

**JOHNSON
OIL BURNERS**
S. T. Johnson Co.

Executive Offices and Factory

Branches
 SAN CARLOS, CALIF.
 SAN FRANCISCO, CALIF.
 SACRAMENTO, CALIF.
 PHILADELPHIA, PA.

940-950 Arlington Avenue, Oakland, Calif.

OIL BURNERS FOR EVERY HEATING AND POWER PURPOSE

EXPERIENCE

The S. T. Johnson Co., established in 1904, is a pioneer in the use of liquid fuels for every heating and power purpose.

PRODUCTS

Manual, Semi-Automatic and fully Automatic Rotary Oil Burners built in various sizes to meet the requirements of any domestic, commercial or industrial application.

Oil Fuel Combination Boiler-Burner units furnishing heat or hot water or both in combination for homes.

Gas fired Boiler-Burner units furnishing heat and domestic hot water where desirable.

Combination Oil and Gas Burners for commercial and industrial applications.

ARCHITECT AND ENGINEER SERVICE

Through the Johnson Engineering Department your heating or power problems will be studied without obligation and full assistance given in preparing layouts and estimates.

BULLETINS

Loose-leaf bulletins on Johnson Oil Burners or boiler burner units and bricking and installation plans for boilers and furnaces most generally encountered are available from the factory or Johnson distributors in principal cities.

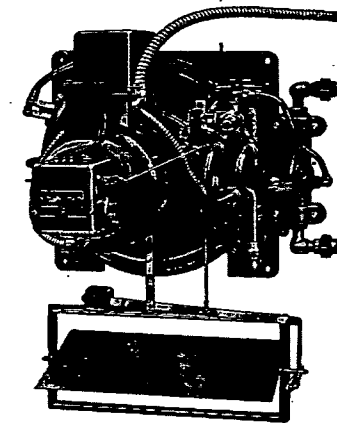
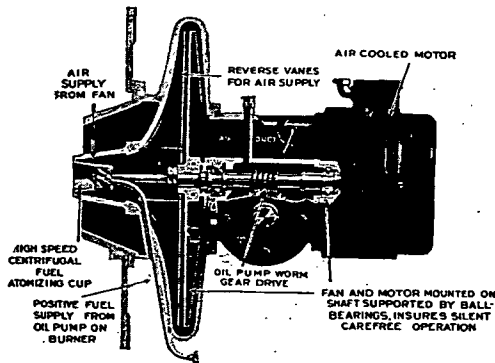
COMMERCIAL FULLY AUTOMATIC ROTARY TYPE OIL BURNERS**Types 30-AV and 30-H**

These automatic burners are made in 5 sizes for boilers up to 41,700 sq ft of steam radiation. Controlled automatically by a thermostat, steam pressure, water temperature, or a combination of these devices as the application may require.

Standard ignition is electric-gas. The gas may be natural, manufactured or compressed gas in containers.

On special order electric spark ignition is available for fuels not heavier than No. 3 on smaller burners.

Type 30-AV uses up to No. 5 fuel without preheating and is equipped with the Johnson viscosity compensating valve furnishing a constant flow of fuel, regardless of fuel temperatures or viscosities, to the burner without building excessive pressure in the lines or putting undue strain on the pump or motor. The valve incorporates a spring loaded floating piston with three orifices registering with delivery ports to the burner atomizer, to the suction side of the pump and to the oil return to storage. Adjustments are made by moving a lever around a notched quadrant



Type 30-AV Johnson Oil Burners Swing Easily Out of Firing Position, Without Disconnecting Any Pipes, When It Is Desirable to Make an Inspection or Mechanical Adjustment

which changes the size of the metering orifices.

Type 30-H is equipped with an automatic oil preheater and features that make possible the efficient use of No. 6 (Bunker C) fuel oil. The preheater maintains warm oil enabling burner to start instantly at all times.

Johnson Low Fire Starting and Modulated Firing Accessories. These features are incorporated in Type 30-AV LFS & MF and Type 30-H LFS & MF Johnson Burners. Also available for Type 28 Burner.

Low Fire Starting automatically reduces oil and air to a minimum for starting purposes and during a short pre-determined period, increases the fuel and air to full flame, assuring smooth positive starting.

Modulated Firing takes charge of the burner after full flame is established and automatically varies the flame to suit boiler demands through control of air and fuel. At shut down periods primary and secondary air are closed thus conserving furnace heat. Fuel savings have run as high as 7 per cent with this type of operation.

SEMI-AUTOMATIC TYPE 28

A manually ignited burner made in five sizes for boilers up to 41,700 sq ft of steam radiation. Built in two types—one with built-in pump for single installations, the other for use with separate Johnson pump equipment on multiple installations. Fuel oils (preheated when necessary) as heavy as No. 6 may be used.

'LADDI' DU-ALL**Combination Boiler-Burner Unit for Small and Medium Sized Homes**

Furnishes heat or domestic hot water or both in combination at low cost.

In the combination units fuel is only consumed for the production of domestic hot water during warm weather.

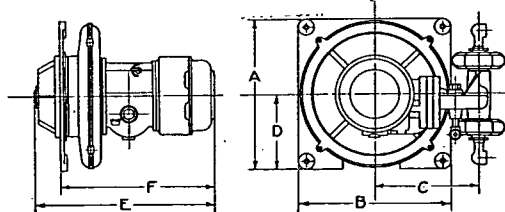
Made in three sizes: 100,000, 120,000, and 140,000 Btu per hour output.

'Laddi' Du-All Units rest directly on the floor. Diameter at the base is 24 in. on all three sizes, while the heights run 4½ ft on No. 1, 5 ft on No. 2 and 5½ ft on No. 3.

General Specifications of 'Laddi' Du-All

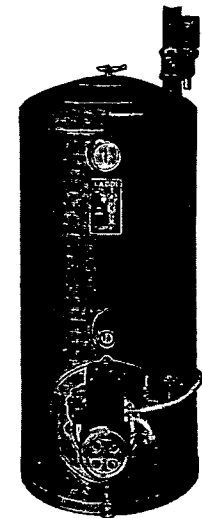
Vertical ¾ in. copper bearing steel boiler shell electrically welded . . . Tested to 150 lb hydrostatic pressure . . . Horizontal fire box with pre-cast refractory combustion chamber . . . 1¼ in. seamless extra heavy copper bearing steel fire tubes . . . 6 in. reversible chimney connector for either top or back connection . . . Completely insulated with mineral wool and heavy steel enameled jacket . . . Johnson Type B burner, 110 volts a.c., 60 cycles.

Burns Diesel fuel oil or No. 3 U. S. Standard. Unit fully assembled and tested before shipment . . . Finish of enamel in Royal Purple and Brewster Green . . . Fire tubes easily accessible.

**S. T. Johnson Co. Rotary Oil Burners Types 28, 30-AV, 30-H**

Burner Size No.	Capacity Steam Radiation, Sq Ft		Boiler Hp Rating	Cal Oil per Hour		Size Motor Hp	Dimensions in Inches					
	Min.	Max.		Min.	Max.		A	B	C	D	E	F
2½	825	2775	20	2	7	¼	14	13⅞	9½	6⅞	17	15
3½	1400	6950	50	3	15	½	16⅞	15⅞	10¼	8¼	17½	15½
4½	2775	13900	100	6	30	¾	17	19½	13	9⅞	21	19¼
5½	5550	27800	200	12	60	2	21½	21½	13	11	24	20
6½	8325	41700	300	24	90	3	21½	21½	13	11	25	20½

*Boiler output. Above burners available without built-in pumps in same sizes and capacities.



'Laddi' Du-All