KINEMAX® Gas or Oil Burners

1-1/2" Series G KINEMAX® Burners with spark ignitor, optional pilot gas adjustable orifice, and arranged for UV scanner mounting. Standard refractory block is shown in background and burner equipped with seal and support assembly in foreground.

- **Stir up the heat in your furnace** with exit velocities up to 275 ft/sec (185 MPH) to promote workload heat penetration and better temperature uniformity
- **Operate on-ratio, with excess fuel, or with excess air** to meet the specific demands of your combustion process needs
- **Burn most clean, low pressure gaseous fuels or #2 light oil** with only 8-16 ounce combustion air pressures
- **48:1 turndown capability** promotes faster bring-up times without temperature override
- **Maximum application flexibility provided** with seven different sizes and capabilities up to 8,400,000 Btu/hr per burner
- **Lower fuel consumption** by using preheated combustion air up to 800°F (427°C)
- **Lightweight refractory-less burner with stainless steel combustion sleeve** for air heating applications
- **Alternate refractory block materials** for chamber temperatures up to 3000°F (1649°C)

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

KINEMAX® Burners

Principle of Operation

With Series G KINEMAX® Burners, combustion air enters the burner body and is swirled out into the burner block (or sleeve) through the internal air orifice plate.

Low pressure gas enters the burner body and exits to the block through machined ports in the gas nozzle.

The gas and air are intimately mixed in the cast burner block tunnel. The spark ignitor is positioned to intersect the fuel/air mixture directly in front of the nozzle face.

Pilot gas is introduced directly behind the gas ports in the gas nozzle and essentially flows through to the burner block through the same ports as does the main gas. The pilot capacity is the minimum firing rate of the KINEMAX® Burner.

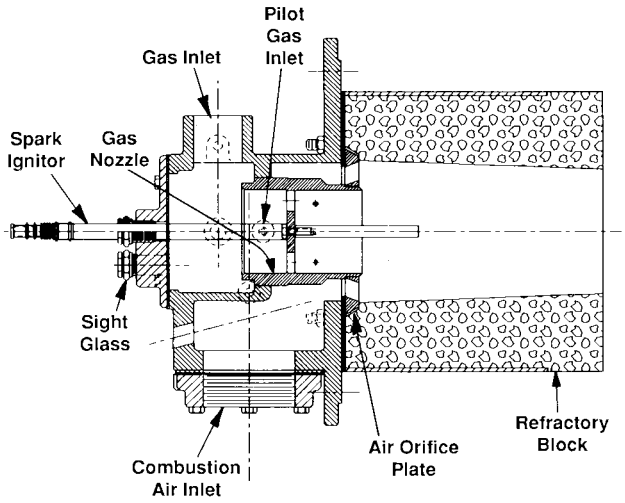
With Series C KINEMAX® Burners, combustion air enters the burner body and is swirled out into the burner block (or sleeve) through the air orifice plate. **Low pressure gas** enters the body and exits to the block/sleeve through the gas tube and nozzle.

For light oil firing, the #2 oil enters through the strainer and oil tube going to the oil spinner nozzle where the stream of liquid oil is atomized by the atomizing air directly in front of the spark ignitor.

Gas for the pilot comes in through a separate inlet in the gas body and flows down the gas tube where it spins out the face of the gas nozzle in front of the spark ignitor.

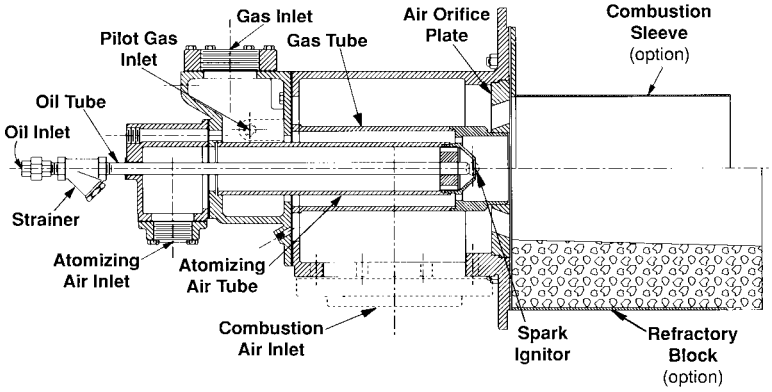
Series G KINEMAX® Burners

for gas only firing



Series C KINEMAX® Burners

for gas/oil firing



KINEMAX® Burners provide a higher velocity stream of hot combustion gases that promote circulation within your furnace or lehr, improving both temperature uniformity and workload penetration.

When used in conjunction with Maxon's MICRO-RATIO® Control Valves, a KINEMAX® Burner may be adjusted to fire on-ratio throughout the firing range or set to give a choice between on-ratio and excess air, or excess fuel firing. As high as 4700% excess air is possible at minimum capacity.

Maxon catalog bulletin 7000 describes MICRO-RATIO® Control Valves which throttle air and fuel volumes to the KINEMAX® Burner.

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