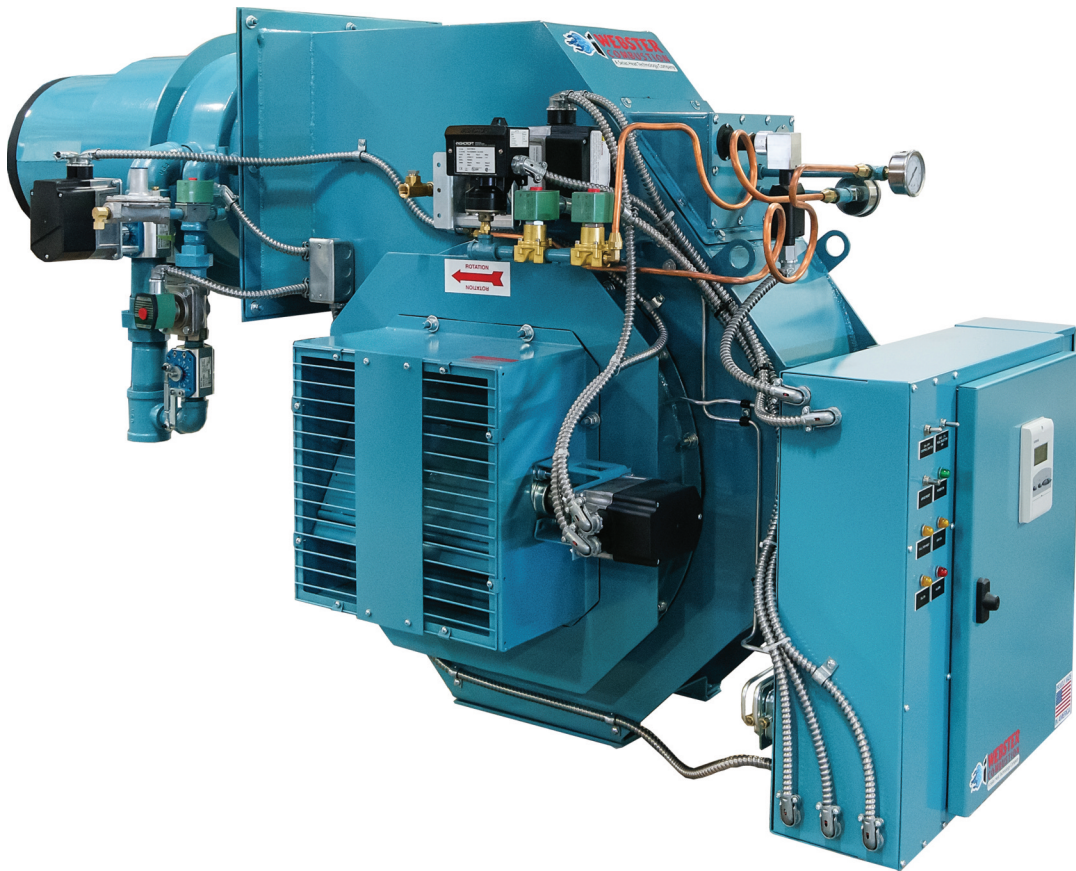


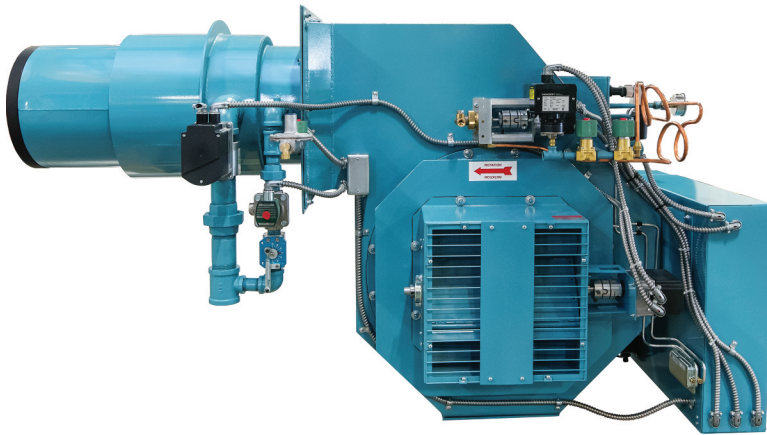
# SC Series Burners

**Low Emissions, Low Excess Air,  
Staged Combustion**



Burner sizes: 50HP up to 700HP

## Benefits of the SC low emissions burner include:



The new “SC” series burner from Webster Combustion combines the reliable and rugged burner technology Webster is known for with a new, patented staged-combustion firing head. This new offering allows the user to operate with low emissions without the cost and expense of external Flue Gas Recirculation

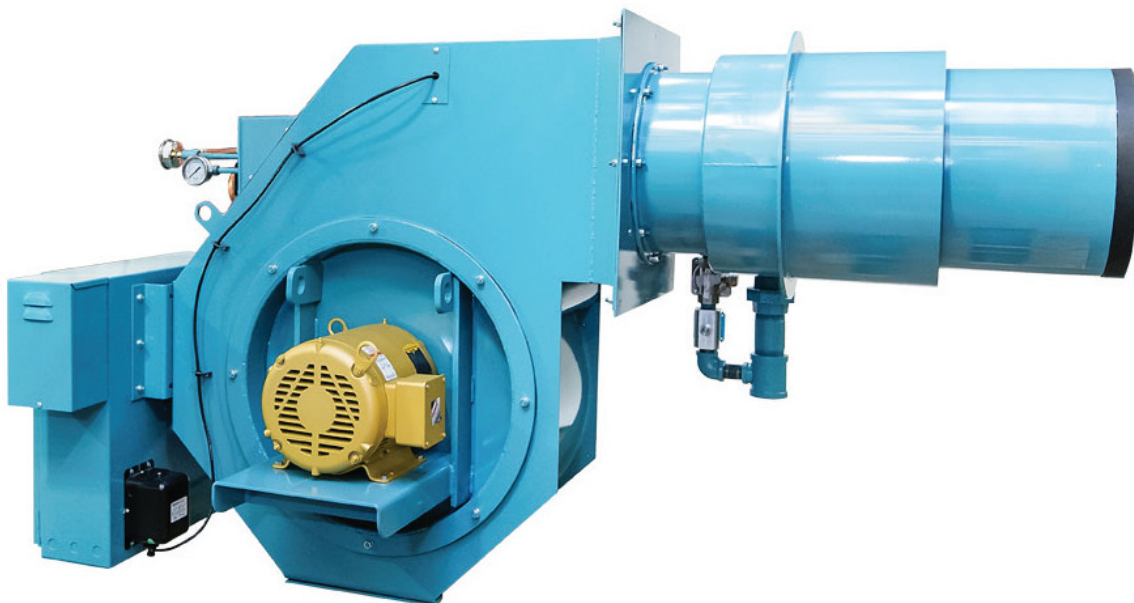
pipng, or the maintenance issues associated with surface combustion technology. The SC burner can achieve 30ppm NO<sub>x</sub> levels while maintaining a very low O<sub>2</sub>, which results in excellent efficiency, and can achieve as low as 9ppm NO<sub>x</sub> levels with an increase in the O<sub>2</sub>.

When combined with Webster’s patented Temp-A-Trim™, the SC burner will maintain even lower excess air levels as operating conditions change, saving fuel and electricity and lowering maintenance costs. The SC burner is available for Scotch-Marine, firetube, watertube, flextube, firebox, and other heaters and vessel types.

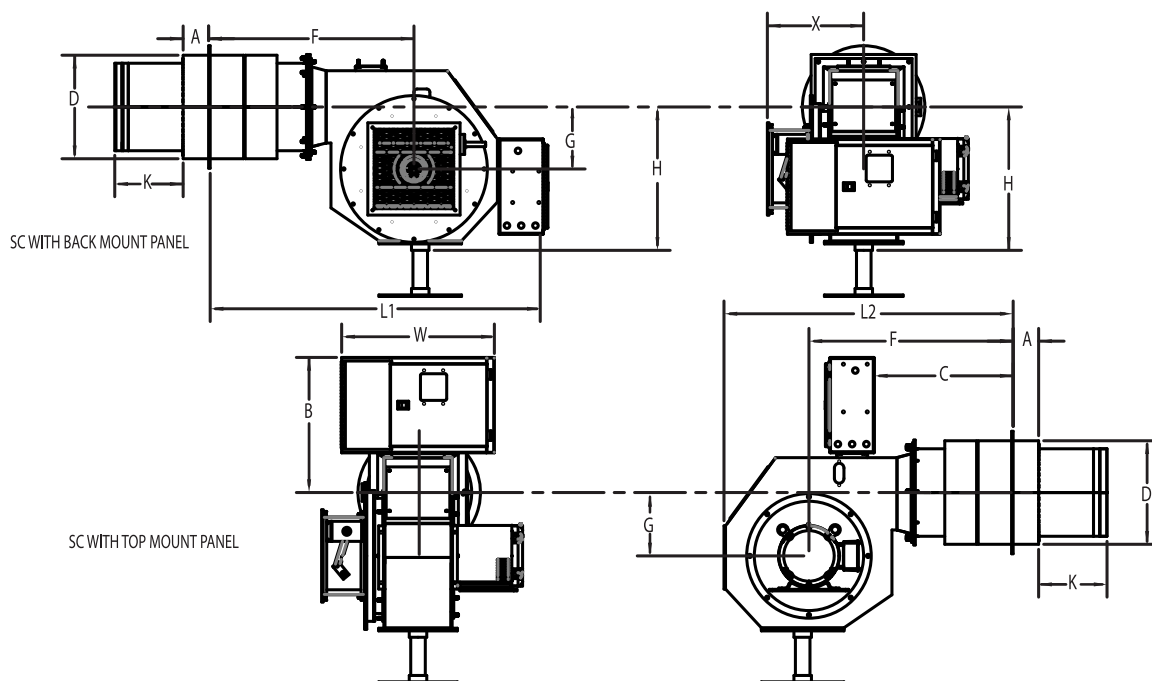
**Contact your Webster representative today so they can show you how much you’ll save by replacing your burner with a new Webster SC burner! Or visit [www.webster-engineering.com](http://www.webster-engineering.com) to locate a sales office in your area.**

## SC Burner Features

- Excellent flame stability for reliable low NOx performance
- Options for various NOx level requirements
  - ✦ Gas - 30ppm, 15ppm, 9ppm
  - ✦ Oil - 60ppm
- Lower Excess Air requirements for extremely efficient operation
- No External Flue Gas Recirculation (FGR) required
- Fire multiple fuels
  - ✦ Natural or LP gas
  - ✦ No. 2 Oil
- Configurable blower housing to match application requirements
- Field-proven ignition system
- Combustion air fan and motor are housed in a single assembly for easy removal and inspection
- Compatible for most types of boilers: Scotch-Marine Firetube, Watertube, Flextube, Firebox, as well as thermal heaters and other vessels
- Options for both pressure and air atomized oil systems



## SC Burner Arrangement



## SC Series Burner Sizes

| MODEL*     | Min Req'd Gas Press. (PSIG) | Std Gas Train Size | Max Firing Rate (MBH) STD |        | Fan Motor HP | DIMENSIONS (INCHES) |      |      |      |      |      |      |      |      |      |    |
|------------|-----------------------------|--------------------|---------------------------|--------|--------------|---------------------|------|------|------|------|------|------|------|------|------|----|
|            |                             |                    | <30 PPM                   | <9 PPM |              | A**                 | B    | C    | D    | F**  | G    | H    | K    | L1** | L2** | W  |
| SC8-20     | 0.75                        | 1.5"               | 3,300                     | 2,900  | 2            | 2                   | 19   | 15.7 | 7.9  | 22.3 | 6.6  | 15   | 10.8 | 38.4 | 30.9 | 24 |
| SC10-30    | 0.75                        | 2"                 | 4,100                     | 3,600  | 3            | 2                   | 20   | 19   | 9.9  | 26   | 8.3  | 18.6 | 10.8 | 44.5 | 36.9 | 24 |
| SC12-50    | 0.75                        | 3"                 | 5,300                     | 4,700  | 5            | 2                   | 21.2 | 16.8 | 12   | 27.3 | 9.7  | 22.5 | 10.8 | 47.9 | 40.5 | 24 |
| SC12.3-75  | 0.75                        | 3"                 | 7,700                     | 6,800  | 7.5          | 2                   | 21.2 | 16.8 | 12.3 | 27.3 | 9.7  | 22.5 | 10.8 | 47.9 | 40.5 | 24 |
| SC13-100   | 1                           | 3"                 | 11,700                    | 10,300 | 10           | 2                   | 21.2 | 16.8 | 13.7 | 27.3 | 9.7  | 22.5 | 10.8 | 47.9 | 40.5 | 24 |
| SC13.8-150 | 1                           | 3"                 | 12,500                    | 11,000 | 15           | 2                   | 24.6 | 26.6 | 13.8 | 30.2 | 17.8 | 34.2 | 10.8 | 56.7 | 49.1 | 24 |
| SC14-150   | 1                           | 3"                 | 14,300                    | 12,600 | 15           | 2                   | 24.6 | 26.6 | 14   | 30.2 | 17.8 | 34.2 | 10.8 | 56.7 | 49.1 | 24 |
| SC15-150   | 1                           | 3"                 | 15,700                    | 13,800 | 15           | 2                   | 24.6 | 26.6 | 15.7 | 30.2 | 17.8 | 34.2 | 10.8 | 56.7 | 49.1 | 24 |
| SC15.8-200 | 1                           | 3"                 | 16,600                    | 14,600 | 20           | 2                   | 24.6 | 26.6 | 15.8 | 30.2 | 17.8 | 34.2 | 10.8 | 56.7 | 49.1 | 24 |
| SC16-200   | 1                           | 3"                 | 18,800                    | 16,500 | 20           | 2                   | 24.6 | 26.6 | 16   | 30.2 | 17.8 | 34.2 | 10.8 | 56.7 | 49.1 | 24 |
| SC18-300   | 1.25                        | 3"                 | 21,600                    | 19,000 | 30           | 2                   | 27.6 | 41   | 18   | 38   | 24.2 | 43.7 | 10.8 | 68   | 60.4 | 24 |
| SC20-300   | 1.25                        | 3"                 | 24,500                    | 21,500 | 30           | 2                   | 27.6 | 41   | 20   | 38   | 24.2 | 43.7 | 10.8 | 68   | 60.4 | 24 |
| SC24-400   | 1.25                        | 3"                 | 30,400                    | 26,700 | 40           | 2                   | 27.6 | 41   | 20.4 | 38   | 24.2 | 43.7 | 10.8 | 68   | 60.4 | 24 |

\* Can be "G" (Gas), "O" (Oil) or "C" (Combination Gas/Oil) \*\* 2" Nose length is standard. May be different depending on vessel insertion depth.

Data shown is for 1" furnace pressure. Contact Webster for data on other furnace pressures.

All dimensions are for reference only. Webster reserves the right to change dimensions without notice.



**WEBSTER**  
**COMBUSTION**

A Selas Heat Technology Company

**The *Better* Boiler Burner.**