

STANDARD FEATURES

Lockwood Type A boiler feed systems are offered as standard for boilers up to 600 HP and 200 PSIG pump pressures in simplex, duplex, and triplex configurations. Custom systems are also available.

Receivers are constructed of heavy steel plate with necessary reinforced tank connections, including two vents (one internally unrestrictable for added safety). Receivers are furnished with flat flanged heads for added strength, and bolted to support legs for ease of removal. For general applications receiver capacity is sized to allow approximately 1 gallon of gross capacity per boiler horsepower (smaller receivers may be utilized for high make-up water conditions; larger receivers are recommended for high condensate return conditions). Each system includes a gauge glass with protection rods and shut-off cocks, individual pump suction piping, and a make-up water feeder (internal mechanical type for systems rated thru 200 boiler HP; electrical solenoid type on larger systems). Pumps are selected for intermittent service unless otherwise requested.

TYPE A PUMPS

Type A regenerative turbine pumps offer many advantages in pumping applications requiring low flow and moderate to high pressure when compared to standard centrifugal pumps. Most centrifugal pumps are designed for high flow rates, relative to discharge pressure. Regenerative turbine pumps are designed for low flow rates, relative to discharge pressure, and consequently are more efficient and economical for boiler feed applications. Because the head capacity curve is steep in the turbine pump, a greater degree of flexibility is offered to the engineer. When turbine pumps are operated at lower than designed pressure, a turbine pump will require less HP, whereas a centrifugal pump would require more. Turbine pumps are less susceptible to cavitation caused by pressure fluctuations, and offer higher heads than are normally available with centrifugal pumps.

Turbine pumps derive their name from the many buckets machined into the periphery of the rotating impeller(s). The pumped liquid circulates in and out of the impeller buckets many times, each cycle imparting more energy until the liquid is discharged. The resulting flow is smooth and continuous. In two-stage pumps, the liquid is directed into a second stage impeller where the process is repeated, doubling the discharge head.

Standard Lockwood Type A turbine pumps are furnished with bronze fitted construction, long life bearings, and mechanical seals rated for 225°F (packed stuffing boxes are also available). Each pump is independently mounted on a heavy steel base, and direct connected by flexible coupling (with coupling guard) to an industrial grade motor with heavy duty bearings. Independent mounting allows ease of replacement of both motor and pump.

ACCESSORIES/OPTIONS

- TEFC/Explosion Proof Motors
- Magnetic Starters/Custom Panels
- H-0-A Switches
- Pilot Lights
- Control Circuit Transformers
- Electrical Alternators
- Level Alarm Switches
- Thermometers
- Pressure Gauges
- Internal Dispersion Tubes
- Steam Preheat Assemblies
- Pump Re-Circulation Orifices
- Corrosion Inhibitors (Magnesium Anode)
- Internal Tank Linings
- Galvanized Tanks
- ASME Code Tanks
- Tank Insulation



TYPE A PUMP