

Lee Engineering Company

Union National Bank Bldg., Youngstown, Ohio

LEE DIRECT WARM AIR HEATING

The Lee System of warm air heating generally costs less to install than steam or hot water; utilizes fuel with a high degree of efficiency; distributes the heat exactly where needed; responds promptly without lag; requires little or no maintenance; and needs no licensed attendant. Heaters for use with the Lee System are made in the four types illustrated and described briefly below.

BRICK-SET TUBULAR HEATER

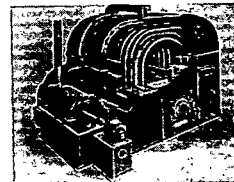
For use with central heating system in connection with duct distribution. Single heater capacities from 2,800,000 Btu per hour to 8,000,000 Btu per hour. Two heaters, installed as a battery serving as one unit, provide capacities over 10,000,000 Btu per hour.



Brick Set Tubular Heater

STEEL ENCASED TUBULAR HEATER

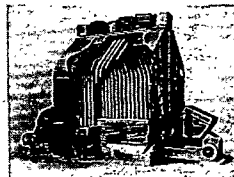
For use with central heating systems in connection with duct distribution over a capacity range of from 2,000,000 Btu per hour to 6,000,000 Btu per hour. Heater may be installed in heated area without enclosure, requires no foundation, and may be moved from one location to another by taking unit apart and reassembling.



Steel Encased Tubular Heater

TUBULAR UNIT HEATER

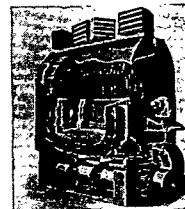
For use either as a central system in connection with duct distribution or with adjustable outlet nozzles as a unit heater. Capacity range from 2,000,000 Btu to 6,000,000 Btu per hour. In sizes up to 4,000,000 Btu heater is shipped as a completely assembled unit with all but mechanical equipment, refractory lining and controls in place. Heaters require no foundation and are equipped with crane hooks so that they may be moved from one location to another.



Tubular Unit Heater

SHELL UNIT HEATER

For use with or without distributing duct system. Heaters have capacity range of from 300,000 Btu to 2,000,000 Btu per hour. Available for gas, oil or combination gas-oil firing. All units are shipped completely assembled, wired and ready for operation. Units furnished with either refractory lined or stainless steel combustion chambers. Heaters may be floor mounted or suspended in any position. Also available in both hand and stoker fired models.



Shell Unit Heater

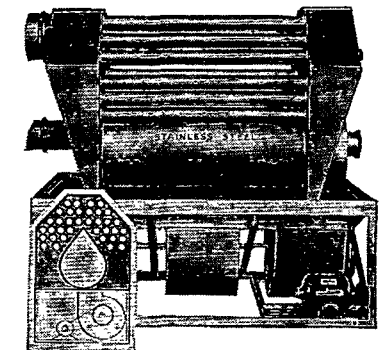
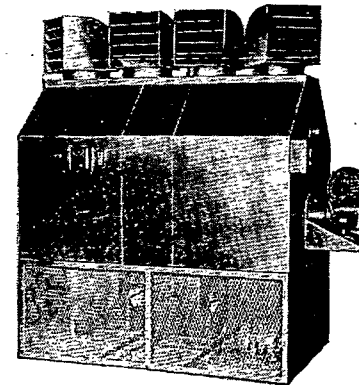
For further information write for Catalog HV-44.

National Heater Company

2182 Cleora Avenue, St. Paul 4, Minnesota



STEEL S-P-A-C-E HEATERS



GAS AND OIL FIRED UNITS

National Champion Heaters are available in both factory floor set units, as illustrated, and in quiet operating, resilient mounted models for convenient connection to duct distribution system. Skeleton view illustrates compactness of heat exchanger and blower section mounted on sturdy angle-iron base frame. Lifting eyes are provided for crane handling. Streamlined

firebox of rust and heat resisting Stainless Steel requires no refractory and affords life far beyond that possible with mild carbon steel. Tear Drop combustion chamber design and convactor tube arrangement assure complete efficient air impingement on all heating surface at a minimum of resistance. Induced draft blowers can be supplied when suitable chimney or stack is not available.

ENGINEERING RATING CHART—TEAR DROP DIRECT FIRED HEATERS

Heater Number	B.T.U. Output Capacity	1/2 S.P. C.F.M.	Sq. Ft. Heating Surface	Blowers D W D I	Maximum Firing Rate		Blower Motor		Stack Req'd. Minimum	
					Oil G.P.H.	Gas C.F.H.	H.P.	R.P.M.	Dia. Inches	Hgt. Feet
T.D. 25	250,000	3,600	120	14" Twin	2.5	330	3/4	1750	10	20
T.D. 40	400,000	5,400	130	14" Twin	4.0	550	1	1750	10	20
T.D. 50	500,000	6,600	150	14" Triple	5.0	680	1 1/2	1750	10	25
T.D. 70	700,000	8,800	175	14" Triple	7.0	940	2	1750	10	25
T.D. 80	800,000	10,200	200	16" Triple	7.5	1100	2	1750	12	30
T.D. 100	1,000,000	12,500	250	16" Triple	9.5	1400	3	1750	12	30
T.D. 125	1,250,000	15,300	315	18" Triple	11.5	1610	5	1750	14	35
T.D. 150	1,500,000	19,400	375	18" Triple	14.0	2040	5	1750	14	35

Heater Number	Tubes		Approximate Shipping Weight	Warm Air Plenum Opening	Overall Dimensions Inches			Gauge Material				
	No.	Dia.			Width	Length	Height	Tubes	Head-ers	Stainless Steel Comb. Chamber	Case-ing	Dis-charge Heads
T.D. 25	23	3	1,300	14 x 60	32	60	81	14	12	14	20	18
T.D. 40	23	3	1,350	14 x 60	32	60	81	14	12	14	20	18
T.D. 50	23	3	1,780	14 x 80	32	80	81	14	12	14	20	18
T.D. 70	23	3	1,855	14 x 80	32	80	81	14	12	14	20	18
T.D. 80	36	3	2,110	18 x 80	48	80	81	14	10	14	20	18
T.D. 100	36	3	2,200	18 x 80	48	80	81	14	10	14	20	18
T.D. 125	48	3	3,000	20 x 100	54	100	96	14	3/4	14	20	18
T.D. 150	48	3	3,250	20 x 100	54	100	96	14	3/4	14	20	18