



Prerostal[®]: The solution for perfectly matched flow and clean wet wells

Conventional stations experience discharge peaks due to inflow fluctuations, along with issues like odors and blockages caused by floating layers. The Prerostal® system adjusts the pump outflow to the inflow without additional controls and enables effective sump cleaning without extra mechanical or electrical components.



Hidrostal Prerostal® system

Conventional system

Product advantages

- → Matches station outflow to inflow using fixed-speed motors
- → Automatically removes floating and settled solids
- → Shallower pump stations (vs. submersibles with on / off controls)
- → Alternative to space-consuming Archimedes screw pumps
- → Lower construction costs with prefabricated, flow-optimized Prero-tank



The Prerostal® system

The Prerostal® system provides a unique, economical, and simple solution for automatically adjusting pump flow rates to varying inflow conditions. The pump operates at a constant speed while maintaining the zero-flow head of the pump curve. The system combines the Hidrostal screw centrifugal pump with a suction bellmouth and a specialized intake chamber, the Prerostal® tank. The generated vortex flow cleans and flushes the sump with the pumped medium. The alignment of the impeller and vortex rotation regulates the flow rate without needing to adjust the pump speed.

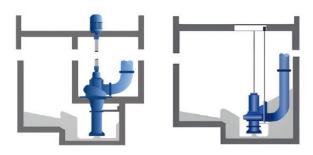


Specifications

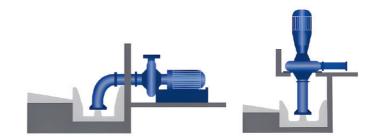
- → Discharge Sizes: 80–500 mm (3–20")
- → Suction Sizes: 80-500 mm (3-20")
- \rightarrow Head: 0.5m-60 m (2-200 ft)
- → Flow: 2 l/s-1350 l/s (30-21000 gpm)
- → Power: 0.75-320 kW (1-430 HP)
- → Frequencies: 50 Hz, 60 Hz, VFD
- → Materials: Cast Iron, Hidrohard, Duplex Steel
- → Tank GRP and concrete

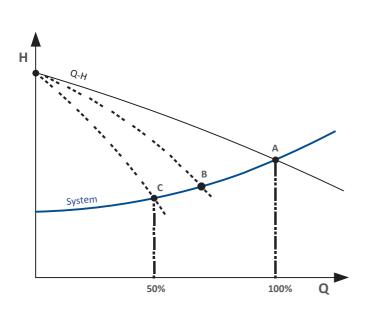
A system adaptable to your pump station, whether wet or dry installation

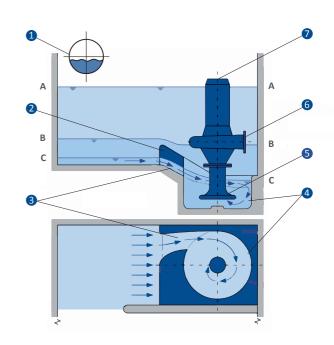
Wet well designs



Dry well designs







A No prerotation

No delta h in Prerotation sump, pump operates on standard Q/H- curve

B Partial prerotation

Flow forced through the entrance channel of the tank, delta h creates the vortex flow as the pump capacity decreases

C Maximum Prerotation

Max. delta h in sump, highest rotation speed of the vortex flow max reduction of pump capacity (up to 50% from A.)

- 1 Inlet pipe
- Weir
- 3 Tangential entrance channel
- 4 Prerotation tank
- 5 Suction bellmouth
- 6 Discharge
- Pump

Reliable and efficient services during the whole life cycle of your pumps

Our customers are individual and so are our solutions, products and services. We offer our support in the early project phase to find the optimal pump for a specific application.

Thanks to our excellent quality system and our worldwide manufacturing, sales and service network, we meet any demand for our customers and provide efficient maintenance and servicing.



Consulting & training

Our experienced team of engineers will advise you on the selection of a suitable pump and with energy-saving solutions. We offer professional pump selection training and help you design the optimal solution for your needs.



Production & installation

Our skilled technicians offer tailored solutions, from minor service calls to full installation and commissioning. We specialize in comprehensive re-engineering to maintain peak equipment performance. Additionally, we handle piping and fitting installations with equal precision.



Digital solutions

Our cloud-based solutions for failure-free pump operation enable seamless remote monitoring and control of your assets. With our vibration monitoring module you get real-time insight into the condition of your pumps.



Service & repair

We prioritize reliable pump operation. With an extensive inventory of original spare parts and an experienced service team, we offer expert advice, predictive maintenance, and swift repairs for your pump installations.



Rental solutions

Our rental fleet features diverse Hidrostal quality pumps, including submersible and diesel/electric-driven options like the self-priming SuperBetsy. We offer classical pumping systems and highly energy-efficient siphon systems, such as the Heber 2000.



Analysis & testing

From pump performance tests, condition monitoring, inspection & analysis to troubleshooting – we ensure a reliable and safe operation of your pumps and processes.

Make a quick and accurate pump selection: hidrostal.com/pumpselector.php



Hidrostal pumps

Hidrostal pumps are used in numerous branches and industries due to their excellent pumping characteristics. They convey a wide variety of liquids and materials with low pulsation and gentle handling. Our specialists select the suitable material combinations and adapt each pump individually to the conditions on site. This approach ensures that Hidrostal pumps prove their worth even in difficult applications and thus achieve the best results in terms of efficiency, energy efficiency and low life cycle costs.

- → non-clogging delivery
- → high suction capacity
- → gentle conveying due to low shear forces
- → high efficiency
- → stable characteristic curve
- → long service life
- → low pulsation
- → continuous, speed proportional conveying
- → high pressure stability











