

BURNERS HI-VELOCITY SINGLE TUNNEL

MODEL: 3505 - HS - GA - R
3505 - HS - F - R

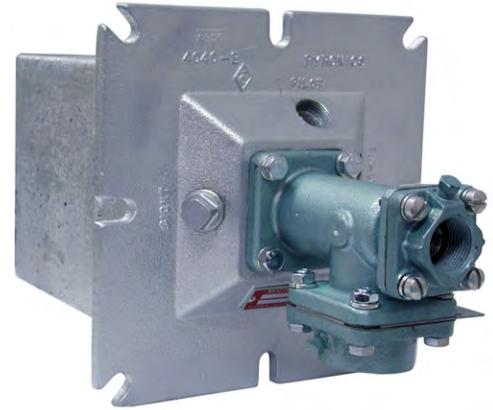
Revision: 0

BULLETIN
3505

DESCRIPTION

The Hot Shot (HS) series is a nozzle-mixing, hi-velocity burner used primarily where a high recirculation rate of the products of combustion is required. The produce a hi-velocity stream of hot gases at the exit of the burner tunnel which will give a high degree of heat penetration into the work in a furnace. The result being greater efficiency with reduced fuel costs. Burners can also operate with excess air or fuel providing additional versatility in process applications.

(For Dual-Fuel Hi-Velocity Burners, see Bulletin 3640).



FEATURES

| | |
|----------------------|---|
| Hi-Velocity: | 250 ft./sec. |
| Refractory Block: | 3000°F (3300°F refractory available) |
| Block Casings: | Steel or alloy available for fiber lined furnaces. |
| Air/Gas Connections: | Flanged for ease of installation. |
| 5 Sizes: | 1 1/2" to 6" NPT Air Connections. |
| Ratings: | 320,000 to 5,150,000 BTU/HR at 20 oz. air pressure at burner (see Table). |
| Turndown: | 10 to 1 |
| Excess Air: | 300% (without pilot) |
| Excess Fuel: | 40% (without pilot) |
| Burner Ports: | Pilot, flame monitoring, and sight (sight glass not included). |
| Direct Spark: | Available (low fire start only) |
| Preheated Air: | Up to 750°F as Std. (1000°F units available, consult factory). |

APPLICATIONS

- Periodic Kilns - Shuttle Kilns - Tunnel Kilns
- Large Carbottom Furnaces - Heat Treating - Stress Relieving
- Ladle Heating - Impingement Heating - Reverberatory Furnaces

CAUTION: Operation of combustion equipment can be hazardous resulting in bodily injury or equipment damage. Each burner should be supervised by a combustion safeguard and only qualified personnel should install, make system adjustments and perform any required service.



pyronics
A Selas Heat Technology Brand

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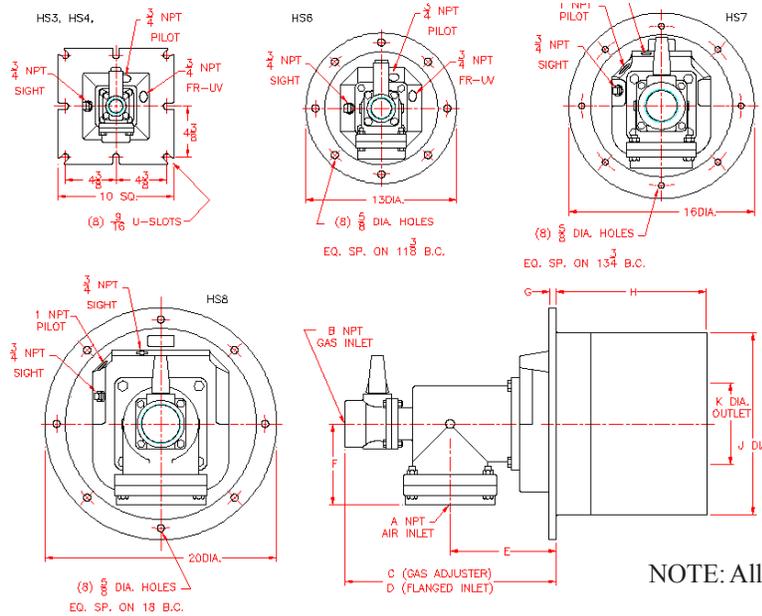
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NOTICE: Pyronics practices a policy of continuous improvement in the design of its products. It reserves the right to change the specifications at any time without prior notice.

BURNERS HI-VELOCITY SINGLE TUNNEL

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DIMENSIONS



NOTE: All Dimensions are in Inches.

| Model No. | A | B | C | D | E | F | G | H | J | K | Weight | |
|-----------|-------|-------|--------|--------|-------|-------|-----|----|--------|-------|--------|-------|
| | | | | | | | | | | | Lbs. | Kgs. |
| HS 3-*-R | 1-1/2 | 1 | 8-3/8 | 7-3/8 | 4-3/4 | 3-1/8 | 3/8 | 9 | 7 | 2 | 55 | 25.00 |
| HS 4-*-R | 2 | 1 | 9-3/8 | 8-3/8 | 5-1/4 | 3-3/8 | 3/8 | 9 | 7 | 2-3/4 | 52 | 23.60 |
| HS 6-*-R | 3 | 1-1/2 | 11-3/8 | 10-1/4 | 6-1/8 | 4-1/4 | 1/2 | 10 | 8 | 3-3/4 | 70 | 31.75 |
| HS 7-*-R | 4 | 2-1/2 | 16-5/8 | 14-1/8 | 8-5/8 | 5-1/2 | 1/2 | 12 | 11-3/4 | 5-1/2 | 180 | 81.63 |
| HS 8-*-R | 6 | 3 | 18-1/4 | 15-3/4 | 9-1/4 | 7 | 5/8 | 13 | 15-3/4 | 7-3/4 | 220 | 99.80 |

* Insert Letter: (GA) - Gas Adjuster (F) - Flanged Inlet

CAPACITY TABLE

| Model No. | Natural Gas 0.64 Sp. Gr. 1000 BTU/HR @ 20 oz. | Flame Length on Ratio | Recommended Pilot | Recommended Direct Spark Electrode |
|-----------|---|-----------------------------|----------------------|--|
| HS 3 | 320 | 14" | P62 PBST | DSE - 3 |
| HS 4 | 655 | 22" | P62 PBST | DSE - 3 |
| HS 6 | 1,290 | 28" | P64 PBST | DSE - 1 |
| HS 7 | 2,425 | 40" | P86 PBST | DSE - 1 |
| HS 8 | 5,150 | 45" | P86 PBST | DSE - 11 |

ORDERING INFORMATION

Add to Model No. for Block Holder and Refractory required.

- 1 With Std. Refractory less Jacket 3000°F.
- 2 With Hi-Temp. Refractory Less Jacket 3300°F.
- C With Alloy Jacket & Std. Refractory 3000°F.
- D With Alloy Jacket & Hi-Temp. Refractory 3300°F.
- E With Short Alloy Jacket & Std. Refractory 3000°F.
- F With Short Alloy Jacket & Hi-Temp. Refractory 3300°F.

2. Specify Model No. & Quantity.
3. Type of Fuel and Pressure available.
4. Specify Pilot Model No. (If required).
5. Specify Sight Glass Model No. (If required).
6. Shipping Instructions.