

KREBS®
PUMPS, CYCLONES AND VALVES

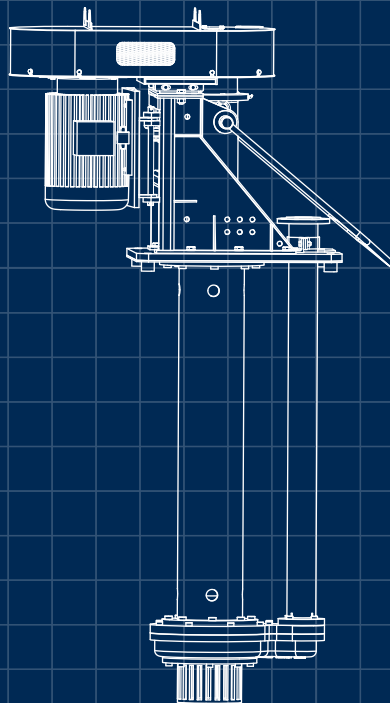
vMAX™
Vertical cantilever pump



Set it and forget it

A sump pump you can trust

We developed our vMAX line of vertical cantilever pumps for both conventional and harsh sump and process duties that require reduced degradation of any pumped solids. The fully recessed impeller design permits passing of large solids and operation without the need for sump level control. The vMAX design provides reliable continuous operation, no required impeller adjustments, less downtime, and simple maintenance.



Key benefits

■
Large solids
passing size

■
Extended
wear life

■
No sump level
control required

■
Easy to operate,
easy to maintain

■
No agitator
required

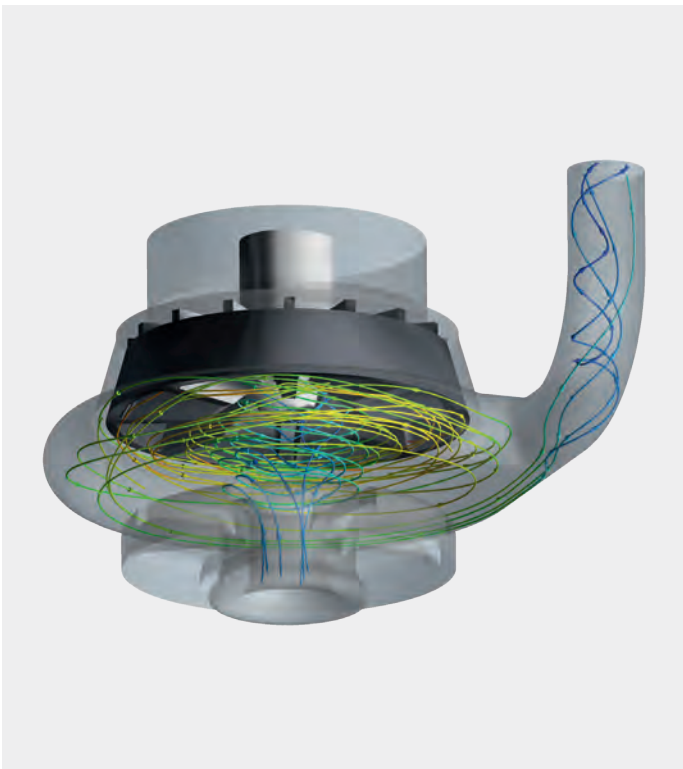
vMAX Pumps

Making sump and plant floor clean-up a breeze!

The process of pumping fluids that contain large solids or transferring highly viscous fluids can be fraught with difficulties. Common problems with vertical sump pumps include the build-up of solids at the suction inlet, leakage from the back of the casing, and excessive vibration.

With an advanced hydraulic design, our vMAX pump tackles these common problems making sump and plant floor clean-up a breeze!

The vMAX pump's oversized suction-strainer works like a particulate filter to prevent solids from bidding or clogging the suction inlet. This increases operational life and eliminates the need to remove the pump for cleaning. The improved impeller design eliminates the vibration issues, while its high-performance expelling vanes on the back of the impeller shroud work to prevent leakage.



Computational Fluid Dynamic (CFD) modeling of vortex effect created by the vMAX impeller.

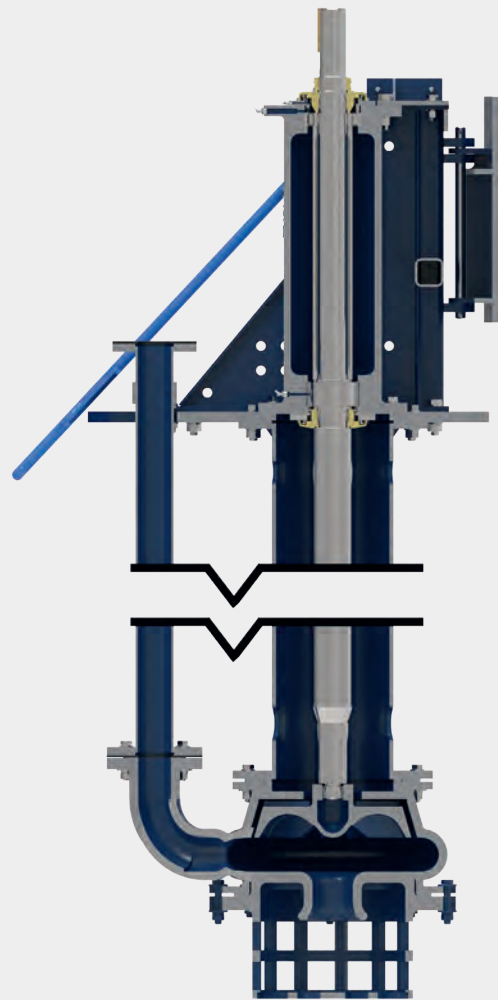
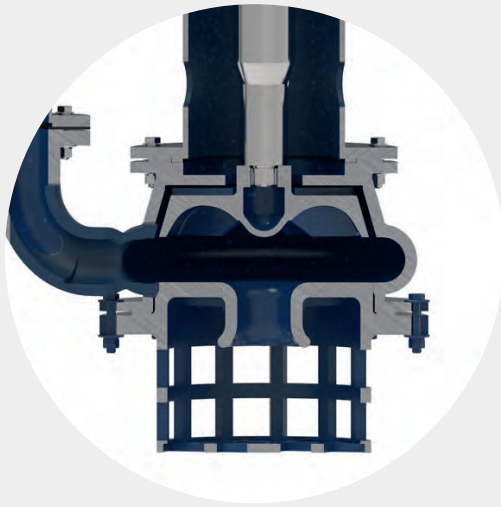


vMAX™ installation with a standard motor mount configuration. Other configurations are available.

vMAX™

Metal Vertical Pump

Our vMAX line of vertical hard-metal pumps provide reliable operation even in the most extreme conditions. The vMAX prevents solids from settling in the sump and delivers continuous operation without sump level control. You truly can install it, set it, and forget it.



Designed to operate successfully under typical-to-extreme sump pump duties, the vMAX delivers the following:

Prevents solids from settling in the sump

An agitator is not necessary to prevent solids from settling in the sump. The vortex effect created by the vMAX pump's impeller creates enough turbulence to keep the solids in suspension and the sump free of sediment build-up.

No sump level control required

In conventional designs, when the sump level falls below the suction, the pump loses its prime and the slurry comes rushing back down the discharge pipe. Returning slurry impacts the rotating impeller and cause violent vibrations which can lead to catastrophic failure.

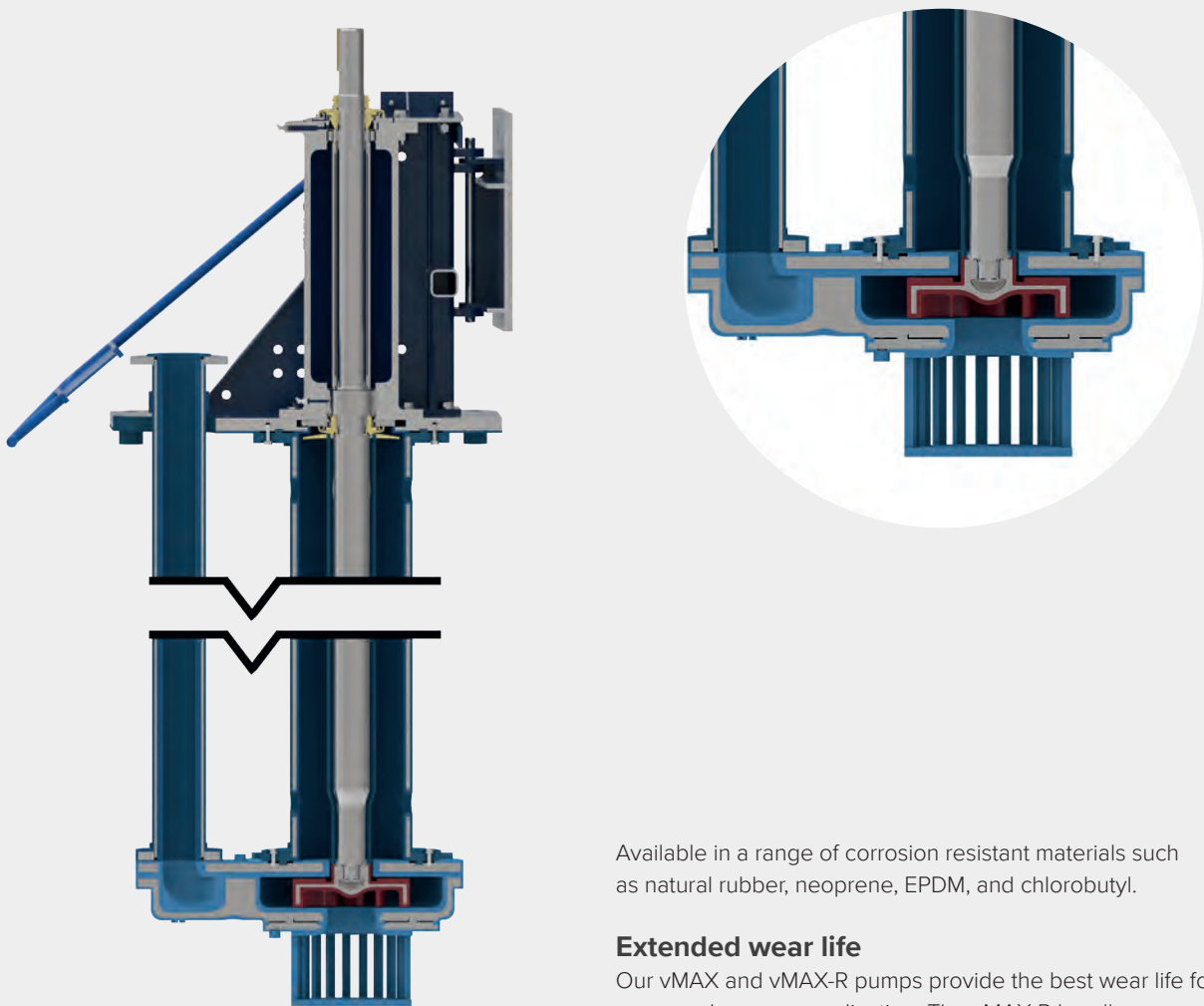
With this problem in mind, we designed the vMAX pump to include a fully recessed impeller. When the sump has been emptied of slurry, the recessed impeller allows the slurry to return safely down the discharge pipe without contacting the impeller.

The result? The vMAX operates without the need for sump level control.

vMAX™ -R

Rubber Lined Vertical Pump

The vMAX-R rubber lined cantilever pump has been developed for the most difficult corrosive applications. Every part that could come into contact with the slurry is elastomer lined to ensure reliability. With multiple materials options, the vMAX-R is adaptable to many different acid and slurry temperature combinations.



Available in a range of corrosion resistant materials such as natural rubber, neoprene, EPDM, and chlorobutyl.

Extended wear life

Our vMAX and vMAX-R pumps provide the best wear life for each sump and process application. The vMAX-R handles corrosive applications, while the vMAX covers conventional and extreme duties - even with highly viscous slurries that contain large solids.

Reliable pump operation in the most extreme conditions

Additional features include:

Cantilever design does not require a stuffing box seal or submerged bearings.

Drive-end bearing is a fixed-clearance twin taper roller that provides axial thrust. The impeller-end bearing is a parallel roller design that delivers radial thrust. Bearings are grease-lubricated. A rigid 1040 steel shaft with large bearing span reduces shaft deflection and bearing loads.

Integral discharge elbow on the casing works to reduce localized wear.

Integral mounting plate for supporting the pump above the sump, a steel discharge pipe extends above the liquid level, and is fixed to the mounting plate for access to your existing piping.

Adjustable motor mount is integral to the power frame assembly, and allows tension adjustment of the v-belt drive.

Lifting yoke for crane hook suspension over the sump.

vMAX™ and vMAX™-R size range

Imperial units (in)	Metric units (mm)
2 x 2	50 mm x 50 mm
3 x 3	80 mm x 80 mm
4 x 4	100 mm x 100 mm
6 x 6	150 mm x 150 mm
8 x 8	200 mm x 200 mm

Standard setting lengths 1.2m-3.0m. For non-standard setting lengths consult FLSmidth representative.

vMAX™ Product applications

- Mining and mineral processing
- Carbon transfer
- Industrial processing
- Heavy-duty abrasive slurries
- Power Plants
- Dewatering
- Plant floor cleanup
- Low PH applications (vMAX-R)
- chemical processing (vMAX-R)

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in the cement and mining industries

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