

FreeFlow-Technology



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

The Hidrostal hydraulic characteristics offer:

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

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.

FreeFlow-Technology

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**.



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.

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

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.

Do you need more information or detailed consultation? Talk to us!



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.

