OXY-THERM® LE Gas or Oil Burners

OXY-THERM® LE Gas Burner

- **Lowest NOx levels of any oxygen/fuel burner.**
- **Burns any gaseous fuel,** including fuels that may be unstable using air for combustion.
- **Fuel oil capability ranges from light to heavy fuel oils.**
- **Quickly convert between gas and oil service** by changing the burner nozzle. Provides stand-by or alternate fuel capabilities.
- **Increased flame volume and luminosity.**
- **Patented design eliminates flame lofting.**
- **Easily change burner capacity** by simply replacing the burner nozzle.
- **Provides application flexibility** with high operational turndown.
- **OXY-THERM® LE Burners available in three sizes.**
- **OXY-THERM® LE EX (Extended Block) Burners available in two sizes.**
- **Designed for easy installation and service.** OXY-THERM® LE Burner nozzles can be removed during furnace operation, eliminating costly downtimes.
- **Substantially reduce the size of exhaust gas handling equipment.** Oxygen-fuel firing can reduce flue gas volume by 75% or more.
- **Dramatically increase available heat by producing higher flame temperatures** from burning fuels with oxygen. OXY-THERM® Burners eliminate the need for costly combustion air preheaters, regenerators or recuperators.

Manufactured under U.S. Patents #5,431,559 and #5,458,483

MAXON® CORPORATION 201 East 18th Street, P.O. Box 2068, Muncie, Indiana, 47307-0068. Phone: (765) 284-3304. FAX (765) 286-8394

OXY-THERM® LE Gas or Oil Burners

Principle of Operation

With OXY-THERM® LE Burners firing gas, oxygen for combustion enters the burner housing and exits the burner block where it mixes with the fuel.

For oil firing, oil enters through the nozzle, is atomized with your choice of oxygen, air, steam, or fuel gas and combines with the combustion oxygen as it exits the burner block.

The ignited oxygen-fuel flame discharges through the refractory block tunnel and develops a luminous, non-lofting, tightly-wrapped flame pattern with low momentum.

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

Typical applications in industry include converted regenerative-type furnaces and melters, unit melters, non-ferrous melting, waste incinerators, smelters, and special applications requiring high temperatures.

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

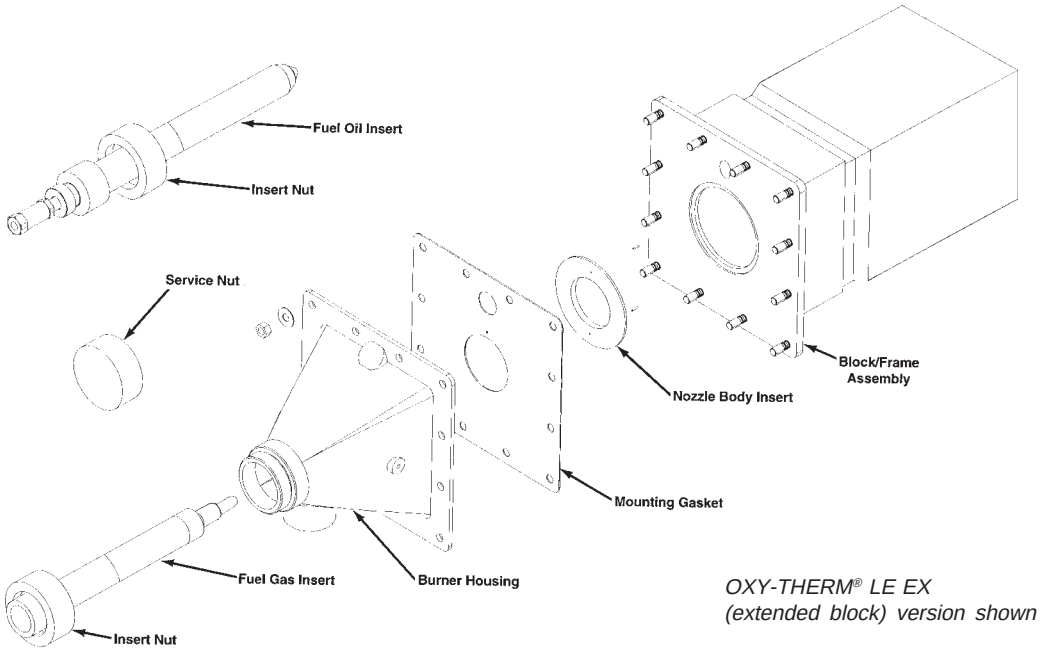
Two refractory block materials are available for OXY-THERM® LE Burners. **Aluminum/zirconia/silica (AZS) burner blocks** are to be used for gas firing only, and should be checked for compatibility with your process. **Zirconia burner blocks** may be used with gas firing and are required for oil firing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

Capacities

Gas OXY-THERM® LE Burners provide maximum outputs that range from 200 MBtu/hr (59 kW) to 15 MMBtu/hr (4.4 MW). **Oil OXY-THERM® LE Burners** provide maximum outputs that range from 3.0 MMBtu/hr (879 kW) to 19.9 MMBtu/hr (5.8 MW).

Gas OXY-THERM® LE EX Burners provide maximum outputs that range from 200 MBtu/hr (59 kW) to 11 MMBtu/hr (3.2 MW). **Oil OXY-THERM® LE EX Burners** provide maximum outputs that range from 3.0 MMBtu/hr (879 kW) to 14.9 MMBtu/hr (4.4 MW).

NOTE: In the Imperial system, "M" refers to10^3, and "MM" refers to 10^6.



OXY-THERM® LE EX (extended block) version shown

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