burks®
by Crane Pumps & Systems, Inc.

Regenerative Turbine Pumps

Close-Coupled & Base-Mounted Models

Capacities to 91 GPM
Heads to 350 Feet

FEATURES:

- Standard Bronze Fitted
- All Bronze
- Stainless Steel

Burks Turbine Pumps...
Designed for Low Maintenance and Long Service Life

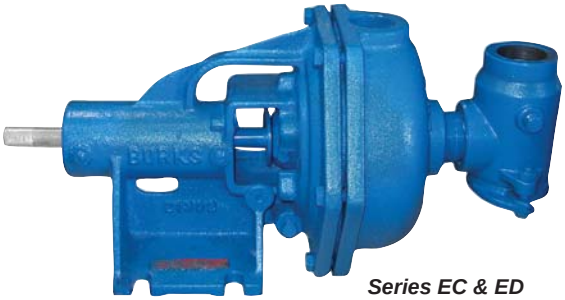
Burks Turbine Pumps are unique in design and different from all other regenerative turbine pumps. An integral part of their unique design is the Life-Lok® feature that provides a way to externally adjust the clearance between the impeller and raceway. Burks is the only regenerative turbine pump that has this feature. This adjustment is used for precise setting of pump performance during production testing.

Life-Lok® makes the Burks Turbine Pump field adjustable. Because of the low-flow, high head characteristics of the regenerative turbine, the pump pressure may be adjusted when necessary to match critical system requirements without appreciably changing the flow rate. Life-Lok® also allows pump performance to be restored to "like new" after years of service, greatly extending pump life.

Burks Regenerative Turbine Pumps offer high pressures and low-flow capacities impossible for other single-stage pumps of similar size.

Life-Lok® External Adjustment

The adjusting screw is located in the bearing frame on Base-Mounted Pumps and in the shaft extension end of the motor on Close-Coupled Pumps. A positive pre-load spring pressure is applied to the pump shaft bearing and, in turn, is transmitted to the adjusting screw. This controlled pressure eliminates bearing end play and provides a means for external adjustment of the clearance between the impeller and raceway.



Series EC & ED

Series CR

Series CS

CRANE PUMPS & SYSTEMS

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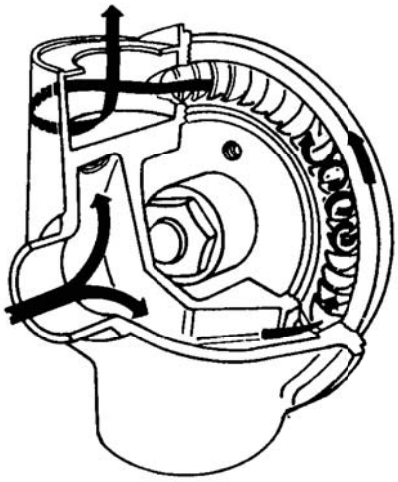
How It Works...

Clearance between the impeller and raceway is pre-set at the factory on production test. The pump starts under virtually no load. The impeller takes up its load gradually as the motor comes up to speed. Water enters the pump through a suction port in the raceway and is directed to the rotating impeller by means of channels in the raceway. The water is picked up by the blades of the rotating impeller and is literally pushed in a spiraling motion through the raceway channel. Each impeller blade imparts additional energy to the water as it is propelled to the raceway cut-off. The energized fluid is then discharged through the raceway by means of a cut-off or water block which is built into the raceway. The discharge is directed into a built-in vortex pocket in the raceway which separates air from the fluid being pumped.



Designed for Versatile, High Performance

Applications
Burks Turbine Pumps are designed for pumping any clean, non-corrosive, non-abrasive lower viscosity liquid on low-flow, high-head applications. They are used is a wide range of industries on applications such as...

Feed/Transfer
- High-temperature water and oil heat transfer
- Boiler feed and condensate return

Circulation
- Hot and cold water circulation
- Brine recirculation
- Hydraulic oil circulation

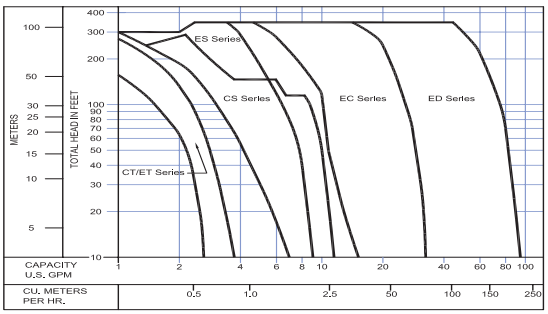
Metering
- Additive metering
- Hot water spray

Pressure Maintenance
- Jockey pumps
- Pressure boosting

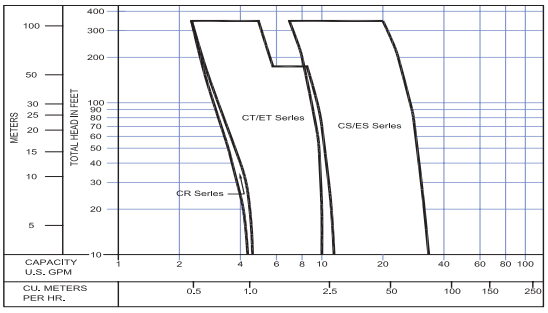
These are but a few of the most common applications. Their potential is limited only by the pump design characteristics.

Pump Performance

Performance Envelope:
CT, ET, CS, ES Series @ 1725 RPM
EC, ED Series @ 1750 RPM



Performance Envelope:
CR, CT, CS, ET and ES Series @ 3450 RPM



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