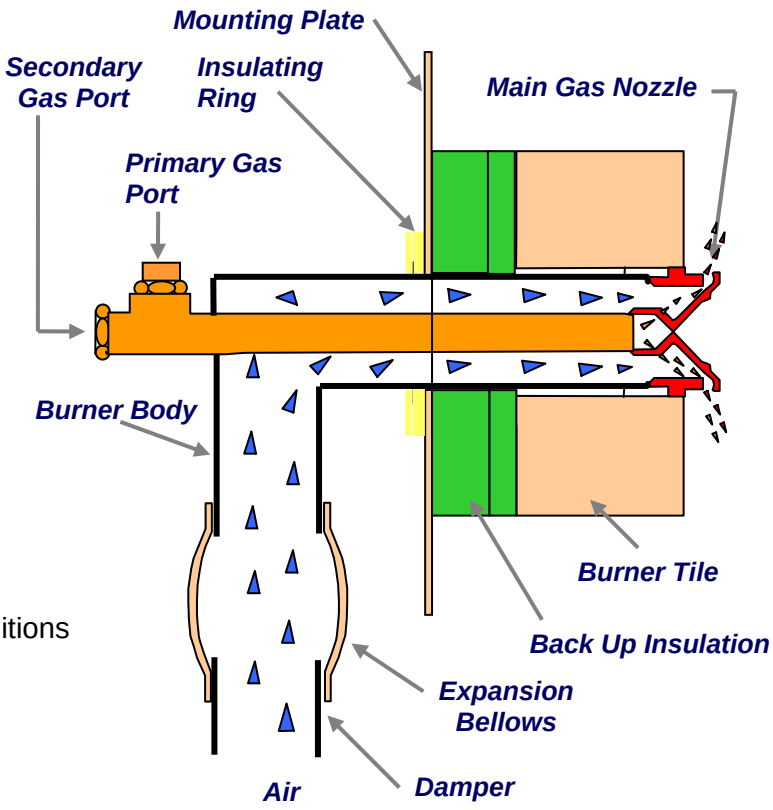
DATASHEET

Radol Burner

HAMWORTHY COMBUSTION

Applications

- Radiant Wall Side Fired Furnaces
  - Ethylene Cracker
  - EDC Furnace
  - Ammonia Reformer
  - Hydrogen Reformer



Design Requirements

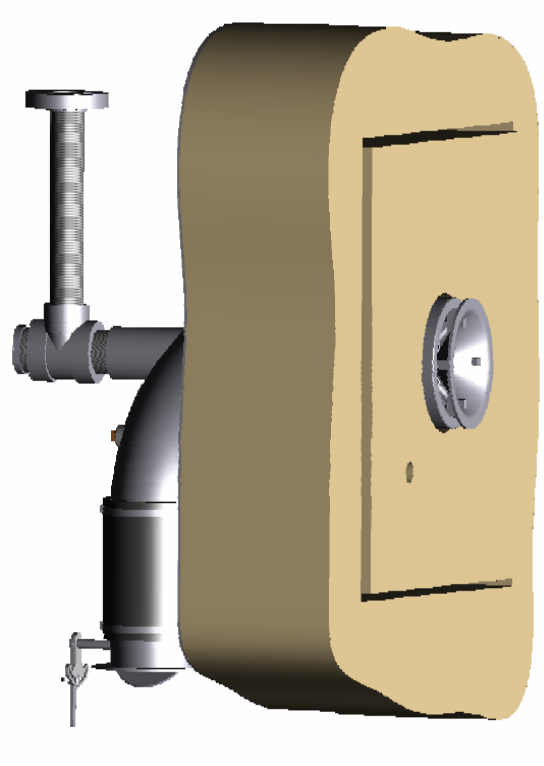
- High firebox temperature
- Uniform heat over long process tubes
- Minimum forward flame projection
- Wide range of fuel gases and upset conditions
- Ease of installation and maintenance
- High combustion air preheat

Standard Supply

- **Burner Body** –manufactured from stainless steel to eliminate painting requirements and provide lighter weight for easier maintenance
- **Damper** – lockable butterfly type with external position indicator extended to compensate for any external duct insulation applied at site
- **Main Gas Nozzle** – cast from high quality stainless steel and machined with orifice tubes positioned to minimise flashback
- **Mounting Plate** – stainless steel construction with anchors to support burner tile and back up insulation as a single module for ease of installation
- **Burner Tile** – pre-dried single piece unit cast from high quality low cement castable
- **Back Up Insulation** – 2 phase insulation designed to withstand the high interface temperature and minimise mounting plate surface temperatures
- **Insulating Ring** – optional - ceramic fibre insulation gasket to prevent conducted heat from hot combustion air in burner body transferring to furnace mounting plate
- **Expansion Bellows** – optional extra – suitable fabric or metallic bellows supplied by client or Hamworthy to compensate for movement of combustion air ducting

Key Features

- Ultra low NOx application
- Forced draught
- Single or dual gas version
- Stainless steel burner and mounting plate construction
- Pre-fired burner tile fully supported by mounting plate
- Ignition by means of portable or fixed source
- High hydrogen and vaporised naphtha capability
- High air preheat design



Specifications

- **Liberation** 0.2 to 0.9 MW
- **Excess Air** 5 – 30%
- **Fuels** Butane, Natural gas, Hydrogen, PSA
- **Fuel Pres.** Gas 0.1 to 3 kg/cm^2
- **Register Draught Loss** 150 to 300 mmwc

Assumed conditions unless stated / requested

- **Furnace Temperature** 1,050 ˚C
- **Register Draught Loss** 200 mmwc
- **Combustion Air Temp** 300 ˚C
- **Excess Air** 10%
- **Fuels** Natural Gas @ 1.0 kg/cm^2.
- **NOx** 75 mg/Nm^3

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

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HAMWORTHY
COMBUSTION

Incorporating:
PEABODY ENGINEERING
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CHENTRONICS

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