

SERIES 4810 BOWL (ELS) ASSEMBLY

ENCLOSED LINESHAFT VERTICAL TURBINE

Bowls: 10" to 52" Diameter
Flows: To 28,000 GPM
Heads: To 980 Feet
Temp: To 250°F

Services:

Cooling Water
 Raw Water Intake
 Sea Water
 Industrial Process
 Condenser Circulating
 Irrigation & Drainage
 Municipal Water Supply

BOWL ASSEMBLY

- Supplied standard in ASTM A48 class 30 cast iron with vitreous enamel interior lining
- Heavy wall thickness for corrosion allowance and high pressure applications
- Includes investment cast, 304 stainless steel, single suction impellers
- Impellers can be offered in enclosed or semi-open design for aggressive applications
- Optional bowl and impeller wear rings upon request
- Francis impeller design allows for broad band, high efficiency performance
- Impellers are machined and dynamically balanced prior to assembly
- 416 stainless steel bowl steel shaft is stronger than standard carbon steel and has superior corrosion resistance
- Keyed impeller construction for high pressure applications upon request
- Bronze bowl bearings with a wide variety of other materials upon request
- All stages feature o-ring construction making sure no leakage is present
- Dual bearing discharge supplied standard in ASTM A536 ductile iron case for additional shaft support at the top of the bowl assembly
- Alternate metallurgy options available upon request

STRAINER

- Supplied in galvanized steel, 304 or 316 stainless steel and all bronze construction
- Available in basket or conical design
- Protects the bowl assembly from large solids that may be present in the pumped fluid
- Optional vortex suppressor available upon request
- Alternate metallurgy options available upon request

LINESHAFT COUPLINGS

- Smaller HP models feature threaded lineshaft couplings while larger sizes have keyed lineshaft couplings standard
- Alternate metallurgy options available upon request

DISCHARGE CASE

- ASTM A536 ductile iron construction
- Connections for column oil lubrication & water lubrication
- Double oil lip seal design to add superior sealing for discharge case
- Wide variety of enclosing tube sizes available based on column selection

BOWL SHAFT

- Oversized, 416 stainless steel shaft is stronger than standard carbon steel and has superior corrosion resistance
- All impellers through 19 inch bowls feature taper lock impellers with optional keyed impellers available on every size

INTERMEDIATE STAGES

- Supplied standard in ASTM A48 class 30 cast iron with vitreous enamel interior lining
- Bowl o-ring standard between each stage
- Bronze bowl bearings standard within each stage for superior shaft support
- Optional grease lubricated isolated bearings available upon request
- Wide variety of optional metallurgy available upon request

IMPELLER DESIGN

- Includes investment cast, 316 stainless steel, single suction impellers
- Largest hydraulic selection in both enclosed and semi-open impeller designs
- Semi-open designs designed for aggressive, dirty water applications

OPTIONAL BOWL WEAR RINGS

- Heavy wall, ASTM B584 Alloy 836 lower bowl wear rings pinned in location so the wear ring cannot rotate within the bowl assembly
- Alternate metallurgy options available for all wear rings upon request

SUCTION BEARING

- Bronze sleeve bearing can be supplied in optional metallurgy upon request
- Marine grease lubricated with set-up tool drilling to aid in bowl assembly

