

# SERIES 4810

## MODEL VT

### VERTICAL TURBINE ENCLOSED-LINESHAFT

**Sizes:** 4" to 42" Discharge  
**Bowls:** 5" to 52" Diameter  
**Flows:** To 34,000 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

#### DISCHARGE HEAD

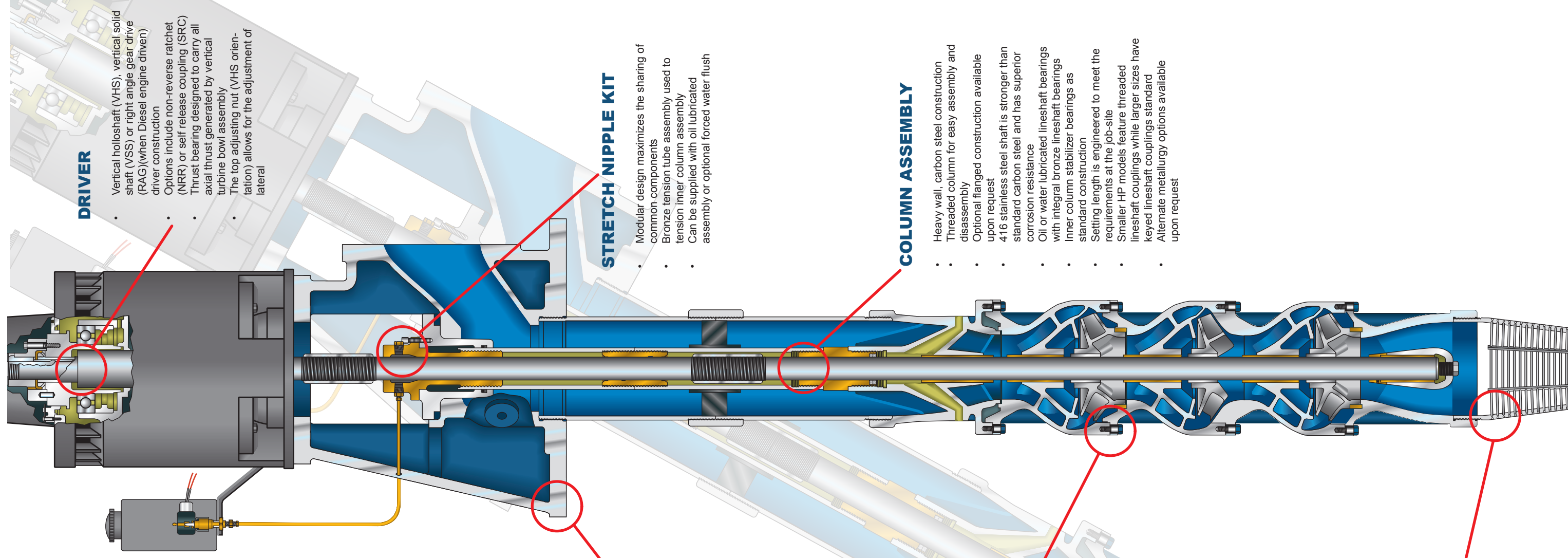
- Supplied standard in ASTM A48 class 30 cast iron
- Fabricated steel discharge heads (above base, below base & inline) available upon request
- Optional oil-lubricated motor stand for high axial thrust applications
- Optional deepset version supplied in ASTM A536 ductile iron for settings beyond 1,000 feet
- Discharge gauge package with 304 stainless steel buffer tube, fittings and ball valves
- Discharge flanges supplied in 250 PSI rating with integral o-ring groove 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 A48 class 30 cast iron with vitreous enamel interior lining
- Heavy wall thickness for corrosion allowance and high pressure applications
- Includes investment cast, 316 stainless steel, single suction impellers
- Impellers can be offered in enclosed or semi-open design for aggressive applications
- Optional bowi 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
- Discharge case with inner column adapter for connection to inner column for deepset applications
- Alternate metallurgy options available upon request

#### STRAINER

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



#### DRIVER

- Vertical hollowshaft (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 of lateral

#### STRETCH NIPPLE KIT

- Modular design maximizes the sharing of common components
- Bronze tension tube assembly used to tension inner column assembly
- Can be supplied with oil lubricated assembly or optional forced water flush

#### COLUMN ASSEMBLY

- Heavy wall, carbon steel construction
- Threaded column for easy assembly and disassembly
- Optional flanged construction available upon request
- 416 stainless steel shaft is stronger than standard carbon steel and has superior corrosion resistance
- Oil or water lubricated lineshaft bearings with integral bronze lineshaft bearings
- Inner column stabilizer bearings as standard construction
- Setting length is engineered to meet the requirements at the job-site
- Smaller HP models feature threaded lineshaft couplings while larger sizes have keyed lineshaft couplings standard
- Alternate metallurgy options available upon request