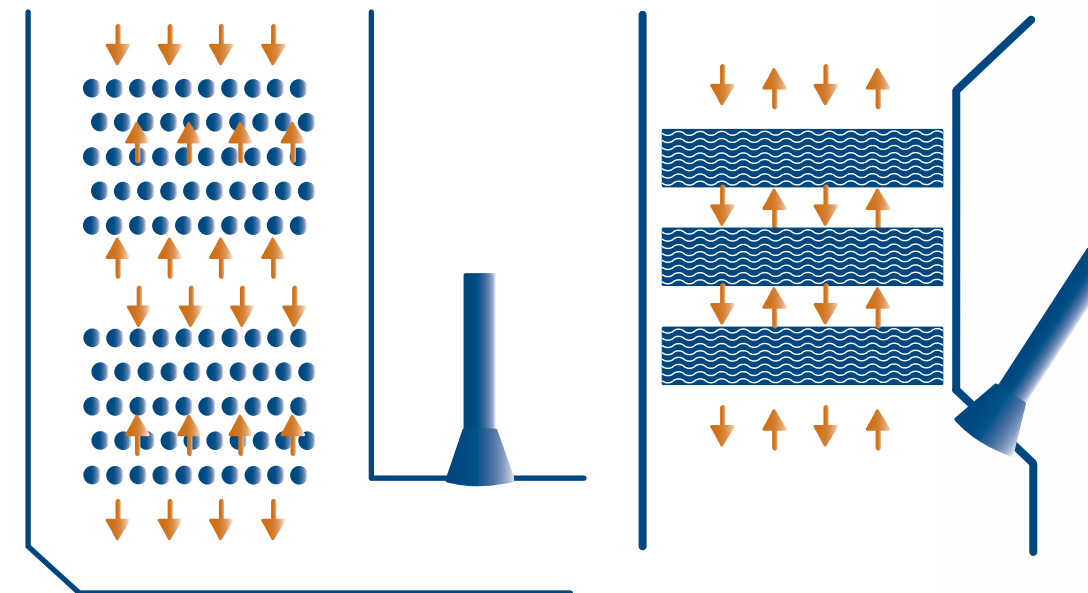
- **Low intensity**—always-on.
- Prevents accumulation of deposits.
- Uniform cleaning effectiveness throughout large heat transfer volumes.
- Non-directional application.
- Virtually continuous service, 24/7/364.5.
- Works with a variety of fuels.
- Infinitely adjustable intensity.
- Operates with low pressure air.
- Unmatched application experience.

Benefits

- Always clean...everywhere.
- No opacity excursions.
- Maintains thermal efficiency.
- No wear on tubes or heating elements (including air preheater seals).
- Keeps your gas differential low.

WaveMaster™ Acoustic Cleaning is all about creating turbulence in the flue gas by means of low frequency sound waves. The sound waves envelope large volumes of heat transfer surfaces and keep ash particles in suspension in the flue gas. This is the essential part that prevents accumulation.

The sound waves passing through the tube banks can also remove dry and dusty deposits.



Typical setup of WaveMaster™ Acoustic Cleaning system

Suspended ash particles are then carried on with the flue gas for removal in downstream gas cleaning equipment.

A single WaveMaster™ Acoustic Cleaner is often enough, while a second Acoustic Cleaner may be required for larger volume applications.

Acoustic Cleaning of fireside deposits is an effective way to increase unit availability, reduce operating and/or maintenance expenses and satisfy opacity regulations.



WaveMaster™ Acoustic Cleaner: Economizer Cleaning



WaveMaster™ Acoustic Cleaning system with two dedicated air supply units

Do You Want More?

Sootblowers: Intelligent, smart or just plain. Are they really the cleaning technology suitable for 21st century power generation?

- tube erosion;
- torn up heating elements and seals;
- high cost to maintain and operate;
- tube banks are partially clean some of the time.

Heat transfer surfaces that are partially clean waste ID/FD fan capacity and require off-line cleaning.

Visit our website and type "sootblowers" in the search box.

www.soniccleaning.com

It is not rocket science!