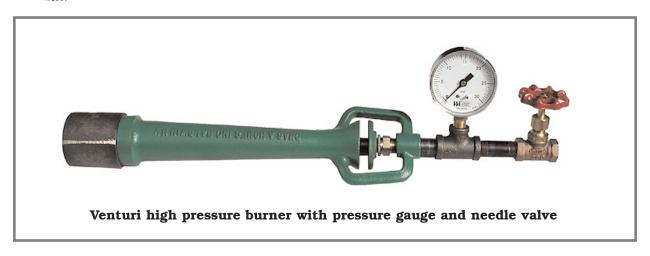
# Gas furnaces for heat treating & melting. Venturi gas burners. Since 1911.

## Venturi HP Nozzle Burner



The *Buzzer* high pressure nozzle burner offers a powerful and efficient torch type flame using high pressure (1 PSI and above) natural or propane gas. The high pressure burner provides a quick and very intense heat without the need for blowers, compressed air, or complicated piping. Our all cast iron construction and flexible Venturi design make them ideal performers in the metal working, foundry, forging, heat treating, glass, and ceramic fields.

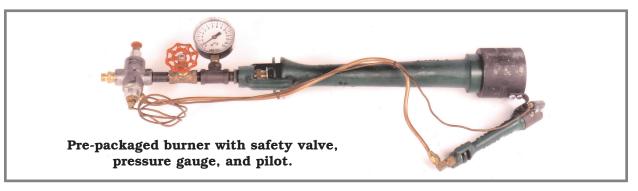
#### **Features**

High pressure nozzle burners come equipped with our retaining port nozzle. This unique nozzle is designed with a series of small retaining ports encircling the main exit port. The recessed design and angle position of the retaining ports prevent the main flame from being blown off the nozzle. This self-piloting design provides a stable flame operating on gas pressures exceeding 25 pounds. Burner output can be increased simply by increasing the gas pressure. As you can see in the accompanying orifice chart, a VNB 200-HP operating at 5 PSI is rated at 280,000 BTU/hr., while the same burner operating at 15 PSI is rated at 480,000 BTU/hr.

**Buzzer** high pressure nozzle burners come equipped with either a heavy duty needle valve ( $^{1}/_{8}$ ",  $^{1}/_{4}$ ",  $^{3}/_{8}$ ", and  $^{1}/_{2}$ " sizes) or a globe valve ( $^{1}$ " and  $^{1}/_{2}$ " sizes). These valves are made of brass and provide a very accurate degree of turndown. The "needle" valve may be of particular interest to potters, kiln users, and those who require both fine tuning and measurability in order to replicate heat conditions in subsequent firings.

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#### **Applications**

The *Buzzer* high pressure nozzle burner can be positioned to fire horizontally or vertically (upwards). It can be supplied as a straight burner or equipped with a 90° ell if space is limited. If the application calls for firing vertically down (toward the floor), burners can be equipped with a 45° ell so that the Venturi remains horizontal and the nozzle can be positioned to fire down at a 45° angle. Venturi nozzle burners are commonly used as high powered torches for singeing, flame treating, pre-heating, and ladle/crucible heating. They are widely used in heat treating ovens, foundry equipment, metal melting furnaces, glass annealing kilns, and pottery kilns.

Model		Natural Gas Orifice	Propane orifice	BTU's per hour in 1,000's					Manula	Nozzle dimensions		
				1#	5#	10#	15#	25#	Nozzle only	Thread	Length	Diameter
VNB 5	50-HP	73	75	5	12	16	20	25	HP 50	$^{1}/_{2}$	$1^{1}/_{2}$	$1^{1}/_{4}$
VNB 7	75-HP	66	70	9	20	29	35	46	HP 75	3/4	$1^{7}/8$	$1^{1}/_{2}$
VNB 1	100-HP	60	63	16	35	50	61	78	HP 100	1	$1^{7}/8$	$1^{3}/_{4}$
VNB 1	125-HP	50	53	41	94	130	160	210	HP 125	$1^{1}/_{4}$	$1^7/8$	$2^{1}/8$
VNB 1	150-HP	43	48	68	150	212	250	310	HP 150	$1^{1}/_{2}$	$2^{3}/8$	$2^{3}/_{8}$
VNB 2	200-HP	1/8	38	125	280	390	480	620	HP 200	2	$2^{3}/_{4}$	$3^{1}/_{4}$
VNB 2	250-HP	29	32	160	360	500	620	800	HP 250	$2^{1}/_{2}$	$3^{3}/_{4}$	$4^{1}/8$
VNB 3	300-HP	17	26	260	580	820	1,000	1,300	HP 300	3	$4^{3}/_{4}$	5
VNB 4	100-HP	3	16	360	840	1,200	1,500	1,900	HP 400	4	6	$5^{1}/_{2}$
VNB 6	600-HP	<sup>23</sup> / <sub>46</sub>	P	1,000	2,500	3,500	4,800	5,300	HP 600	6	8	8

Please note: these nozzles are used with **Buzzer** Venturi air mixers on air heaters to retain burner flames under suction. Measurements given in inches. Pressure gauges with  $2^1/2^\circ$  dial available: 0-15 PSI, 0-30 PSI, 0-60 PSI, 0-15 $^\circ$  w/c and 0-60 $^\circ$  w/c.