

STEP Combustion CASE STUDY

Dual Fuel Wall-Fired Boiler (230t/h)

Problem:

An overseas industrial high-tech materials manufacturer needed dual fuel burners and additional equipment for their new coal and natural gas fired boiler.

Unit Description: Rafako 230 ton/h superheated steam boiler. The boiler is equipped with economizer, air pre-heater, Selective Catalytic Reduction (SCR) system and Electro-Static Precipitator.

Solution:

STEP Combustion provided eight (8) 108 MMBtu/h dual fuel (Coal and Natural gas) burners. Also provided were Class 1 retractable gas igniters, sixteen flame scanners (main and igniter flame), as well as a modular windbox.

Results:

Burners and windbox were designed, fabricated, and shipped within a 12 week period. All of the equipment provided met CE requirements.

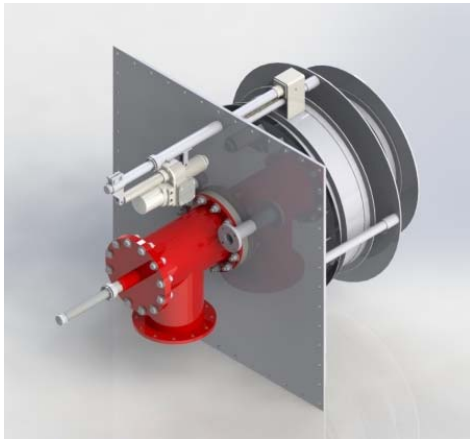


Figure 1 - STEP Dual Fuel Wall-Fired Burner

STEP provided installation and start-up support, fuel and air flow balancing, coal mill, SCR and boiler tuning.

STEP provided installation and start-up

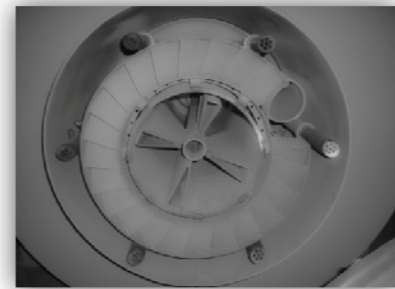


Figure 2 - STEP Dual Fuel Wall-Fired Burner



Figure 3 - Modular Windbox