

BRANCHED ELEMENT DUCT BURNER



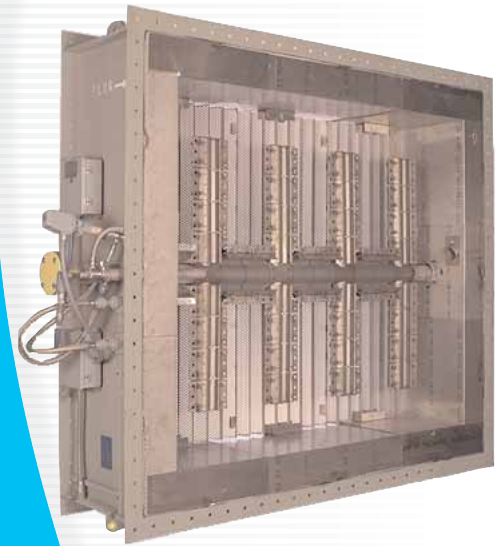
DUCT BURNERS

Duct Burners from Forney Corporation provide the latest designs in duct burner technology to meet the complex needs of the combined cycle and cogeneration industry.

Our branched element design offers a compact, efficient duct burner design for small cogeneration applications. These burners are well suited for the high temperature demands of today's heat recovery systems.

Forney's integrated design, which includes an upstream distribution grid, provides both the flow straightening device and burner in one modularized section. Turbulent turbine exhaust gases or air streams are "smoothed" to provide even combustion air distribution to the burner section. Uniform flow results in better emission performance and improved temperature distribution to the downstream components.

Our branched element duct burners offer many of the same industry leading technologies as our large combined-cycle and cogeneration units.



SINGLE POINT OF IGNITION for reliable light-off and reduced igniter costs. Turbulent air flows with low oxygen and high moisture content require a reliable ignition source - Forney's MAXFire 10 High Energy Spark Igniter (HESI)!

COMPACT, COST EFFECTIVE DESIGN - The branch element reduces the need for multiple burner runners and our high energy igniters ensure light off every time! Ignition and flame scanning scanning complexity is reduced by providing a single point location for the entire burner.

LOW MAINTENANCE- Forney's branched element duct burner feature all stainless steel construction. Orifices are precision drilled and our flame stabilizers are investment cast to close tolerances for many years of trouble free and consistent performance.

EASE OF INSTALLATION- With our integral frame and distribution grid, the duct burner section can be easily installed in ductwork. Our typical 24" deep frame section provides sufficient room for both the grid and burner element.



Re-powering your world





BRANCHED ELEMENT DUCT BURNER

SCOPE OF SUPPLY

- Framed burner element with integral distribution grid
- ANSI B31.1 Fuel Skid with Integral PLC-based Burner Management System
- Redundant Scanner Cooling Air Blowers (Skid Mounted)
- Optional:
 - Pressure Reducing Stations
 - CFD and Physical Flow Modeling

APPLICATIONS

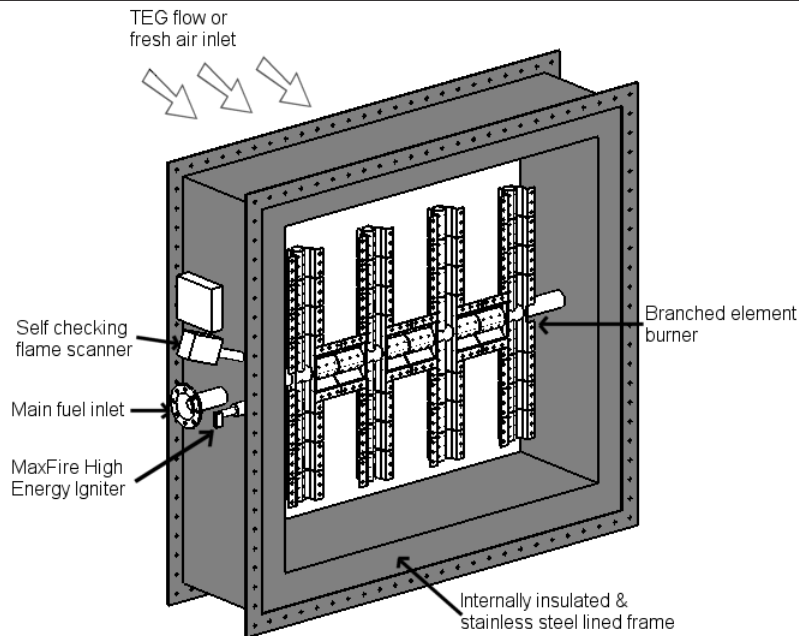
- Small HRSG & Waste Heat Boilers
- Industrial cogeneration
- Air Heater Applications
- Fresh air back up for cogeneration systems

PERFORMANCE SPECIFICATIONS

- Duct cross sections of 3 to 8 feet in width
- Heat inputs from 3 to 80 MMBTU/HR
- Post-fired oxygen concentrations to 6% wet
- Inlet oxygen levels as low as 12% wet

TYPICAL EMISSION LEVELS

TEG NO _x	0.08 LB/MMBTU, HHV
Fresh Air Firing NO _x	0.15 LB/MMBTU, HHV
CO	0.08 LB/MMBTU, HHV



Integral distribution grid (shown in photo on front)