

FreeFlow-Technology in wastewater

FreeFlow-Technology is ideal for pumping liquids with high solids content and containing large amounts of fibrous material.



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The benefits of the Hidrostal hydraulic characteristics combined with the unique FreeFlow-Technology

By adding the SharkFin and JetDisk, the innovative FreeFlow-Technology increases the benefits of the Hidrostal hydraulic characteristics and improves the reliability of your pump installations.

The duty requirements for waste water pumps have become more severe in recent years, primarily due to changes in the solids composition.

Hidrostal offers the optimum solution for both large and fibrous solids, as well as viscous media. The new FreeFlow-Technology added to the screw centrifugal impeller provides a sustainable and innovative solution.

This results in both increased operator safety and smooth, trouble free operation of the pump installation. FreeFlow-Technology is based on two newly developed features – the SharkFin and the JetDisk.

The Hidrostal hydraulic characteristics offer:

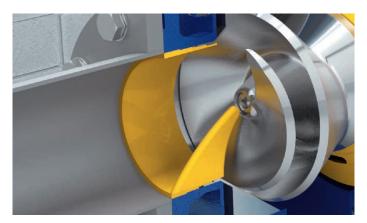
- \rightarrow high efficiency
- ightarrow steep and stable Q-H curve
- \rightarrow flat power curve
- \rightarrow low NPSH requirements

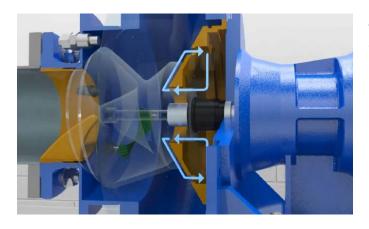
The innovative SharkFin and JetDisk features are available on various pump sizes that correspond to the Hidrostal modular system for both bare-shaft and submersible/ immersible pumps.

SharkFin

The SharkFin is located in the pump suction port and provides an optimized deflection of the incoming solids and fibrous material toward the center of the impeller. This reduces solids settling and clogging, resulting in significantly less downtime.

Neither the hydraulic properties (curve shape, efficiency, power curve and NPSHR) of the screw centrifugal impeller nor the free ball passage are affected by the addition of the SharkFin in the pump suction.





JetDisk

The JetDisk is located behind the impeller, and reduces clogging problems at that location and at the mechanical seal. The special geometry of the JetDisk directs a centrifuged portion of the recirculating flow into the space between the impeller and backplate to provide a flushing effect. This prevents a build-up of the solids that can accumulate behind the impeller, which leads to wear and mechanical seal problems.

Hidrostal Pump Applications

Due to their outstanding characteristics, Hidrostal pumps are used in numerous municipal and industrial sectors. They pump the most diverse fluids and materials gently and with low pulsation. Our specialists select the suitable material combinations and individually adapt every pump to the local conditions. We ensure with this process that Hidrostal pumps are successful in difficult applications and achieve the best results with respect to performance, energy efficiency and low life-cycle costs.

- clog-free pumping \rightarrow
- high suction capacity \rightarrow
- \rightarrow gentle delivery due to low shear forces
- high efficiency \rightarrow
- \rightarrow stable, steep pump curve
- long service life \rightarrow
- \rightarrow low pulsation
- \rightarrow continous flow proportional to the speed
- high pressure stability \rightarrow across a wide speed range



Oils and pastes Gels

Food

Water intake & power Flood protection

Construction

Hidrostal worldwide.

Pumps from Hidrostal are used all around the world. Our pumps are custom -made and are specially tailored to the needs of each location. With this procedure we achieve a high level of operational effectiveness and excellent energy efficiency. It is always worth investing in a Hidrostal pump in the long run because our pumps are low-maintance, they almost never clog, and their long service life is unique. Depending on the location, our clients are assisted by one of our subsidiary companies or sales partners. You will find your contact at www.hidrostal.com





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



