THE UNIVERSAL TURBINE PUMP

Custom Manufactured to meet Your Specific Needs

MANUFACTURED BY
Process Systems\textsuperscript{,} inc.
No matter what type of liquid you need to move, chances are the Deming Vertical Turbine Pump is your best choice for the job.

The Deming Vertical Turbine Pump is suitable for transferring almost any liquid, from rainwater to hard-to-handle fluids (hazardous, abrasive, viscous, etc.), in a wide range of capacities and pressures to match your requirements.

There is a model of the Universal Turbine Pump to solve virtually any fluid-handling problem you may have. By selecting the proper motor, sealing option, strainer, metallurgy, etc. for your application, you can virtually create your own pump. Imagine the possibilities! Our experienced engineers can help with your specific application.

Because there are so many configurations, the Deming Vertical Turbine is the most versatile pump in the world. These pumps are solving problems in a broad range of industries, including steel mills, metal finishing, chemical, paper, municipal, petroleum, agriculture - in virtually any type of facility that transfers fluid.

Additionally, the Deming Vertical Turbine features the same precision engineering and top-quality materials that are built into all our pumps. The result: a pump that runs smoother and lasts longer.

More than a century of research, engineering and manufacturing experience stands by your selection of a Deming Universal Vertical Turbine Pump. It will prove to be a wise choice.
TYPICAL PUMP CONFIGURATIONS

Hollow-shaft motor
Surface discharge head
Threaded column
Standard bowl assembly
Basket strainer

Solid-shaft motor
Motor stand
Fabricated discharge head
Flanged column
Flanged Bowls
Bell-mouth suction
Bolt-on strainer

Hollow-shaft motor
G-head ANSI base-mounting flange
Liquid lock-bypass construction
Bowl assembly-open suction

Hollow-shaft motor
Surface discharge head
Grease flush construction
Bell-mouth suction

Hollow-shaft motor
T-head
Flanged column
Bell-mouth suction
Suction barrel

Solid-shaft motor
Motor stand
Fabricated discharge head
Flanged column
High-pressure cased bowls
A MODULAR APPROACH

DRIVERS
- Hollow-shaft motor

DISCHARGE HEADS
- Standard surface discharge - cast iron

SEALING METHODS
- Standard pressure packing box
- Open line-shaft product-lubricated

COLUMN AND SHAFT
- Product-lubricated with rubber bearing
- Product-lubricated

BEARING HOUSINGS
- Product-lubricated

BOWL ASSEMBLIES
- Standard basket

STRAINERS
A MODULAR APPROACH TO PUMP CONSTRUCTION...

Solid shaft motor with stand

Fabricated-steel surface discharge

T-head

Mechanical seal

Enclosed lineshaft-oil-lubricated

Product-lubricated with metallic bearing

Flanged bowls-tapered suction

Flanged bowls-bell-mouth suction

Standard conical

Flat mesh for bell

Bolt-on basket for bell

Open construction (no strainer)

C-face motor with thrust stand

Right angle gear drive

G-head ANSI flange base

Motor stand for below-grade discharge

Liquid lock-bypass construction

Oil/grease flush construction

Below-grade discharge

G-head

Oil/grease flush construction

High-pressure packing box

High-pressure cased assembly

...TO MEET YOUR SPECIFIC NEEDS.
**Product and Oil Lubricated**

1. Impellers easily adjustable - with adjusting nut located at top of motor.
2. Ratchet prevents backspin - and avoids damage to pump in case of phase reversal.
3. Heavy-Duty thrust bearing - cooled by air entering motor.
5. Base of head recessed - permits casing or sleeve to extend above foundation as required by many health departments.
6. Flanged head construction - facilitates assembly of column and discharge head. Maintains accurate alignment between motor and column shaft assembly. (Some discharge heads feature threaded column connections. Refer to factory.)
7. High strength line shaft - of heat treated steel, ground and polished - one-third stronger than ordinary shaft.
8. Column couplings - machined for tight fitting butt joints. (Flanged column available.)
9. Stainless Steel impeller shaft - specially heat treated, ground and polished for longer life.
10. Streamlined bowl passageways - designed to reduce friction and give greater pump efficiency.
11. Enclosed or Semi-Enclosed Impellers - have completely finished surfaces for maximum efficiency.
12. Bronze bowl bearings - on all enclosed impeller pumps.
13. Rubber bowl bearings - on all semi-enclosed impeller pumps.

27. Coupling guard - supplied as standard option.

Product Lubricated only

15. Stainless Steel stuffing box shaft - may be inverted to renew wearing surface.

16. Accessible extra-deep stuffing box - with controlled lubrication for long packing life.

17. Pre-lubrication connection - through stuffing box distributes water around shaft for proper lubrication before start-up.

18. Water-lubricated shaft bearings - fluted, resilient rubber shaft bearings are lubricated by water flowing through the pump. Bearings are held in place by a machined bronze bearing retainer secured between two pipe ends.

Oil Lubricated only

19. Automatic lineshaft lubricator - on motor-driven units - opens when pump starts, closes when it stops.

20. Bronze tube tension nut - is easily accessible for placing tube under proper tension - also provides close fitting bearing in pump head.

21. Tubing head adapter with “O” ring - assures water - tight seal around shaft - enclosing tube.

22. Bronze lineshaft bearings - provide accurate alignment for lineshaft and a coupling for enclosure tube. A spiraling internal oil groove permits uniform bearing lubrication and by-pass of oil to bearings below.


24. Enclosure tube stabilizers - reinforced rubber “spiders” are regularly spaced to maintain enclosure-tube alignment.

25. Bearing protecting slinger - prolongs bearing life by preventing entrance of sand into top bowl bearing.

26. Relief ports in top bowl - prevent water from rising in tube above water level in well.

Deming Vertical Turbine features:
Two-Piece Head Shaft is standard construction
Reversible Stainless-Steel stuffing box shaft
Discharge Head Design meets Municipal Sanitary requirements
Packing or Mechanical seal options
Industry Standard column bearings
Semi-Enclosed and Enclosed impellers
Backed by over 100 years of Manufacturing Experience
THE DEMING VERTICAL TURBINE

Availability...Service

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