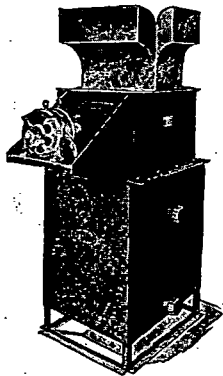


York Heating and Ventilating Corp.

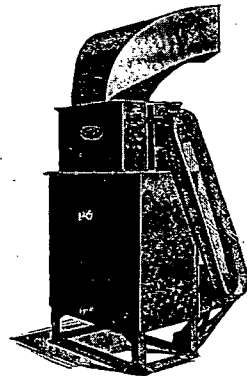
1502 Locust Street :: PHILADELPHIA

Unit Heaters—Unit Fans—Rotary Ventilators—Stationary Ventilators—Cyclone Dust Collectors—Dampers—Quadrants—Blast Gates—Drying Trays—Radiators—Brackets—Sheet Metal Work and Light Structural Iron Fabrication.

YORK "WELDED COIL" UNIT HEATER



York Unit with motor directly coupled to fan shaft.



York Unit with motor belted to fan shaft. Furnished with or without motor and belt guard as illustrated.

No. 2 UNIT HEATER For Steam Pressure of 5 lb.

R. P. M.	A. P. M.	H. P. Motor	Recirculating—Air at 60° F. Entering Unit			Basic Data—Air at 0° F. Entering Unit		
			B.t.u. per Hr.	Final Temp.	Cond. per Hr.	B.t.u. per Hr.	Final Temp.	Cond. per Hr.
590	2160	1/2	165,000	139°	171 lb.	226,000	108°	234 lb.
680	2500	1	186,000	137°	193 "	253,000	104°	262 "
850	3110	1 1/2	216,000	131°	224 "	296,000	97°	306 "
1150	4200	2	268,000	124°	278 "	368,000	88°	382 "
1425	5200	2	314,000	120°	235 "	430,000	83°	445 "

No. 2-A UNIT HEATER For Steam Pressure of 5 lb.

R. P. M.	A. P. M.	H. P. Motor	Recirculating—Air at 60° F. Entering Unit			Basic Data—Air at 0° F. Entering Unit		
			B.t.u. per Hr.	Final Temp.	Cond. per Hr.	B.t.u. per Hr.	Final Temp.	Cond. per Hr.
590	2700	1/2	220,000	145°	228 lb.	300,000	116°	310 lb.
680	3040	1	240,000	142°	248 "	326,000	112°	338 "
850	3680	1 1/2	270,000	135°	280 "	360,000	103°	379 "
1150	4800	2	324,000	129°	336 "	440,000	94°	455 "
1425	5800	2	375,000	126°	388 "	510,000	89°	528 "

No. 3 UNIT HEATER For Steam Pressure of 5 lb.

R. P. M.	A. P. M.	H. P. Motor	Recirculating—Air at 60° F. Entering Unit			Basic Data—Air at 0° F. Entering Unit		
			B.t.u. per Hr.	Final Temp.	Cond. per Hr.	B.t.u. per Hr.	Final Temp.	Cond. per Hr.
590	3850	3/4	280,000	135°	290 lb.	381,000	102°	395 lb.
680	4450	1	310,000	131°	321 "	422,000	97°	436 "
850	5540	1 1/2	358,000	126°	371 "	490,000	90°	507 "
1150	7500	2	450,000	120°	465 "	620,000	83°	642 "
1425	9500	3	520,000	116°	540 "	716,000	77°	740 "

No. 3-A UNIT HEATER For Steam Pressure of 5 lb.

R. P. M.	A. P. M.	H. P. Motor	Recirculating—Air at 60° F. Entering Unit			Basic Data—Air at 0° F. Entering Unit		
			B.t.u. per Hr.	Final Temp.	Cond. per Hr.	B.t.u. per Hr.	Final Temp.	Cond. per Hr.
590	4450	1	340,000	139°	352 lb.	460,000	107°	477 lb.
680	5100	1 1/2	368,000	135°	381 "	500,000	102°	517 "
850	6300	2	426,000	132°	442 "	580,000	97°	600 "
1150	8500	3	530,000	124°	548 "	720,000	87°	745 "
1425	10,400	5	625,000	120°	647 "	850,000	81°	880 "

No. 4 UNIT HEATER For Steam Pressure of 5 lb.

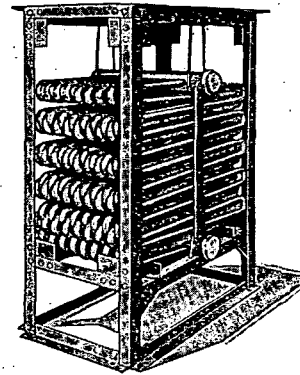
R. P. M.	A. P. M.	H. P. Motor	Recirculating—Air at 60° F. Entering Unit			Basic Data—Air at 0° F. Entering Unit		
			B.t.u. per Hr.	Final Temp.	Cond. per Hr.	B.t.u. per Hr.	Final Temp.	Cond. per Hr.
590	8700	2	610,000	132°	631 lb.	830,000	98°	860 lb.
680	10,000	3	670,000	128°	693 "	910,000	93°	940 "
850	12,500	5	790,000	124°	820 "	1,060,000	86°	1100 "
950	14,000	7 1/2	860,000	122°	890 "	1,170,000	84°	1210 "
1050	15,400	10	930,000	121°	963 "	1,260,000	83°	1300 "

No. 4-A UNIT HEATER For Steam Pressure of 5 lb.

R. P. M.	A. P. M.	H. P. Motor	Recirculating—Air at 60° F. Entering Unit			Basic Data—Air at 0° F. Entering Unit		
			B.t.u. per Hr.	Final Temp.	Cond. per Hr.	B.t.u. per Hr.	Final Temp.	Cond. per Hr.
590	10,300	3	810,000	140°	838 lb.	1,100,000	109°	1140 lb.
680	11,900	5	895,000	136°	925 "	1,220,000	104°	1260 "
850	14,800	7 1/2	1,040,000	131°	1070 "	1,430,000	97°	1480 "
950	16,500	10	1,130,000	129°	1170 "	1,540,000	94°	1590 "
1050	18,200	15	1,210,000	127°	1250 "	1,650,000	91°	1710 "

Ratings on larger sizes and special units will be furnished on request.

Complete Heating, Ventilating and Dust Collecting Systems; designed, built and installed.



Welded Coils of Number 2, 2-A and 3 Units. Number 3-A and larger Units have a double set of coils, twice the number of headers illustrated.

OPERATING FEATURES

1. **Low Power Requirements**—the balanced fan, running on ball bearings, reduces power requirements to a minimum. Path of air is straight through the heater—there are no baffles, etc., to cause back pressure.
2. **Maintenance is Low**, coils are welded to the headers—there are no joints or valves to leak causing rust, damage and necessitating repair.
3. **In Mild Weather**—the unit can be run for a short time to bring the room to the desired temperature and to put the air into circulation. Then, the power can be shut off, and circulation thus started will continue (although at a slower rate) due to the air motion set up and to the stack or aspirating effect caused by the height of the unit.

MECHANICAL FEATURES

1. **Welded Pipe Coils**—no joints from inlet to outlet. Coils are tested to 300 lb. pressure. Good for 150 lb. working pressure.
2. **Supply and Return Headers**, to which the coils are welded, are both inside the unit housing—hence heat radiated from the headers, goes into the air passing through the heater.
3. **Steam** is admitted to the top header, which runs the full length of the coils—it then passes through the coils to the return header at the bottom, where it is collected as condensed.
4. **Fan Wheel**, of the efficient, double inlet type, is mounted on ball bearings—insuring freedom from vibration.
5. **Ball Bearings**—self-aligning, dustproof type, mounted outside the fan housing and not in contact with hot air. Their location permits oiling without removing fan housing.
6. **Base of the Heater** is open on all four sides, hence the unit draws its air from the floor where the air is naturally coldest. This simplifies connection to outside air supply when same is desired for it can easily be made with a rectangular duct of ample size, from any one side.

INSTALLATION FEATURES

1. Fan may be belted to line shaft or motor, or directly coupled to motor.
2. Fan Pulley is located near the top of the unit, which makes connection to line shafting easy. This is also convenient for belting to electric motor fastened to ceiling, wall or column. No belt guards are required with this arrangement. The belted unit may also be arranged with motor mounted on bracket attached to the heater.
3. The Unit stands on an angle iron base, no extra foundations are required.
4. The Unit occupies a floor space greater in length than in depth, making it easily adaptable to unused floor spaces.
5. These Units can be arranged for suspension from ceiling or roof trusses, or they can be mounted on special extended supports, allowing underneath headroom.
6. Operates equally satisfactory on vacuum, low pressure or high pressure steam systems.

SPECIFICATIONS

No. of Unit	Size Pulley		No. of Steam Conn.	Sq. Ft. Heat Sur.	Equiv. Sq. Ft. Direct Radiation	Outlet Size Outside of Angles	Size Base Angles	WEIGHTS		Approximate Height Incl. Outlet	Width Inches	Length Inches
	Dia.	Face						Unit Heaters Complete No Motor	Unit Heaters Complete With Motor			
2	8"	3"	1	180	1200	17 1/2"	2x2 1/2"	1500 lb.	1650 lb.	96	22	42 1/2
2-A	8"	3"	1	260	1500	17 1/2"	2x2 1/2"	1900 lb.	2100 lb.	99	31	42 1/2
3	8"	3"	1	260	2000	20 1/2"	2x2 1/2"	2000 lb.	2300 lb.	114	31	42 1/2
3-A	8"	3"	2	360	2400	20 1/2"	2 1/2 x 2 1/2"	2800 lb.	3100 lb.	114	43	43 1/4
4	12"	4"	2	520	3500	27 1/2"	2 1/2 x 2 1/2"	3600 lb.	3900 lb.	132	43	61
4-A	12"	4"	4	880	5000	27 1/2"	3x3 1/2"	5800 lb.	6100 lb.	132	54	85

All Frames made from Steel Angles with Gusset Plates Hot Riveted—coils made of 3/4 in. std Steel Pipe—Both Headers are 3 in. std Steel Pipe with outside male thread.

UNIT HEATER—B.t.u. Constants for Various Steam Pressures and Temperatures of Entering Air

Steam Press. Lbs.	Temperature of Air Entering Heater													
	-10°	0°	10°	20°	30°	40°	45°	50°	55°	60°	65°	70°	75°	
0	.975	.93	.89	.84	.80	.76	.73	.71	.69	.67	.64	.62	.60	
2	1.01	.96	.92	.87	.83	.79	.76	.74	.72	.70	.68	.65	.63	
5	1.04	1.00	.96	.91	.87	.82	.80	.78	.76	.74	.71	.69	.67	
10	1.06	1.05	1.01	.97	.92	.88	.85	.83	.81	.79	.76	.74	.72	
15	1.15	1.10	1.05	1.01	.97	.92	.90	.88	.86	.83	.81	.79	.76	
20	1.18	1.14	1.09	1.05	1.00	.96	.94	.92	.89	.87	.85	.83	.81	
30	1.25	1.21	1.16	1.12	1.08	1.03	1.01	.98	.96	.94	.92	.90	.88	
40	1.30	1.26	1.22	1.17	1.12	1.08	1.06	1.04	1.02	1.00	.97	.95	.93	
50	1.35	1.31	1.27	1.22	1.18	1.13	1.11	1.09	1.07	1.04	1.02	1.00	.98	
60	1.39	1.35	1.31	1.26	1.22	1.18	1.16	1.13	1.11	1.09	1.07	1.05	1.03	
70	1.43	1.43	1.38	1.34	1.29	1.25	1.23	1.20	1.18	1.16	1.14	1.12	1.10	
80	1.53	1.49	1.44	1.40	1.35	1.31	1.29	1.26	1.24	1.22	1.20	1.18	1.16	
125	1.59	1.56	1.51	1.46	1.42	1.37	1.36	1.33	1.31	1.29	1.27	1.24	1.22	
135	1.61	1.57	1.53	1.48	1.44	1.39	1.37	1.35	1.33	1.30	1.28	1.26	1.24	
140	1.62	1.58	1.54	1.49	1.45	1.41	1.38	1.36	1.34	1.32	1.29	1.27	1.25	
150	1.64	1.60	1.55	1.51	1.46	1.42	1.40	1.38	1.35	1.33	1.31	1.28	1.26	

Note—To get B.t.u.'s at any steam pressure and entering temperature, multiply constant from table given above, by rated B.t.u.'s at 0° entering and 5 lb. pressure.

Catalogs on any products, sent on request.