OXY-THERM® Gas or Oil Burners

Principle of Operation

With OXY-THERM® Burners, oxygen for combustion enters the burner body, mixes with the fuel and exits the burner block.

For oil firing, oil enters through the nozzle, is atomized and combines with the combustion oxygen as it exits the burner block.

The ignited oxygen-fuel flame discharges through the refractory block.

Pilots are generally not required for oxygen-fuel applications, but are available through Maxon. Contact your Maxon representative about specific piloting questions.

Typical applications include converted regenerative-type furnaces and melters, unit melters, non-ferrous melting, hazardous waste incineration and special applications requiring high temperatures.

Flow control and shut-off valves (available from Maxon) need to conform with the appropriate codes and standards for oxygen service.

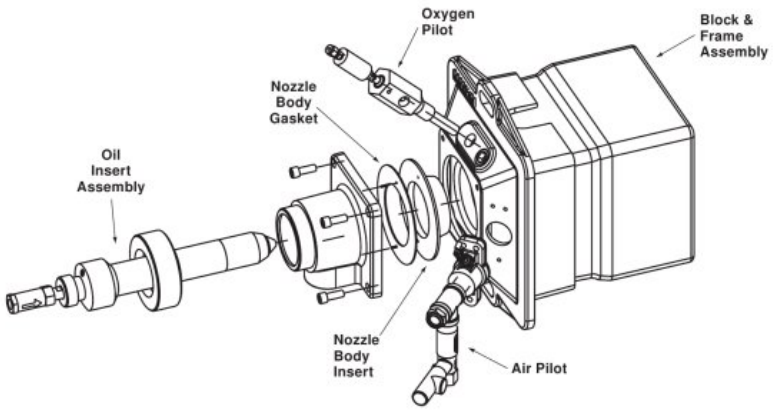
Two refractory block materials are available for OXY-THERM® Burners. **AZS (Alumina/Zirconia/Silica) burner blocks** are to be used for gas firing only, and should be checked for compatibility with your process. **Zirconia burner blocks** may be used with gas firing and are required for oil firing due to the intensely radiant nature of the flame and high resultant flame temperatures.

Capacities

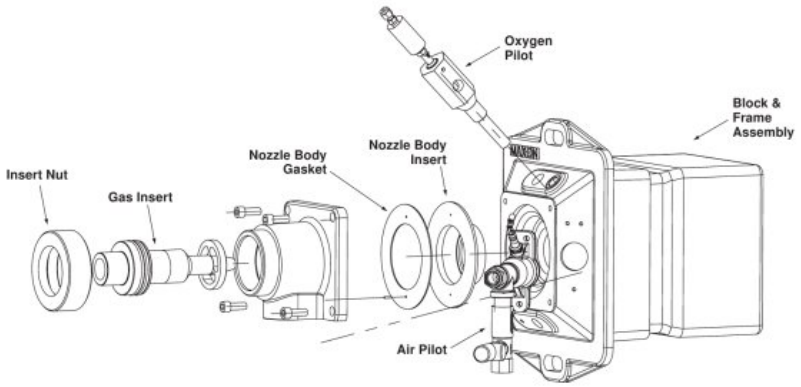
Gas OXY-THERM® Burners provide maximum outputs that range from 200 MBtu/hr (59 KW) to 11.0 MMBtu/hr (3.2 MW). **Oil OXY-THERM® Burners** provide maximum outputs that range from 3.1 MMBtu/hr (915 KW) to 19.9 MMBtu/hr (5.8 MW).

NOTE: In the Imperial System, "M" refers to 10^3, "MM" refers to 10^6.

OXY-THERM® Oil Burner
(exploded view)



OXY-THERM® Gas Burner
(exploded view)



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