

# **DO THE MATH!**

# Check out our Model PWI-BB API 610 Vertical In-Line Single Stage OH3 by the numbers!



Manufactured and tested in the USA

# **2** Coupling

 Radially split spacer coupling allows the complete rotating assembly to be removed without disturbing the driver.

### 3 Angular Contact Thrust Bearings

 Absorb thrust loads and also exceed the API 610 life criteria of 25,000 hours

## 4 Scroll Pumping Ring

 Moves oil from the high capacity oil sump to the upper thrust bearings

#### Casing Cover and Seal Chamber

- API 610 seal chamber allows user to install any API 682 cartridge seal to meet process requirements
- Renewable throat bushing for controlled seal chamber environment
- Flat surface seal gland for 0-Ring sealing
- Optional machined gasket area for higher temperature applications or on customers request

# Renewable Casing and Impeller Wear Rings

- Front and back rings control seal chamber pressure and provides impeller stability
- Optional non-metallic rings for improved efficiency and dry running

## Impeller Retention

 Keyed and secured to shaft with exclusive dual set-screw locknut

## 8 Impeller

- Fully enclosed design provides increased efficiency
- Dynamically balanced to ISO G1.0 criteria before mounting

# **ePOD Pump Selector**• Access to end users and specifiers to select,

 Access to end users and specifiers to select, configure and estimate their pump application on line at www.pumpworks610.com

# 10 Delivery

- 16 weeks for API 610 material class S-6, S-8, and C-6
- Refer to the factory on deliveries for other API material classes and customer specific material combinations

### 11 Driver

 Readily available standard "P" base motor to accommodate pump thrust

## Driver Stand

- Motor positioning lugs with bolts to facilitate alignment
- Two stands cover the entire pump size range
- Generous window access allows for easy seal maintenance.

### 13 Fan Cooling and Finned Housing

• Ensures adequate heat dissipation at all speeds.

## 14 Viton Flinger

 Maximizes oil cooling effectiveness by throwing oil to housing walls.

## 15 Lower Radial Bearing

· Ensures maximum rotor stability

## 16 Heat Sink

• Dissipates conducted and radiated heat

#### **Throat Bushing**

- · Graphalloy Throat Bushing
- · Non-galling, superior wear resistance
- · Allows for tight running clearances to minimize shaft runout

#### Nozzle Load

• Casing design meets current edition API 610 Nozzle Load requirement

#### -19 Pump Casing

- Precision machining and fully confined controlled compression gasket ensures proper sealing and case to cover alignment
- ANSI 300# Class RF Flange standard, hydro test pressure 1100 psig

#### Casing

Designed for use with or without a mounting plate

Do the math - it equals superior performance, highest quality and the fastest delivery!

# **DO THE MATH!**

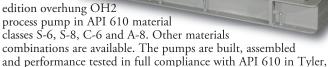
#### The PumpWorks 610 Difference

- Manufactured and tested in the United States
- Access for end users and specifiers to select, configure and estimate their pump application on line at www.pumpworks610.com.



PWH API 610 Process Pump

PWH is the PumpWorks 610 API 610 current



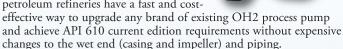
Texas USA.

■ Shorter lead times than the competition –
16 weeks for API 610 Material Classes S-6, S-8 and C-6

See our PWH API 610 Single Stage OH2 Brochure for more information.

#### PW-11 API 610 Upgrade Program

PW-11 is the PumpWorks 610 retrofit upgrade kit that meets API 610 current edition for horizontal single stage OH2 process pumps. The kit ensures petroleum refineries have a fast and cost-



See our PW-11 API 610 Upgrade Program Brochure for more information.

#### **PWM API 610 Multistage Pump**

PWM pump is designed for covering the full range of High Pressure petroleum refinery services, petrochemical plant services, gas processing, oil processing, offshore installations (platforms), hydrocarbon and crude oil pipeline and finished products pipeline services.

■ Shorter lead times than the competition – 26 weeks for API 610 material class S-4, S-6, S-8, C-6 and A-8

See our Pump Works 610 Multistage Pump Brochure for more information.

#### **PWV API 610 Vertical Turbine Pump**

PWV is the PumpWorks 610 API 610 current edition VS6 and VS1 vertical turbine pump in API 610 material classes S-1, S-4, S-5, S-8 and A-8. Other material combinations are available. The pumps are built, assembled and performance tested in full compliance with API 610 in Tyler, Texas USA.

Shorter lead times than the competition – 16 weeks in API 610 Material Class S-1

See our PWV API 610 Vertical Turbine VS6 (Can Type) and VS1 (Sump Type) Brochure for more information.

#### PWD API 610 BB1 Horizontal Split Single Stage Pump

The robust BB1 PWD is an axially split, single stage, horizontal, between bearing pump. Our heavy duty casing with multiple mounting options for temperature and liquid requirements afford our customers with application specific/custom hydraulics designed to meet even the aggressive of pumping requirements. The PWD is designed for critical heavy-duty process applications like refining applications that include cooling water, distillation and sulfur recovery. The PWD is a versatile pump for loading the stage of the stage

recovery. The PWD is a versatile pump for loading, boiler feed boosting, crude oil pipeline, desalination and water transfer.

■ The PWD delivers in 28 weeks

See our PWD API 610 BB1 Horizontal Split Single Stage Pump Brochure for more information.

# Online Pump Selection with ePOD

Visit our website at www.pumpworks610.com and specify flow and performance needs to obtain pump selection, performance curve, data sheet and budget estimate through ePOD software pump selection program.

# Test Facilities Horizontal and Vertical Pumps

A critical function of any pump manufacturer is the performance testing of their product across the pump's operating region to ensure that it meets design specifications. Located in Tyler, Texas and in Shreveport, Louisiana, the Best PumpWorks Test Facilities are designed to provide perfor-mance and NPSHR tests in accordance

with the latest edition of API 610.

#### **Test Facilities Capabilities:**

- Test flows up to 21,500 gpm
- Discharge test pressures up to 6,000 psi
- Variable frequency drive for precise speed control through 600 HP @ 460 volt
- Solid state soft start for low impact motor starting over 600 HP through 4000 HP @ 4160 volt

See our PumpWorks 610 Test Facilities Brochure for more information.





