

DATASHEET

Enviromix 2000 Burner

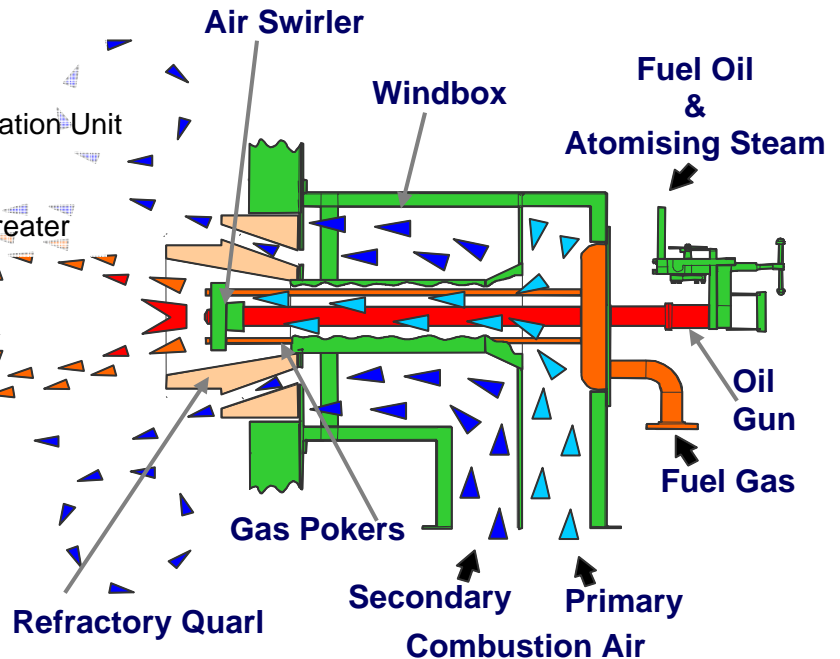


Applications

- All Process Fired Heaters such as
 - Crude and Vacuum Distillation Unit
 - Delayed Coker
 - Hydrocracker and Hydrotreater
 - Platformer
 - Visbreaker

Design Requirements

- Wide operational envelope
- Able to handle a multitude of fuels
- Flexible design considerations
- API specification compliant
- Robust for low through life costs



Standard Supply

- **Windbox (Natural Draught)** – 5 mm carbon steel insulated with 50mm mineral wool fully retained with stainless steel perforated plate / expanded metal
- **Windbox – (Forced Draught)** 5 mm carbon steel – can be internally or externally insulated if requested
- **Damper** - integral with the windbox and fully lockable, with external position indicator in any position. Can be designed to operate from grade for any heater height
- **Refractory Tile** - high grade low cement castable with identical pieces that can be installed in any position
- **Gas Gun (Gas Only and Dual Gas)** - flanged single gas inlet positioned to allow carriage removal without effecting local piping
- **Oil Gun** – (oil only and gas & oil combination) designed to maximise hole sizes to minimise plugging due to coke or carry through particles. Can be manufactured in high alloy steels to minimise the erosion effect of catalyst fines
- **Gas Sprayer Carriage (Dual Gas and Gas & Oil Combination)** - fully welded construction with single gas (2 for dual gas) inlet positioned to allow carriage removal without effecting local piping
- **Swirler** -utilises highly efficient curve blade construction and manufactured from high grade stainless steel

Key Features

- Forced or natural draught
- Flame profile
 - round, flat between tubes or flat against wall
- Swirl stabilisation provides extreme flame stability and allows a greater turndown
- Low excess air for maintaining efficient combustion
- Smaller burner throat reduces combustion noise transfer from the furnace to burner air inlet
- Suitable for a wide variety of applications.
- Robust materials and methods of construction ensures long and reliable life
- Designed and manufactured based on latest industry standards such as API 535, API 560 and EN 746-2
- Range of fuel firing
 - gas only, oil only, gas & oil combination, dual gas waste gases

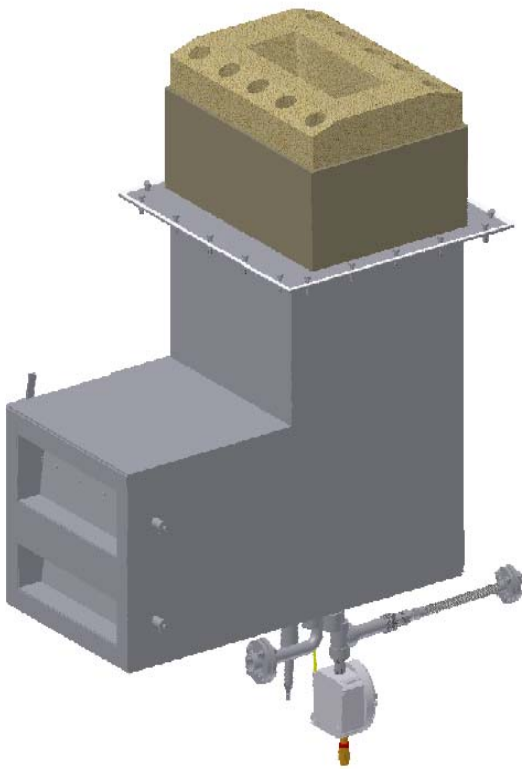


Specifications

- **Liberation** 0.3 to 18.0 MW
- **Fuels** Gas ... Butane, Natural gas, Hydrogen
Oil Light Distillate to Heavy Fuel Oil
- **Fuel Pres.** Gas 0.5 to 2 kg/cm², fuel oil 4 to 6 kg/cm²
- **Excess Air** 5 to 30 %
- **Register Draught Loss** 5 to 200 mmwc

Assumed conditions unless stated / requested

- **Furnace Temperature** 850 °C
- **Register Draught Loss** Natural Draught 10 mmwc
Forced Draught 75 mmwc
- **Combustion Air Temp** 25 °C
- **Excess Air** 10%
- **Fuels** Natural Gas @ 2.0 kg/cm².
- **NOx** 100 mg/Nm³



For further information on combustion equipment please contact the head office:

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Hamworthy Combustion Engineering Limited reserve the right to make changes and improvements which may necessitate alteration to the specification without prior notice


HAMWORTHY
COMBUSTION

Incorporating:

PEABODY ENGINEERING
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