# **SERIES 5040 MODEL VT**

**VERTICAL TURBINE** 

Sizes: 4" to 16" Discharge Bowls: 10" to 22" Diameter

100 GPM to 6,000 GPM Flows:

Heads: 40 PSI to 610 PSI

To 250°F Temp:

# Services:

**Fire Protection** 







#### **DISCHARGE HEAD**

- Supplied standard in ASTM A36 carbon steel
- All discharge heads feature a dual safety guard designed to completely protect the user from all rotating parts
- Dedicated support for the nameplate allows for a high visibility design
- Discharge gauge package with 304 stainless steel buffer tube, fittings and ball valves
- Discharge flanges supplied in 250 PSI rating with raised face for high pressure applications
- Integral drip basin with threaded connection collects all packing leakage
- Alternate metallurgy options available upon request

### **BOWL ASSEMBLY**

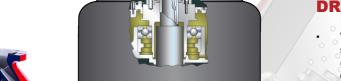
- Supplied standard in ASTM A536 ductile iron
- Heavy wall thickness for corrosion allowance and high pressure applications
- Includes investment cast, 304 stainless steel, single suction impellers with hydraulic balancing holes to minimize axial thrust
- Pinned dual case wear rings (1 upper and 1 lower) 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 resistanceKeyed 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
- Alternate metallurgy options available

upon request



#### **DRIVER**

- Vertical holloshaft (VHS), vertical solid shaft (VSS) or right angle gear drive (RAG)(when Diesel engine driven) driver construction
- Options include non-reverse ratchet
- (NRR) or self release coupling (SRC) Thrust bearing designed to carry all axial thrust generated by vertical turbine bowl assembly
- The top adjusting nut (VHS orientation) allows for the adjustment

#### PACKING HOUSING KIT

- Modular design maximizes the sharing of common components
- 304 stainless steel shaft sleeves completely protect the shaft from wear and corrosion
- 304 stainless steel gland assemblies ensure that packing can be adjusted without the worry of corrosion
- High pressure bypass port minimizes packing leakage on high pressure applications
- Labyrinth style design for lower and upper throat bushings keep pressure losses at a minimum
- 304 stainless steel shaft sleeve nuts are located outside of the fluid chamber minimizing corrosion and allowing for an easier disassembly when the need for service arises

# COLUMN ASSEMBLY

- Heavy wall, carbon steel construction
- Flanged construction makes assembly and disassembly very easy
- 4340 quenched and tempered high chrome steel shaft is stronger than standard carbon steel and has superior corrosion resistance
- Product lubricated lineshaft bearings with integral 304 stainless steel lineshaft sleeve
- Overall length (OAL) is engineered to meet the requirements at the job-site All flanges feature o-ring construction
- making sure no leakage is present Flanged construction with jackscrew
- threads for easy assembly and disassembly
- Smaller HP models feature threaded lineshaft couplings while larger sizes have keyed lineshaft couplings standard
- Alternate metallurgy options available upon request

