



*Specialist for Pumping Technology*

INNOVATION  
EFFICIENCY  
QUALITY



**VLT/VMT**

Vertical Canned Process Pump

## For more than 60 years the name Ruhrpumpen™ has been synonymous worldwide with innovation and reliability for pumping technology

Ruhrpumpen is an innovative and efficient centrifugal pump technology company that offers a wide range of quality products to our clients. Ruhrpumpen is committed to global excellence with a complete range of Pumps, Fire Pump Packages and related products, such as Decoking Systems and Tools to support the core markets, namely Oil & Gas, Petrochemical, Power, Heavy Industry Applications, Mining and Water Services.

The broad product line complies with the most demanding quality specifications and goes beyond stringent industry standards such as API, ANSI, Hydraulic Institute, Underwriter's Laboratories, Factory Mutual and ISO 9001.

Ruhrpumpen is a vertically integrated company with its own foundry, machine shop, pump manufacturing plants and service centers. With strategically located manufacturing plants, operating offices and service centers in many parts of the world, Ruhrpumpen is truly a global pump company which also has the strength to focus on the local necessities of each client.

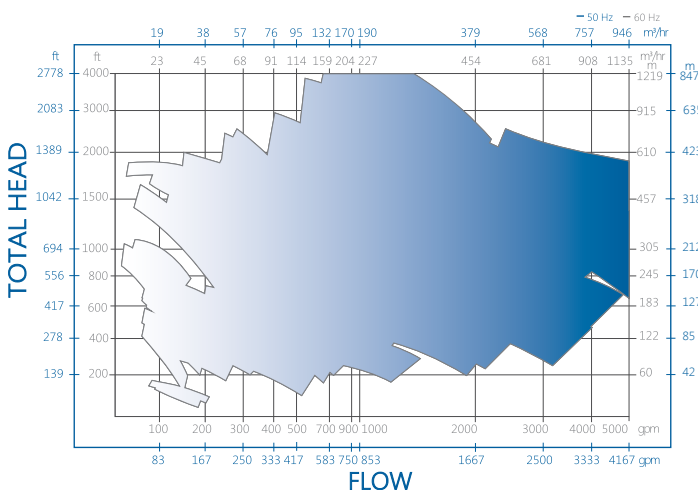
### VLT / VMT Pumps

The VLT / VMT pumps are vertical process pumps of the "double casing" type as defined by API-610. By multi-staging series stages in the medium specific speed design range, the VLT / VMT pumps provide outstanding efficiencies and low cost operation in high head applications. The special first stage allows operation with extremely low NPSH requirements while running at optimum speeds. Exclusive hydraulic and mechanical features provide continuing reliability with optimum performance.

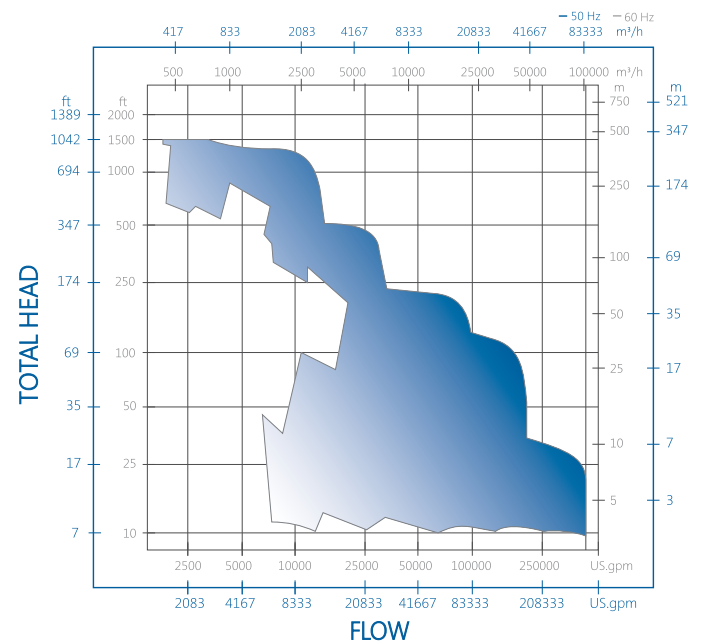
Ruhrpumpen vertical process pumps have led the market since the 1950's. These pumps can be offered as fully API 610 (latest edition) compliant, in cryogenic services for low temperature applications and Non-API condensate services.

### Selection Chart

VLT Various Poles

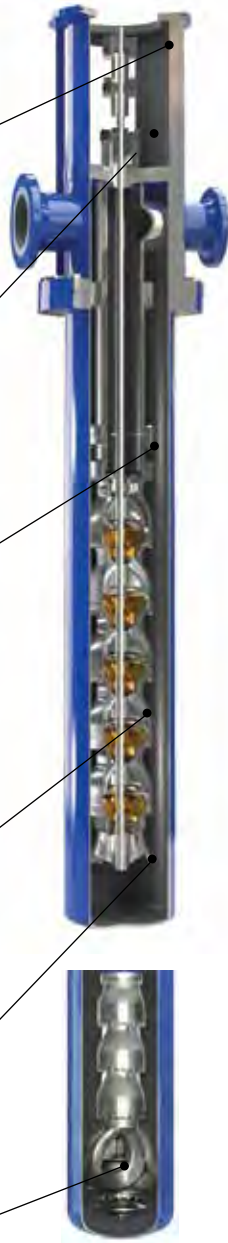


VMT Various Poles



## Characteristics

- 1 COUPLING**  
All metal, four piece adjustable for solid shaft drivers.
- 2 LONGER SEAL LIFE**  
Mechanical seal is located in full discharge flow for positive lubrication-cooling and is inherently self-venting and self-cleaning.
- 3 O-RING GASKETS**  
Throughout allow metal-to-metal rabbeted fits between all components.
- 4 UNSURPASSED LOW NPSH**  
Designed to match series stage flow rates, the exclusive between bearing first stage impeller design provides shockless fluid entry with optimized eye/vane inlet angles, not the typical "large eye impellers".
- 5 HIGH QUALITY GUIDE BEARINGS**  
Ruhrpumpen has extensive experience with other non metallic bearings such as VESPEL for these Pumps.
- 6 DOUBLE SUCTION**  
First Stage Bowl Assembly optional.



Images for general arrangement use only, not certified for construction.

### VLT PERFORMANCE DATA

Capacity	100 to 1,600 m <sup>3</sup> /h	7,000 U.S. gpm
Head	up to 1,494 m	4,900 ft
Pressure	up to 140 bar	2,020 psig
Temperature	-195 °C to 565 °C	-320 °F to 1,050 °F

### VMT PERFORMANCE DATA

Capacity	up to 9,500 m <sup>3</sup> /h	45,000 U.S. gpm
Head	up to 900 m	3,000 ft
Pressure	up to 90 bar	1,300 psig
Temperature	up to 815 °C	1,500 °F

Note: For pump operation outside this range, please contact a Ruhrpumpen representative.

## DESCRIPTION

Vertical Canned Process Pump

- API 610 latest edition, type VS6
- Low NPSH"Shockless Entry first stage impeller
- Integral fabricated column support bearings
- Collet or ring and key impeller mounting
- One-piece shaft construction for shaft lengths to 20 ft (6m)
- Rigid 4-piece coupling
- Fabrications manufactured using ASME Section IX code qualified welders for API applications
- Flanged Bowls for API 610 Hydrocarbon services

## OPTIONS





- Thrust bearing choices:
  - Thrust bearings in the motor
  - Thrust pots mounted on the pump
  - Grease lubricated thrust bearing
  - Triple row antifriction as plate type hydrodynamic bearings
- Design available for non Hydrocarbon Applications
- Fabrications designed to national standards when required
- Wide range of hydraulic designs to suit all applications
- Choice of bearings and mechanical seals
- Pump mounted thrust bearing when required
- Tank or sump mount options available
- Double suction first stage bowl assembly optional

## BENEFITS

- Lower overall cost: cost reduction can be achieved by replacing traditional horizontal multistage centrifugal and reciprocating pumps with Ruhrpumpen VLT pumps resulting in lower connected horsepower, while keeping floor space to a minimum
- Less downtime: column prices are designed so that Shaft critical speeds (Bearing Spans) are per the latest API 610 guidelines. All bearing retainers are integrally fabricated into the column sections for accurate alignment and concentricity
- Easy to install: most pumps are shipped completely assembled (less driver and suction barrel)
- High pressure temperature: with years of experience in design of this pump, the VLT can be offered for high pressure / high temperature services



## RUHRPUMPEN PLANTS

-  USA, Tulsa & Orland
-  MEXICO, Monterrey
-  BRAZIL, Rio De Janeiro
-  ARGENTINA, Buenos Aires
-  GERMANY, Witten
-  EGYPT, Suez
-  INDIA, Chennai
-  CHINA, Changzhou
-  UK, Lancing

More Information:

