TORUS® RECESSED IMPELLER VORTEX PUMPS

Performance Range

Drive Configurations

Vertical Cantilever Pump
No submerged bearings or close tolerances for operation in sumps that contain abrasive solids or other difficult to handle fluids.

Vertical Dry Pit
For mounting outside of tanks.

Direct Drive
Motor directly coupled to the pump utilizing a spacer type coupling for back pull-out convenience. Hard metal impellers can be trimmed to size.

Drive Direct

Dimensions shown in shaded areas are millimeters, others are in inches.

Not for Construction Use.

Sharpe Mixers

Submersible
For totally submerged operation.

V-Belt Drive
Standard side by side or overhead mounting of motor. Base design permits easy access to the pump for service and back pull-out.

Hayward Gordon

Version 2.75.1
A vortex or impeller pump is a centrifugal pump which has, as the name implies, a semi-open impeller recessed into the rear section of the volute, out of the path of the solids being pumped. The impeller area uses about 15 percent the fluid volume being pumped to create a force or works thus adding energy to the pumped fluid, which is then split in two actions: one for solids and the other for the liquid.

State-of-the-art TORUS pumps are a unique design featuring a low cost wear ring in the "R" and "XR" series that takes the brunt of abrasive wear, saving more expensive parts. They are simple in design with large open clearances and mining type "castable" solids. Their back pull-out feature, keyed impellers, interchangeability of parts, between series and sizes, and heavy duty ruggedness keep maintenance, inventory and operating costs low.

WHAT THEY DO

TORUS vortex pumps are designed to efficiently handle (a) large soft solids that will pass the pump discharge port (up to 8"), (b) long stringy or fibrous materials that "wind up" in conventional non-clump pumps; (d) abrasive, crystalline or other friable solids with minimum degradation; (d) slurges or sludges, etc., with high gas entrainment (up to 20 percent by volume) without vapour locking; (6) large soft solids, sludges, etc., mixed with varying amounts of abrasive or highly abrasive solids.

From waste treatment grit to coal slurries, slurred bones to aerated paper stock, there is a material for every series and size. The "XR" and "R" series are the extra heavy duty pumps. These pumps consist of 48 models and sizes are mounted on just 3 standard, heavy duty foot-mounted and mining type "clamped" volutes. Their back pull-out feature, keyed impellers, interchangeability of parts makes the TORUS design is also ideal for field repair.

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