

Personalized Service • Traditional Craftsmanship

SINCE 1911

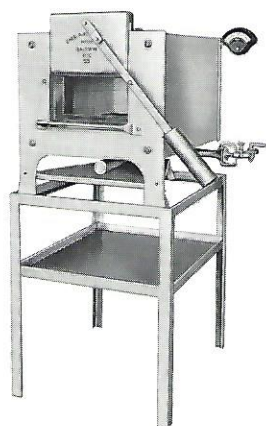
&

FURNACES

BURNERS



VENTURI NOZZLE BURNERS



BENCH TYPE OVEN FURNACES



RING BURNERS



IMMERSION HEATER BURNERS



ATMOSPHERIC POT FURNACES

BUZZER

REG. U.S. PAT. OFFICE

NO BLOWER, NO POWER NEEDED
JUST CONNECT TO GAS SUPPLY

CLEAN, QUIET, COMPACT GAS-FIRED EQUIPMENT FOR INDUSTRIAL, COMMERCIAL AND SPECIALTY TRADE APPLICATIONS

You have indicated a desire to know more about "Buzzer" gas burners and furnaces. This folder describes a number of the more widely selected products of this line and provides an order blank for your convenience. Our complete, 36-page illustrated catalog of the entire "Buzzer" line is available free.

We are a family business in its fourth generation of designing and manufacturing fine quality gas-burning equipment for process heating as well as furnaces for heat treating and non-ferrous metal melting. Our products are representative of the most modern technology, yet our high standards of integrity and personalized, rapid service are unchanged from those upon which the company was founded.

Our customers include small, medium and large companies, individuals and institutions who, over the years, have become convinced that "Buzzer" equipment and design principles save space, fuel and power. "Buzzer" equipment can be depended upon for quiet performance, as described, as well as for years of trouble free service.



SOFT METAL FURNACES



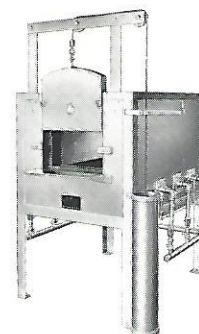
PIPE BURNERS



VENTURI REGISTER BURNERS



RADIAL BURNERS



LARGE FLOOR TYPE OVEN FURNACES

CHARLES A. HONES, INC.

P.O. BOX 518 • 607 ALBANY AVE. • NO. AMITYVILLE, N.Y. 11701 • 516-842-8886

"BUZZER" FURNACES BURN ANY FUEL GAS . . . AND NO BLOWER, NO POWER NEEDED



BENCH TYPE OVEN FURNACES

Ideal for heat treating low carbon steel, pre-heating high speed steels, and for dental, jewelry and numerous other manufacturing processes to 2000°F. Burner is equipped with exclusive BUZZER Venturi Air Mixer for quiet, efficient, even-heating operation. Highest quality insulating firebrick and super duty refractory hearth assure fast heatup to desired temperature, reaching 1600°F. in 20 to 30 minutes. One gas cock controls entire temperature range. Manual pilot is included as standard.

Constructed of fine grade cast iron and steel. Insulated, counter-balanced cast iron slide door is carefully fitted to operate smoothly without binding. Handle can be attached to operate from either right or left side. Tri-legged mounting assures firmer footing, greater stability.



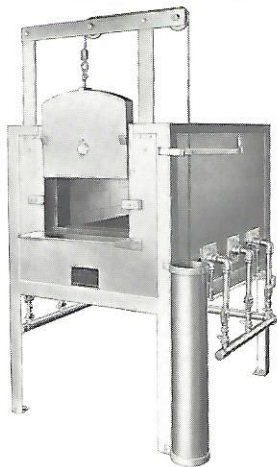
ATMOSPHERIC POT FURNACES

These furnaces are specifically designed for molten salt, cyanide and lead bath hardening operations to 1650°F. Many stringent tests as well as case histories over the years have proved them among the most dependable for this exacting work. Bath temperature uniformity, over a very large temperature range, is assured. Melting temperature for the average heat treating salt is reached within 1 hour. Atmospheric burners, with a wide turndown range, are tangentially fired at the top, heating pot more uniformly and preventing salt from spurting. Insulating firebrick-lined.

NO.	OVERALL			HEARTH		DOOR OPENING		Approx. Shipping Weight	Gas Conn.	BTU PER HOUR	
	Length	Width	Height	Length	Width	Width	Height				
52	16	11	14 1/4	7	3 1/2	4	3	90	1/4	21,000	
54	22	16	21 1/2	9	4 1/2	5 1/2	4 3/4	210	3/8	31,500	
55	31	23	25 1/2	14 1/2	8	9	5 3/4	412	3/8	55,500	
57	Fabricated Steel			18	18	18	9 1/2	8	675	1/2	120

No.	Height	Width	Pot Diameter	Pot Depth	Full Salt Capacity in pounds	Approx. Shipping Weight	Gas Conn.	BTU per Hour in Thousands
*181	27	14 1/4	6	8	15	100	1/2	38
*181A	32 1/4	14 1/4	6	10	19	125	1/2	40
*181B	34 1/4	14 1/4	6	12	24	150	1/2	42
*182	31 1/2	16	8	12	40	250	1/2	78
183	31 1/2	24	10	14	75	650	1	114
184	34	26	12	16	130	800	1	159
185	39	30	14	20	208	950	1 1/4	255
186	42 1/2	30	14	24	240	1000	1 1/4	288
187	41	32	16	18	245	1400	1 1/4	291
188	49	32	16	27	360	1500	2	414
189	42	39	18	18	330	1750	2	408
190	42 1/2	39	18	20	350	1800	2	426
191	48	39	18	24	415	1850	2	456
192	45	41	20	20	450	1900	2	495
193	50	52	24	24	780	2900	2 1/2	750

*Recommended for use at 1450°F. Furnaces supplied with pressed steel pot. Cast or fabricated alloy pots available at extra cost. Width does not include burners or flue ell. Add 3 1/2" on 181-184 and 6" for 185-192 for burners. For ell, add 8" for 181-182, 10" for 183-187, 12" for 188-192.



LARGE FLOOR TYPE OVEN FURNACES

These self-contained, flexible BUZZER heat treating furnaces, incorporating highest quality insulating firebrick under rugged, heavy gauge steel, can attain 1600°F. in 1 hour. The silicon carbide hearth assures maximum possible wear resistance and highest load strength.

Normally used for temperatures up to 1850°F. to heat treat low-carbon steels, pre-heat high-speed steels and for precision casting operations. They can also be used up to 2000°F. Furnished with external pilots for easy lighting. Also available as Gas Atmosphere Muffle Furnaces utilizing prepared atmospheres. Write for details.



SOFT METAL FURNACES

One Week Delivery!

For melting soft metals such as lead, zinc, tin, type metals, etc. These rugged, highly efficient furnaces have high grade block insulation and sheet steel jackets. Melting pots are heavy cast iron with wide flanges to prevent clogging of flues. For lead melting, the unit is available with special valves for bottom draw-off.

LARGER AND SPECIAL SIZES BUILT TO REQUIREMENTS

No.	Overall Dimensions			Door Opening		Hearth		Approx. Shipping Weight	Gas Conn.	BTU per Hour in Thousands
	Width	Length	Height	Width	Height	Length	Width			
1524	48 1/2	46	59	15	10	24	15	1800	1 1/4	175
1536	48 1/2	58	59	15	10	36	15	2960	1 1/4	225
1824	51	47	61	18	12	24	18	2300	1 1/4	180
1830	51	53	61	18	12	30	18	2920	1 1/4	200
1836	51	59	61	18	12	36	18	3160	1 1/4	230
1848	51	71	61	18	12	48	18	3400	1 1/4	300
2424	59	47	64	24	14	24	24	2500	1 1/4	200
2436	59	58 1/2	64	24	14	36	24	3100	1 1/4	300
2448	59	71	64	24	14	48	24	3500	1 1/2	400
2460	59	83 1/2	64	24	14	60	24	3900	1 1/2	500
3048	67	70	64	30	18	48	30	4200	2	600
3060	67	82	64	30	18	60	30	4700	2	750
3072	67	94	64	30	18	72	30	5200	2	850
3084	67	106	64	30	18	84	30	5700	2 1/2	1000

*Width includes the burners and counterweight guide. Length includes 7" for shelf. **Height does not include counterweight bracket. Add as follows to Nos. 1524 to 1848, 21"; to Nos. 2424 to 2460, 25"; to Nos. 3048 to 3084, 27".

No.	Furnace Height	Approx. Shipping Weight	Pot Diameter	Pot Depth	Lead Capacity	*Melting Time	Gas Conn.	BTU per Hour in Thousands
160	22	80	9	7 1/4	160	30	1/4	30
250	25	180	12 3/4	6 1/2	250	45	3/8	50
500	30	300	15	11	500	45	3/8	75
1000	34	500	18 1/2	14 1/2	1000	60	1 1/4	125
2700	37	1100	26 3/4	16 1/4	2700	85	1 1/4	235
5000	53	1600	26 3/4	32 1/4	5000	90	1 1/2	385

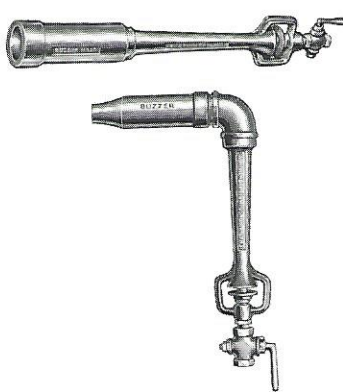
Dimensions of pot are inside and do not include flange.

*Melting time is approximate as applied to lead and varies according to conditions.

SOFT METAL FURNACES, AS WELL AS OTHER TYPES, AVAILABLE WITH OIL OR ELECTRIC HEAT.

FASTEST SHIPMENT ON PRECISION-ENGINEERED "BUZZER" GAS BURNERS

VENTURI NOZZLE GAS BURNERS



These outstanding burners are specifically designed to burn gas at atmospheric pressure (same pressure as used in the home), in limited combustion chambers, with minimum secondary air. With its wide turndown ratio and resistance to flash-back, it may be throttled or turned down with complete safety. For annealing and heat treating furnaces, soft metal melting furnaces, bake ovens, core ovens, conversion of large boilers, for dryers and air heaters. Also used as a torch for singeing, paint removal, preheating. Available in straight or 90° angle models. Burn natural, LP, manufactured or mixed gas. NOTE: Venturi Nozzle Burners (VNB-HP series) are available for gas pressures exceeding one pound. Write for details.

No.	Size*	Length	Weight	Gas Conn.	BTU per Hour in Thousands
VNB 50	1/2	9 1/2	1	1/8	9
VNB 75	3/4	12 1/2	1 1/2	1/8	15
VNB100	1	15	2 1/2	1/4	25
VNB125	1 1/4	19	5	3/8	50
VNB150	1 1/2	22	6 1/2	3/8	65
VNB200	2	26 1/2	11 1/4	1/2	100
VNB250	2 1/2	33	19 1/4	1	150
VNB300	3	39 1/4	32	1	250
VNB400	4	53 1/2	70	1 1/2	500
**VNB600	6	75 1/2	129	1 1/2	1250

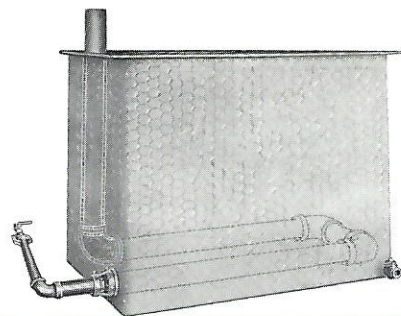
*Venturi pipe size thread which is screwed into Nozzle. Length is given from end of "N" type Nozzle to end of gas cock.
 **Supplied with short nozzle and extension. Venturi Nozzle Burners may be had in brass or aluminum at additional cost. Prices on application.

IMMERSION HEATER BURNERS



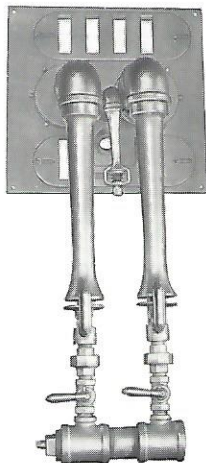
Pioneered by BUZZER engineers, these flexible burners are peak performers for firing submerged heating coils. The flue coils absorb the heat and rapidly transfer it to the liquid, a direct method which minimizes heat loss. Burn natural, LP, manufactured or mixed gas. Case histories over many years prove the unlimited possibilities for these quiet, low-cost, easy-to-install burners for heating water and other liquids. They are ideal for degreasing tanks, cleaning articles before plating, and for refinishing processes prior to spraying. They are also recommended for heating oils, asphalt and other liquids.

No.	I.P.S. Coil Size	Coil Length (feet)	Gas Conn.	BTU Per Hour in Thousands	Wt.
IH50	1 1/4	3 1/2	1/8	9	1 1/2
IH75	1 1/2	4	1/8	15	2 1/4
IH100	2	5 1/4	1/4	25	3 1/2
IH125	3	8 1/2	3/8	50	6 3/4
IH150	3	9	3/8	65	8 1/4
IH200	4	11 1/4	1/2	100	18
IH250	5	13 3/4	1	150	30
IH300	6	18 1/4	1	250	39
IH400	8	21 1/2	1 1/2	400	85



Universal ratings are for manufactured, natural and propane gas using straight burners with "N" type nozzle. 90° ells can be supplied but will soften flame. To get identical flame as straight burner, use "N" type Venturis, or reduce input as follows: Nos. 50, 75, 100, and 125 by 15%; No. 150 by 10%; No. 200 by 5%; remaining burners are unchanged. Adapters for oversize coils are available at slightly extra cost. "L" is length of straight burner.

VENTURI REGISTER BURNERS



These burners are designed either for installing on a steel jacketed furnace or for placing while laying up firebrick walls. For steel shell mounting, as on BUZZER floor type oven furnaces, the box is not used.

Single Register Burners are shipped with straight Venturi Nozzle Gas Burners unless otherwise specified. They may be had with 90 degree ell or with pilot at additional cost.

Double Register Burners, as illustrated, are shipped with Venturi Nozzle Gas Burners at 90 degrees, unless otherwise specified. Double Register Burners are equipped with Venturi pilots and consist of the cast iron register plate having secondary air shutters. If mounting for flame rod is required for Double Register Burners, specify VR 200-2A, VR250-2A or VR300-2A. These are supplied with register plate and shutter only.

No.	Size of Register	Burner Length	Weight	Gas Conn.	BTU per Hour in Thousands
VR 75	4 5/8 x 4 5/8 x 1 1/4 deep	12 1/2	4 1/2	1/8	15
VR100	4 5/8 x 4 5/8 x 1 1/4 deep	15	4 1/2	1/4	25
VR125	6 1/8 x 6 1/8 x 2 1/4 deep	19	12	3/8	50
VR150	6 1/8 x 6 1/8 x 2 1/4 deep	22	14	3/8	65
VR200	6 1/8 x 6 1/8 x 2 1/4 deep	26 1/2	15 1/2	1/2	100
VR250	9 1/8 x 9 1/8 x 3 3/4 deep	33	40	1	150
VR300	9 1/8 x 9 1/8 x 3 3/4 deep	39 1/4	48 1/2	1	250
VR400	11 x 11 x 3 1/2 deep	53 1/2	93 1/4	1 1/2	500
VR200-2A	14 x 14		49	1 1/2	200
VR250-2A	14 x 14		82	1 1/2	300
VR300-2A	14 x 14		107	2	500

Other size registers are available built to specifications.



PIPE BURNERS

Plain Drilled. Equipped with Venturi Air Mixers and Gas Cocks

These burners provide rapid lighting and a wide range of turn-down. Unlike ordinary mass-produced pipe burners with punched port holes, the orifices of BUZZER Pipe Burners are hand-drilled with utmost precision, thereby assuring minimum turbulence and uniform gas and air mixing for most efficient combustion. Especially recommended for LP gas. Available plain, or mounted on legs, or with baffles. Also available are projecting port burners and burners with lower cost plain air mixers. Write for information.

Pipe Size	Flame Length	Total Length	Gas Conn.	BTU per Hour in Thousands
1/2	12	23 3/8	1/8	7
1/2	16	27 3/8	1/8	8
1/2	20	31 3/8	1/8	9
3/4	12	25 1/8	1/8	11
3/4	18	31 1/8	1/8	11
3/4	24	36 1/8	1/8	13
3/4	30	42 1/8	1/8	15
1	18	33 3/8	1/4	13
1	24	39 3/8	1/4	16
1	30	45 3/8	1/4	20
1	36	51 3/8	1/4	22
1	42	57 3/8	1/4	24
1	48	63 3/8	1/4	25
1 1/4	24	42 5/8	3/8	17
1 1/4	30	48 5/8	3/8	22
1 1/4	36	54 5/8	3/8	26
1 1/4	42	60 5/8	3/8	31
1 1/4	48	66 5/8	3/8	40
1 1/4	54	72 5/8	3/8	50
1 1/2	18	37 3/4	3/8	28
1 1/2	24	43 3/4	3/8	36
1 1/2	30	49 3/4	3/8	45
1 1/2	36	55 3/4	3/8	50
1 1/2	42	61 3/4	3/8	53
1 1/2	48	67 3/4	3/8	55
1 1/2	54	73 3/4	3/8	60
1 1/2	60	79 3/4	3/8	65
2	36	59 1/4	1/2	62
2	42	65 1/4	1/2	72
2	48	71 1/4	1/2	80
2	54	77 1/4	1/2	83
2	60	83 1/4	1/2	86
2	66	89 1/4	1/2	90
2	72	95 1/4	1/2	93
2	84	108 3/4	1/2	100
2 1/2	72	99 1/4	1	106
2 1/2	84	112	1	114

Pipe Size	Flame Length	Total Length*	Gas Conn.	BTU per Hour in Thousands
2 1/2	96	124 3/4	1	119
2 1/2	108	137 3/4	1	121
2 1/2	120	150 1/4	1	130
2 1/2	132	163	1	140
2 1/2	144	176 3/4	1	150
3	84	116 1/2	1	123
3	108	142 1/2	1	146
3	132	164 1/2	1	149
3	156	194 1/2	1	164
3	180	220 1/2	1	188
3	204	246 1/2	1	200
3	228	268 1/2	1	250

Optional: N.S.D. (New Style Drilling) for flame retention, curtains, fast tracking and higher inputs—write for information or see prices in this folder.

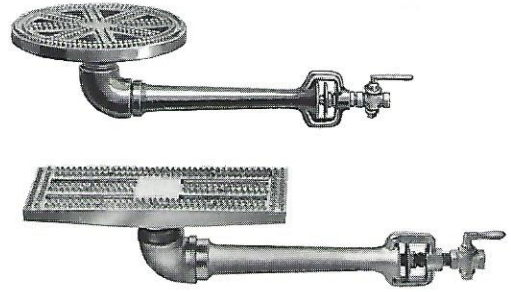
FASTEST SHIPMENT ON PRECISION-ENGINEERED "BUZZER" GAS BURNERS

RAISED PORT RING BURNERS



Unsurpassed for many varied heating applications such as melting large quantities of soft metal, for cooking operations, boilers, tempering baths, pickling baths, etc. Available in one, two, three, four-and five-ring models. Each ring has its own Venturi air mixer and valve and can operate independently of the others. Ports are cast on heavy burner head, then precision hand-drilled, thereby producing short flames of exceptional efficiency and turn-down. Burn any gas. Exceptionally well suited for propane. Ring burners with screwed-in projecting ports are also available. Write for information.

RADIAL GAS BURNERS



Designed for many small applications requiring quick, intense heat such as soft metal melting, small boilers and for heating water and solutions. The space between each cast iron raised port plus that between each burner "spoke" provide ample secondary air to each individual flame. Rugged, efficient and flexible with remarkable turn-down. Burn natural or mixed gas and is exceptionally well suited for LP gas.

No.	Diameter	Length	Height	Weight	Gas Conn.	BTU per Hour in Thousands
V11	5 1/2	21 1/2	6 1/4	12	3/8	47
V12	9 1/2	28	7	34	1 1/4	122
V13	14 3/4	31	7	66	1 1/4	232
V14	19 3/4	33 1/2	7	112	1 1/2	382
V15	24 3/4	42	7	200	2	532

Where separate burner rings are required, specify and name rings to be omitted.

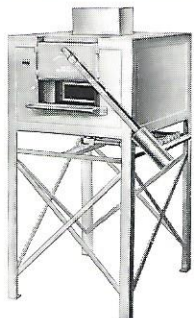
No.	Diameter	Height	Length	Weight	Gas Conn.	BTU per Hour in Thousands
307	7	6	19	8 1/2	3/8	60
308	8	6	20	11 1/2	3/8	75
311	12	7	26	20	1/2	100
312	16	7	33	42	1 1/4	180
313	*21	7	33	52 1/2	1 1/4	270
314	**4 3/4	7	†16	16 1/4	1/2	90
315	**3 1/2	5 1/2	†12 1/4	10	3/8	50

*Diameter is given at widest point. Narrowest is 16 inches.

**Width.

†This length is for burner head. Total length including gas cock is 28" for No. 314 and 21 1/2" for No. 315.

OTHER "BUZZER" GAS EQUIPMENT



HIGH SPEED MUFFLE FURNACES



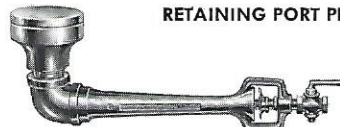
ALUMINUM MELTING FURNACES
Crucible Type



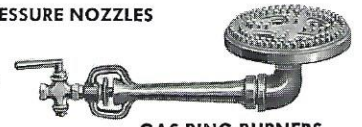
PLAIN AIR MIXERS



RETAINING PORT PRESSURE NOZZLES



DISCPORT BURNERS



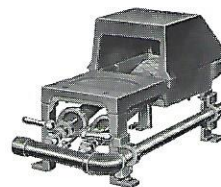
GAS RING BURNERS



ALUMINUM MELTING FURNACES
Pot Type



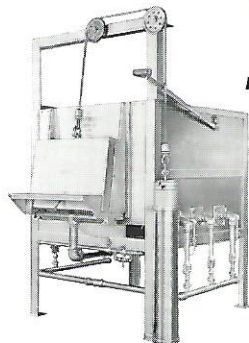
HIGH TEMPERATURE MELTING FURNACES



ORIGINAL SOLDERING FURNACES



URN BURNERS



ATMOSPHERE MUFFLE FURNACES



PROJECTING PORT PIPE BURNERS WITH BAFFLE



STOVE BATTERIES

CHARLES A. HONES, INC.

607 Albany Ave., P.O. Box 518
N. Amityville, N.Y. 11701-0518
Tel. 516-842-8886

These and all other BUZZER products are fully described in the 36-page HONES Catalog No. 1570H available free on request.