
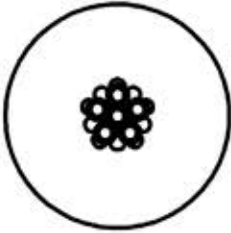

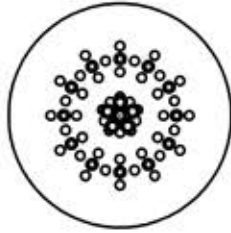

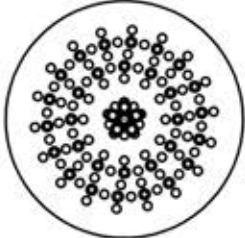




## Technical Data

### Bethlehem's Surface-Mixed Burners

Listed below are the fuel consumption data for the Bethlehem Burners. All burners were set at the maximum flame setting that yields the hottest flame without distorting the solid blue feature of the Bethlehem flame. The numbers are expressed in cubic feet per hour (Ft<sup>3</sup>/hr.). The fuel used for the Alpha and the Bravo burners was propane gas that was regulated by approximately 2 pounds per square inch (psi). The oxygen was delivered from a compressed gas cylinder with a regulator and set for approximately 8psi. Burner flames used for soft glass will not require as much heat as a flame for hard or borosilicate glass. All Bethlehem Burners can work both soft and borosilicate glass.

Burner	Model	Face Pattern	Gas/Oxygen (ft <sup>3</sup> /hr.) (L/hr.)	Suggested Glass Size
	<p><b>Alpha</b></p> <p>Burner Configuration</p> <p>Center Fire- 6 jets            Pentagon Shape            Face Dia. 5/8"</p>		<p><u>Propane Gas:</u>            Gas: 7 ft<sup>3</sup>/hr.            198 liters/hr.            3.3 liters/min            17,612 BTU/hr.            Oxy: 27 ft<sup>3</sup>/hr.            765 liters/hr.            12.8 liters/min</p> <p><u>Natural Gas:</u>            Gas:            ¼ psi, 8 ft<sup>3</sup>/hr.            8,120 BTU/HR.            Oxy:            4psi, 27.06 ft<sup>3</sup>/hr.</p>	<p>Rod: 20mm</p> <p>Tube: 19mm+</p>
	<p><b>Bravo</b></p> <p>Burner Configuration</p> <p>Center Fire- 6 jets            Outer Fire-12 jets            Face Dia. 1"</p>		<p>Gas:            15 ft<sup>3</sup>/hr.            425 liters/hr.            7.1 liters/min            37,740 BTU/hr.</p> <p>Oxygen:            66 ft<sup>3</sup>/hr.            1867 liters/hr.            31.1 liters/min</p>	<p>Rod: 40mm</p> <p>Tube: 42mm</p> <p>Heavy Wall</p>
	<p><b>Champion</b></p> <p>Burner Configuration</p> <p>Center Fire- 6 jets            Outer Fire - 30 jets            Face Dia. 1 1/8"</p>		<p><u>Gas:</u>            38.14 ft<sup>3</sup>/hr.            1,080 liters/hr.            18.00 liters/min            95,960 BTU/hr.</p> <p><u>Oxygen:</u>            185.83 ft<sup>3</sup>/hr.            5,262 liters/hr.            87.70 liters/min</p>	<p>Rod: 44mm</p> <p>Tube: 80mm+</p>

\* Do not use Acetylene. Acetylene contains excess carbon that will clog the gas ports on the burner face.

\* Suggested glass size is old data, burners can work larger glass than suggested.

\* Prices subject to change without notice

Revised 4/30/13