# ARMSTRONG

Series 4700





**VMS 50** 



**VMS 100** 



**VMS 180** 

#### HEAVY DUTY THRUST BEARING

Maintains rotating assembly axial location and unloads pump hydraulic thrust.

# UNIQUE INTERNAL UPPER END DESIGN

Eliminates vapor locking and ensures lubrication and cooling of the mechanical seal.

#### HIGH GRADE STAINLESS STEEL IMPELLERS

For high temperature operation and for maximum resistance to corrosion and erosion. Prevents accumulation of debris on the internal pump components.

# TUNGSTEN CARBIDE INTERMEDIATE BEARINGS

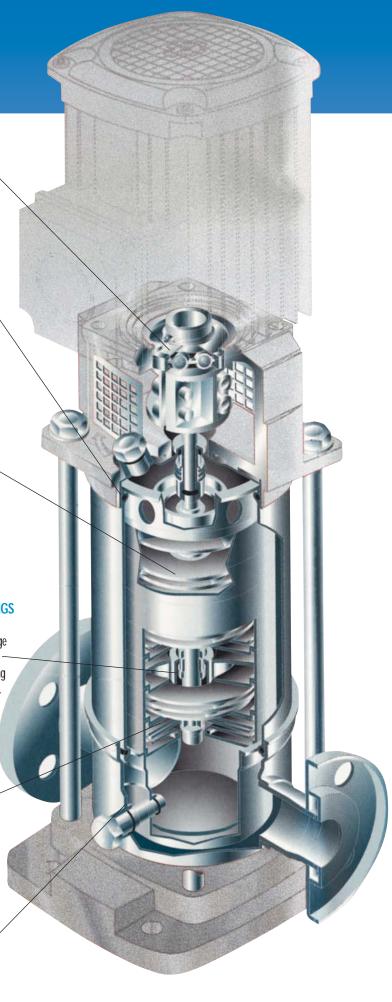
Reduces rotor vibration and improves stability on multistage pumps. Continuous pressure — lubricated bearings ensure long life and reduced maintenance.

# HEAVY DUTY TEFLON IMPELLER SEAL RINGS

Limits interstage recirculation and dramatically reduces friction. Teflon® effectively resists thermal distortion and has excellent abrasion resisting characteristics.

#### **PRIMING PLUGS**

Interconnect suction and discharge chambers to facilitate quick filling and initial air removal.



# SOLUTIONS TAILORED TO EACH APPLICATION



# **Environmental Engineering**

Armstrong Series 4700, designed for temperatures ranging from 5°F to 250°F (-15°C to 120°C), are well suited for boiler feed applications, condensate recovery and air conditioning systems.

Easy to incorporate into industrial environmental engineering equipment, our Vertical MultiStage pumps combine the advantages of compact design, quiet operation and ease of maintenance.



## Water Distribution

From basic water supply to the most specific pressure boosting and fire line pressure maintenance applications, Armstrong Series 4700 Vertical MultiStage pumps satisfy all water distribution requirements. The wide pressure range – from 50 psig to 350 psig (5 bar to 25 bar) – makes this product well suited for applications such as pressure washing of aircraft, trains, boats and road vehicles as well as spray washing of industrial parts and electronic components.

# Industry

From water feeds for machine tools, to grease removal, and cooling of lathes and molds, water has many uses in the industrial market. The stainless steel design and wide temperature parameters of the Series 4700 Vertical MultiStage pump make it an ideal unit for light industrial applications.





# Water Treatment

Water is becoming a precious commodity. Water transportation, demineralization, filtration, de-ionization and reverse osmosis all call for supply of hygienic high pressure water. The Armstrong Series 4700 Vertical MultiStage pump, made entirely with stainless steel wetted components, is well suited for these applications.

# **Agriculture**

The excellent hydraulic efficiency of the Armstrong Series 4700 makes this pump a great choice for irrigation and sprinkling applications. Whether irrigating large farms or sprinkling parks and golf courses, the stainless steel pump stages provide the best hydraulic efficiency in all power ranges. The compact design allows the best utilization of available space in pumping stations.



# TYPICAL SPECIFICATION

## **CONSTRUCTION**

Supply and install, as shown on the plans and specifications, Armstrong Series 4700 Vertical MultiStage pumps. The pump shall have a continuously rising curve from minimum head to shut off condition and shall have a motor installed that is suitable for the full range of the published performance curve.

Models VMS-15, 30 & 50: All hydraulic components shall be manufactured from Type 304 stainless steel.

Models VMS-100 & 180: Manufactured from Type 304 stainless steel with cast iron casing.

Each impeller shall be fitted with a Teflon® seal ring.

The 316L stainless steel shaft shall be fitted with Tungsten Carbide intermediary bearing(s).

#### MECHANICAL SEAL

The mechanical seal shall be suitable for the full pressure and temperature range of the pump and shall be fitted with Carbon rotating face and Silicon Carbide stationary face.

#### PEDESTAL BEARING

The motor pedestal shall be fitted with an oversize thrust bearing.

The thrust bearing must be connected to the adapter and shaft coupling in such a manner as to eliminate pump axial loads from the motor, allowing standard NEMA design motors to be used.

The thrust bearing will also remove the necessity for adjustments of any other moving part during the pump life cycle.

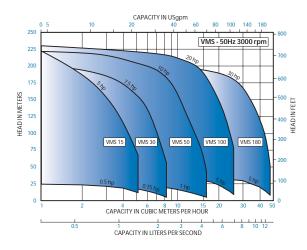
#### CONNECTIONS

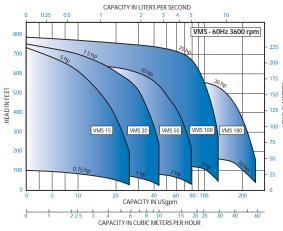
The base mounted pump shall be assembled in a vertical shaft configuration with the suction and discharge connections being in-line at the bottom.

Suction and discharge connections shall have same size flanges drilled for ANSI 250 rating.

## **MOTOR**

Supply a standard NEMA design 2-pole motor with the electrical characteristics and enclosure as indicated on the drawings.





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