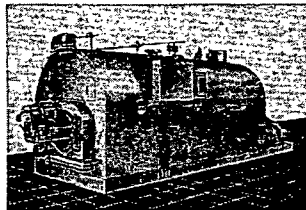




Dutton Boilers

Division Hapman-Dutton Co.
639 Gibson Street, Kalamazoo, Michigan

Four types, many sizes . . . From 5 hp up . . . Firing with gas, light or heavy oil, stoker coal or by hand . . . For processing, power, high and low pressure steam and hot water heating . . . For Industrial Plants, Dairies, Laundry and Dry-Cleaning Plants, Chemical and Food Processing, Hotels, Schools, Institutions, etc.

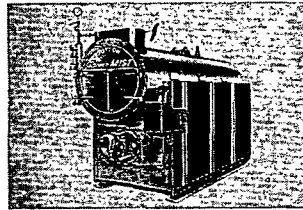


Off-Center Firing With EconoTherm "Packaged" Models—Gas or Oil or Combination Gas-Oil.

EconoTherm Models are automatic, self-contained, "packaged" units with full safety controls. Of 3-pass fire-tube design, they feature a modified Scotch Internal Furnace located off-center. This firing creates rotary water circulation, resulting in more uniform water temperature, fast steaming, steady water line at all times, and high quality dry steam. Higher water column above furnace adds extra safety, efficiency.

Rotary combustion, large steam storage space, and five or more square feet of heating surface per rated hp combine to deliver guaranteed 80 percent efficiency with dryness rating of 99 plus 0/0 dry steam under proper operating conditions.

Induced draft or forced draft fan available for positive, fast firing. Only a vent pipe is needed—no chimney or stack. Boiler shell is welded in one piece, X-ray inspected; complies with all ASME requirements. Every unit gets full running test. Certified ASME Data Report furnished.



Multiple Convertible Firing With The EconoMist "Packaged" Models.

EconoMist Models are automatic, "packaged" boilers featuring multiple convertible firing. They can be equipped for firing by hand, stoker, light oil, heavy oil, or gas, singly or in combinations. Can also be fired with by-products such as wood chips, sugar cane, corn husks, waste gas, etc.

EconoMist Models give you the dependability and simplicity of operation of H.R.T. design, plus greater combustion space, less heat loss. Installation, operation and maintenance costs are low. Welded boiler shell is X-ray inspected; complies with all ASME requirements.

Sizes from 15 to 105 hp are available as "packaged" units ready to connect or as basic units less refractory lining and accessories. Can be equipped with induced draft fan to eliminate need for stack or chimney. Conversion from one type of fuel to another is simple and inexpensive. Each unit is fully tested and certified ASME Data Report furnished when shipped as a packaged unit.

ECONOTHERM—RATINGS AND CAPACITIES

Equivalent Hp	20	25	30	40	50	70	80	100
Sq ft Water Heat. Surf.	112	125	151	201	300	356	400	510
Lbs Steam per Hr	700	773	1035	1726	2070	2450	2760	3754

Equivalent Hp	125	150	180	200	250	300	350	400	500
Sq ft Water Heat. Surf.	650	814	905	1000	1252	1500	1750	2000	2500
Lbs Steam per Hr	4485	5617	6210	6900	8539	10,350	12,000	14,000	17,500

WRITE DIRECT OR CONTACT YOUR DUTTON REPRESENTATIVE FOR COMPLETE, DETAILED SPECIFICATIONS AND DATA DESCRIBING THESE AND OTHER DUTTON BOILERS.

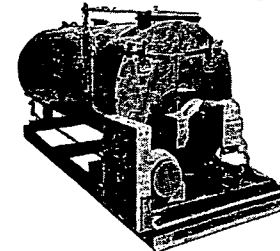
FARRAR & TREFTS DIVISION

YUBA MANUFACTURING COMPANY

20 MILBURN ST. BUFFALO 12, N. Y.

For Heaters—See page •418

For Expansion Joints—See page •322



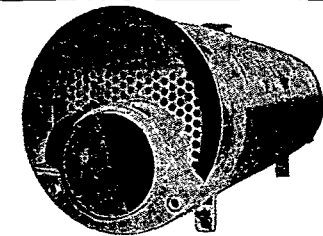
SCOTCH WET BACK HEATING BOILERS

Series 3000 for packaged heating units.

These boilers make excellent boiler-burner units with any manufacturer's burner equipment. Boiler and burner can be factory-assembled or field-assembled. The latter method permits boiler installation before building is closed in and prevents damage to delicate burner equipment.

The boilers have the tried-and-true two-pass design. Among the features are a flush wet front and complete wet back.

Per unit of heating surface, F & T Series 3000 Boilers have a larger furnace, more steam space and water content. A greater percentage of the total heating surface is exposed directly to the radiant heat of combustion. Sizes from 4200 to 70,000 sq ft of steam radiation.



SCOTCH WET BACK HEATING BOILERS

Series 2600

Where economy of installation and operation are paramount and the space is small, F & T Series 2600 Boilers are desirable. No expensive foundations, pits, or external brick work are needed. Piping to boiler is easily installed, especially where headroom is at a minimum.

The rear combustion chamber is surrounded with water. Large steam space and disengaging area are provided.

Series 2600 boilers are self-contained and can be moved easily and installed on two saddles. All parts are readily accessible for inspection and cleaning. Boilers can be furnished with special front furnace extension to suit burner requirements. Sizes from 3160 to 42,500 sq ft of steam radiation.

BISON COMPACT HEATING BOILERS—Series 900

Bison Compact Heating Boilers are designed to have a large furnace volume, ample water and steam storage, proper steam liberating surface and a balanced circulation. The result is a remarkably steady waterline.

Original cost of Bison Compact Heating Boilers is low and they are easily installed. They come complete, ready for piping. Minimum brick work is required. These boilers are designed for mechanical firing with oil, gas or stoker, but can be made for hand firing with anthracite or bituminous coal. Sizes from 2680 to 42,500 sq ft of steam radiation.

SCOTCH DRY BACK POWER BOILERS—Series 800

Series 800 boilers provide efficient, low-cost operation with normal loads and overloads. They require minimum head room and floor space. Because of their cylindrical shape, they are easy to clean and maintain. Installation is simple. No brickwork is needed. Rear refractory is installed before shipment. Place boiler on concrete footings, place stack in position, connect steam piping, and boiler is ready for operation.