

# SERIES 5040

# BOWL

# ASSEMBLY

## VERTICAL TURBINE

**Bowls:** 10" to 22" Diameter  
**Flows:** To 6,000 GPM  
**Heads:** To 377 PSI

**Services:**  
**Fire Protection**



### BOWL ASSEMBLY

- Supplied standard in ASTM A536 ductile iron
- Heavy wall thickness for corrosion allowance and high pressure applications
- Includes investment cast, 304 stainless steel, single suction impellers with hydraulic balancing holes to minimize axial thrust
- Pinned dual case wear rings (1 upper and 1 lower) completely protecting the bowl assembly
- 304 stainless steel shaft sleeves completely protect the shaft from wear and corrosion
- Francis impeller design allows for broad band, high efficiency performance
- Impellers are machined and dynamically balanced prior to assembly
- 4340 quenched and tempered high chrome steel shaft is stronger than standard carbon steel and has superior corrosion resistance
- Keyed impeller construction for high pressure applications
- Bronze bowl bearings
- All stages feature o-ring construction making sure no leakage is present
- Flanged construction with jackscrew threads for easy assembly and disassembly
- Alternate metallurgy options available upon request

### STRAINER

- Supplied standard in 304 stainless steel construction
- Protects the bowl assembly from large solids that may be present in the pumped fluid
- 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

### TOP STAGE

- ASTM A536 ductile iron bowl construction with investment cast, 304 stainless steel, single suction impellers with hydraulic balancing holes to minimize axial thrust
- Dedicated top stage does not have lower wear ring and is designed to transition flow from the bowl assembly to the column assembly
- 304 stainless steel shaft sleeve completely protects the shaft from wear and corrosion (in each bearing location)
- Bronze sleeve bearing can be supplied in optional metallurgy upon request
- Bowl o-ring standard between top stage and first piece of column

### BOWL SHAFT

- Oversized, 420 stainless steel bowl shaft standard
- 18% stronger than standard carbon steel
- All impellers and bowl shaft sleeves are keyed to lock parts to the shaft assembly
- Unique shaft sleeve design with bowl shaft locknut and lockwasher does not require axial key at each impeller location

### INTERMEDIATE STAGES

- ASTM A536 ductile iron bowl construction with investment cast, 304 stainless steel, single suction impellers with hydraulic balancing holes to minimize axial thrust
- Bowls & impellers can be supplied in optional metallurgy upon request
- Bowl o-ring standard between each stage
- 304 stainless steel shaft sleeve completely protects the shaft from wear and corrosion (in each bearing location)
- Bronze sleeve bearing can be supplied in optional metallurgy upon request
- Integral bearing retainer ensures that the bearing cannot rotate within the cast housing
- 304 stainless steel key, locknut and lockwasher lock shaft sleeve into position and keeps the rotating assembly in the proper axial position

### UPPER & LOWER BOWL WEAR RING

- Heavy wall, ASTM B584 Alloy 836 upper and 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

### FIRST STAGE

- ASTM A536 ductile iron bowl construction with investment cast, 304 stainless steel, single suction impellers with hydraulic balancing holes to minimize axial thrust
- Bowls & impellers can be supplied in optional metallurgy upon request
- Bowl o-ring standard between each stage
- 304 stainless steel shaft sleeve completely protects the shaft from wear and corrosion (in each bearing location)
- Bronze sleeve bearing can be supplied in optional metallurgy upon request
- Integral bearing retainer ensures that the bearing cannot rotate within the cast housing
- 304 stainless steel key, locknut and lockwasher lock shaft sleeve into position and keeps the rotating assembly in the proper axial position

### SUCTION BEARING

- 304 stainless steel shaft sleeve completely protects the shaft from wear and corrosion
- Bronze sleeve bearing can be supplied in optional metallurgy upon request
- Integral bearing retainer ensures that the bearing cannot rotate within the cast housing
- 304 stainless steel key, locknut and lockwasher lock shaft sleeve into position