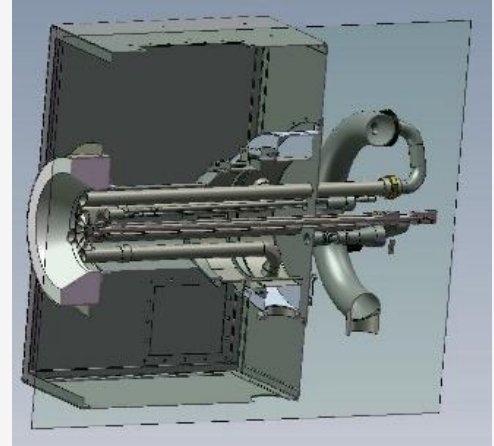


Combustion Solutions for PACKAGE BOILERS



CCA supplies front end, in-furnace and /or post-combustion solutions for new boilers or we can retrofit existing package boilers:

- Cost effective NO_x reduction (both capital and operating), using one or more of the following techniques, selected and optimized based on evaluation of the specific application:
 - NO_x optimization of existing (retrofit) burners
 - New Low NO_x Burners
 - Flue Gas Recirculation (FGR)
 - TRIM-NOX® urea-based Selective Catalytic Reduction (SCR) with patented return flow injection system
 - Patented Water Injection NO_x Tempering
 - CFD analysis and optimization of critical process streams
- Complete system solutions including:
 - Burner Management Systems
 - Combustion Control Systems
 - Fuel trains and skids
 - Fuel metering / pressure regulation stations
 - Combustion Air System
 - Installation Services
- NO_x emissions down to 2 ppm:
 - A sub-10 ppm NO_x solution which, compared to “ultra” low NO_x burners, eliminates the requirement of extreme levels of FGR, increased power consumption, sophisticated control / safety systems and prolonged Commissioning periods.
 - CCA burners offer excellent turndown, responsiveness to demand, low excess air operation, and proven safe operation.
 - TRIM-NOX® SCR system incorporates safe urea based solution to meet ultra-low NO_x emissions, not requiring on site storage and handling of ammonia.
 - Patented intermittent water injection for peak loads, if required.
 - Flexibility to meet future NO_x emissions without major equipment change.
 - Single source (system) responsibility (front and back end) for emissions compliance
 - Ability to burn low sulfur diesel fuels and still meet ultra-low (sub-10 ppm) NO_x
 - Fuel flexibility with CCA burners
 - Purchase power in negotiating gas pricing



CCA Combustion Systems
A Division of Peerless Mfg. Co.

884 Main Street, Monroe, Connecticut 06468

Tel: (203) 268-3139 Fax: (203) 261-7697

www.cca-inc.net

PACKAGE BURNER Specifications



Burner:

Capacities: To >300 MMBtu/hr heat input per burner

Fuels: Virtually all combustible gaseous and liquid fuels including:

- Natural gas
- Refinery gases
- Propane
- Hydrogen
- Landfill / Digester Gases
- Process Off Gases/liquids
- Heavy Fuel Oil
- Ultra Heavy Fuel Oils (pitch / bitumen)
- Light Fuel Oil
 - Ultra-Low Sulfur Oil
- Kerosene
- Jet Fuel



Air Side Pressure Drop:

- 6-10"WC (typical)

Turndown:

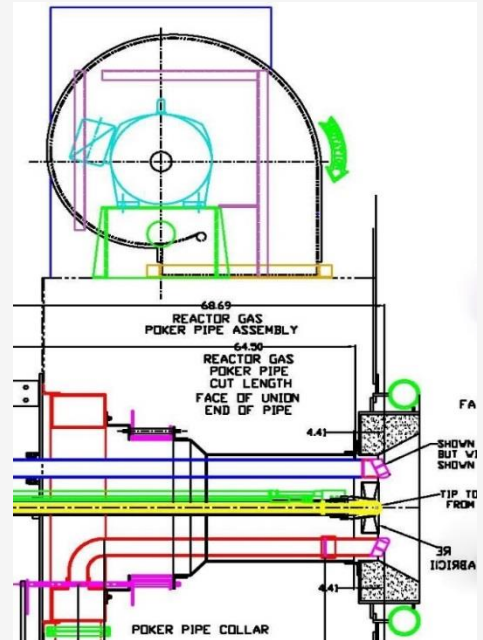
- Natural Gas: 10 – 1 (typical)
- Oil: 8-1 (typical)

Design Excess Air @ MCR:

- Gas: 10%
- Oil: 15%

CO Emissions:

- <50 ppm (corr. to 3% O₂) typical



CCA burners can be designed to meet stringent code requirements and customer QA/QC when required.

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