

4810 Series
VT
Open-Lineshaft
Fabricated Can
Vertical Turbine



Flows to: 34,000 GPM

Heads to: 980 Feet
Temperatures to: 250°F

# **SERIES 4810** MODEL

**VERTICAL TURBINE OPEN-LINESHAFT**  4" to 42" Discharge 5" to 52" Diameter Bowls: Sizes:

To 34,000 GPM Flows:

To 980 Feet Heads:

To 250°F Temp:

### Services:

Municipal Water Supply Condenser Circulating Industrial Process Raw Water Intake **Cooling Water** Sea Water

## **DISCHARGE HEAD**

- Supplied standard in ASTM A36 carbon steel Optional ASTM A48 class 30 cast iron with below base suction
  Optional oil-lubricated motor stand for high axial

- thrust applications
  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**

- nent cast, 304 stainless steel, single 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
- Keyed impeller construction for high pressure applications upon request Bronze bowl bearings with a wide variety of other materials upon request
- o-ring construction making sure no
- 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 metallum out.

#### STRAINER

- Supplied standard in 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
  - options available Alternate metallurgy 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 of lateral

# PACKING HOUSING KIT

- Modular design maximizes the sharing of
- common components
  Cast bronze gland assemblies ensure that packing can be adjusted without the worry of corrosion
- High pressure bypass port minimizes packing leakage on high pressure applications
  Packing, stretch nipple kit and/or mechanical seal housings available based on job-site requirements

# **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 thar standard carbon steel and has superior

- corrosion resistance
  Product lubricated lineshaft bearings with integral 304 stainless steel lineshaft sleeve 304 stainless steel lineshaft sleeve construction
  Overall length (OAL) 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

## **SUCTION VESSEL**

- Heavy wall, carbon steel construction or other specified alloy
  Below base suction flange available upon request



#### How It All Began EFFICIENCY BY DESIGN

With years of manufacturing experience, Ameriflo has spent considerable time developing what the customer has asked for. The most diverse hydraulic offering in the vertical turbine markets with an emphasis on pump efficiency and systems integration. Ameriflo manufactures all product type in a wide variety of standard and optional materials offering you the solution you need.

Ameriflo is a global manufacturer of integrated systems with facilities located in several countries and has clients in over 80 countries. The corporate manufacturing headquarters is located in Tennessee, along with a very large testing and training facility for distributor and representative training.

Ameriflo uses computational fluid dynamics (CFD)and 3D Solids Works for designing all pumps and systems with detail for all valves, suction & discharge piping and any installed optional accessories specified by the end user. Electric and Diesel engine driven systems are available and can be ordered in a variety of flows and pressures with full optional metallurgy support.

#### **Product Line**

The benefit to the Ameriflo offering is that you only need to go to one place for your product line needs. Whether your need is an end suction pump, a large split case or even a vertical turbine Ameriflo has a model for you. Each product line has a very diverse offering from the very small to the very large and everything in between. Do not rely on other manufacturers who have broken product lines with missing models.

Ameriflo also has state-of-the are engineered customer service.



The applications engineering part of Ameriflo have decades of engineering and specification work. This background and experience is critical when the design engineer is looking for answers to questions.

Ameriflo has one of the largest test facilities in North America with nearly 300,000 gallons of water utilizing 8 different test loops from 2 inch through 36 inch. The horizontal and vertical test labs have ratings up through 1,000 HP and include string test stands allowing testing with the job motor or Diesel engine.

#### Communication Is The Key To Our Success

Ameriflo has systems in place making communication with our clients of the utmost priority. Each client has their own customer portal that will allow them to check on all quotations, sales orders and any client case that is generated. These tools put the power in the hands of the client and allow them access to the most current information. This access empowers our clients to respond to their customers in a more timely fashion and secure that next opportunity!

Ameriflo also has a dedicated

theater used for sales and service training. This theater can house approximately 35 students and is used to cover the Ameriflo pump and Diesel engine product lines. Schools are available to sales people and dedicated service schools are also offered. Service schools feature a hands on portion allowing students to disassemble and re-assemble pumps and/or Diesel engines to allow for certified repairs in the field. Contact Ameriflo to inquire about the next school and how you can join in these events.

Ameriflo also has a state-of-the-art software selection package with full configuration, *Ameriflo IQ*, that can be used by simply signing up. E-mail us for additional information.

If you would like more information about what Ameriflo is all about, please contact us.

What separates Ameriflo from the competition, *WE DELIVER*.....

#### **Ameriflo Corporation**

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