



HOT CONVECTION CLEANING REDUCES STACK TEMPERATURE



PROBLEM:

Two identical Platforming heaters at this facility were suffering from elevated stack temperatures and less than desirable steam production.

SOLUTION:

Hot Convection Section Cleaning was performed while the fired heaters were in operation delivering an increase of 0.9 ton/hour in steam production.

Synthetic Fuels Manufacturing Facility

This facility uses proprietary technology to convert syngas into synthetic fuel components, pipeline gas and chemical feedstock for the downstream production of solvents, polymers, comonomers and other chemicals.

Elevated Stack Temperature in Two Platforming Heaters

Two identical Platforming heaters at this facility were suffering from elevated stack temperatures and less than desirable steam production. Following a detailed evaluation, it was determined that the problem was being caused by the fouling in the convection section.

Video: Hot Convection Cleaning



Convection section fouling, watch this application in action



Scan QR code to watch video



Hot Access Creation

In order to gain access to the convection section fin tubes, IGS utilizes a proprietary Hot-tek Hot Access Creation method. 48 reusable access ports have been created to facilitate the cleaning.

Hot Convection Section Cleaning

The cleaning was performed while the plant was in full operation, with no disruption to production. The application was completed using IGS' environmentally friendly service that will not damage finned tubes.

Decrease in stack temperature	36°C /65°F
Increase in steam production	0.9 ton/hour
Internal Rate of Return	31.33%
Return on Investment	30 days

Hot-tek application results



Hot convection section cleaning in action



Hot convection section cleaning completed

Application Summary and Key Benefits

- **Key Benefits:** improved fired heater efficiency and furnace draft, increased process pre-heat and steam production, reducing stack temperature.
- **No Shutdown:** HCC service effectively removes fouling from convection section tubes without shutdown.
- **Easy Access:** IGS utilizes a proprietary blasting media via existing access points or access points created during heater operation.
- **Safety:** This service is very environmentally friendly & will not damage finned tubes