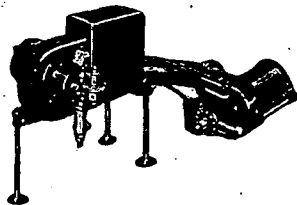


Electrol Incorporated

New York
227 East 45th Street

Manufacturers of Electrol All-Electric Automatic Oil Burner

St. Louis, Mo.
170 Dorcas Street



The Electrol Oil Burner is all-electric and fully automatic, combining mechanical fuel atomization and continuous electric ignition.

Suitable for all automatic applications. Listed as standard by the Underwriters' Laboratories, Inc. Member, Oil Heating Institute.

PRINCIPAL FEATURES

Mechanical draft supplied by a Sirocco fan on the motor shaft.

The exclusive shell-shaped air receiver produces a rotary movement of the air, giving a ball-shaped flame, secured only with Electrol, that is extremely quiet and of high efficiency.

Listed to burn oil fuel not heavier than 28 gravity (A. O. B. A. Spec. No. 3), also Diesel oil (Pacific Coast) not heavier than 25 deg. A. P. I. when viscosity is not more than 54 seconds (Saybolt-Universal at 100 deg. Fahr).

One pump directly connected to the motor shaft serves the double purpose of



The Ball shaped flame an exclusive Electrol feature, insures quiet operation and exceptionally high over-all efficiency.

pumping oil from supply tank and maintaining the proper pressure for atomization. It is of the rotary gear type, having one driven gear and one idling gear-self-sealing. No stuffing box, auxiliary pump or motor is required.

Mechanical atomization is accomplished by forcing the oil under pressure through a specially designed nozzle. The nozzle on the Electrol is the only part that varies according to heating requirements. It is simple. It has no moving parts. Nothing to get out of order.

The atomized oil is mixed with the correct amount of air for proper combustion and ignited by an electric arc. In the Electrol burner ignition is continuous while oil is being pumped. In order to supply a heavy duty spark which is truly an arc, a transformer of sufficiently rugged construction to prevent overheating and breakdown of insulation is used.

Electrol automatic burners are manufactured in three sizes. The Model TJ, the Model TU, and the Model TD.

Motor Sizes: Model TJ— $\frac{1}{2}$ hp. Model TU— $\frac{1}{2}$ hp. Model TD— $\frac{1}{2}$ hp.

SAFETY

The safety system in the Electrol known as the Electrol Master Control was designed, and is used exclusively for Electrol. Should any abnormal condition occur this control immediately shuts down the burner and places it in a non-operating condition.

Dimensions and Capacities of Electrol Burners

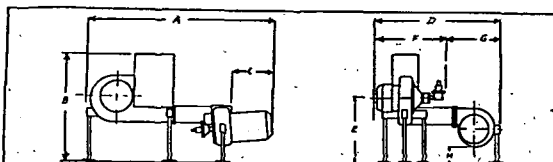
Range: Square Feet of Actual C. I. Radiators

Model	Steam Heat	Hot Water
TJ	200-800	350-1300
TU	600-3000	1000-5000
TD	2000-5000	3500-8750

These ranges include piping and risers.

Ranges for vapor jobs fall in between the steam and hot water capacities and vary according to the degree of vacuum under which the system is operating.

Flame adjustments are made at the time of installation to meet requirements of boiler or furnace.



MODEL	A	B	C	D	E	F	G	H	Motor	MINIMUM	MAXIMUM
MODEL TJ	26 1/2	17 1/2	5 1/2	21 1/2	11 1/2	16 1/2	5 1/2	1 1/2	2 1/2	1 GALLON	2 1/2 GALLON
MODEL TU	42 1/2	25 1/2	8 1/2	29 1/2	15 1/2	16 1/2	12 1/2	4 1/2	4 1/2	2 GALLON	9 GALLON
MODEL TD	42 1/2	25 1/2	8 1/2	29 1/2	15 1/2	16 1/2	12 1/2	4 1/2	4 1/2	2 GALLON	9 GALLON

Hardinge Brothers, Inc.

Oil Heat
for
every purse
and
purpose

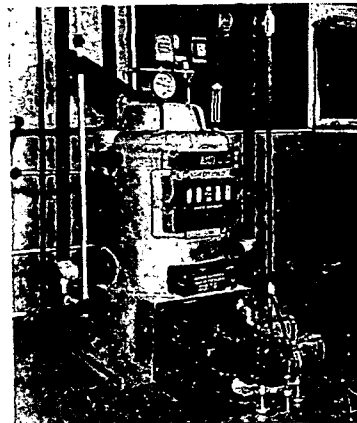
Manufacturers and Engineers
Main Office and Factory

4149 Ravenswood Avenue

Chicago, Ill.

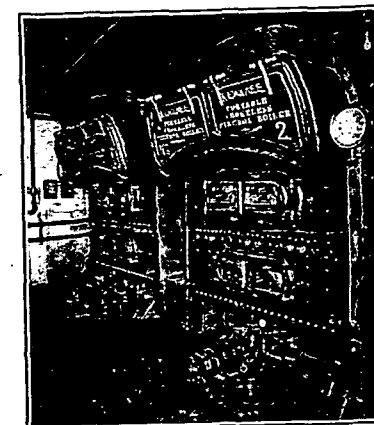
Distributors
in
Principal Cities
throughout the
United States

Manufacturers of HARDINGE Domestic and Industrial Oil Heating Equipment, Cataract Precision Lathes, Watchmakers and Opticians Tools and Supplies



Features:—

- 1—Mechanical Centrifugal Atomization without the use of fans, blowers, compressors or steam.
- 2—Applies heat at grate level, scrubbing insulating gases from water legs.
- 3—It is a self contained unit independent of the Combustion Chamber and not attached to the boiler in any way.
- 4—Burns automatically any commercial fuel oil available between 28 and 40 deg. A.P.I. Burns manually fuel oil between 18 and 40 deg. A.P.I.
- 5—Fuel Feeding Valve self cleaning in its operation.
- 6—Motor—Standard, horizontal, constant speed (1750 r.p.m.) motor operating under normal temperature conditions.
- 7—Listed as Standard by the National Board of Fire Underwriters; Tested and Approved by the New York City Board of Standards and Appeals.
- 8—Tested over a period of ten years by the ultimate judge of Oil Heat—the User Public who also approve.



Hardinge Brothers, Inc., manufacture a range of Oil Heating Equipment adaptable to Heating the Boiler with steam radiation loads of 300 to 25,000 sq. ft. per unit. It has been the aim of this organization not just to put another Oil Burner on the market, but to build into the HARDINGE the finest that material, workmanship, sound design, ample capital and more than one-third century of Precision experience could build. Architects, Heating Engineers and Contractors should feel free to call upon our Engineering Department for information of any kind on Oil Heating problems anywhere.

SEE OUR CATALOGUE IN SWEETS

Ratings

HARDINGE ATOMIZER-SIZES

Ratings

Atomizers Diam. Inches	Capacity in Sq. Ft. Steam Load	Motor H. P.	Atomizers Diam. Inches	Capacity in Sq. Ft. Steam Load	Motor H. P.
3	500	1/2	6	4800	1/2
3 1/2	800	3/4	6 1/2	5500	3/4
4	1200	1	7	6500	1
4 1/2	2000	1 1/4	8	10,000	1 1/4
5	3000	1 1/2	9	15,000	1 1/2
5 1/2	3900	1 3/4	10	25,000	1 3/4



"FROM BUNGALOW TO SKYSCRAPER"