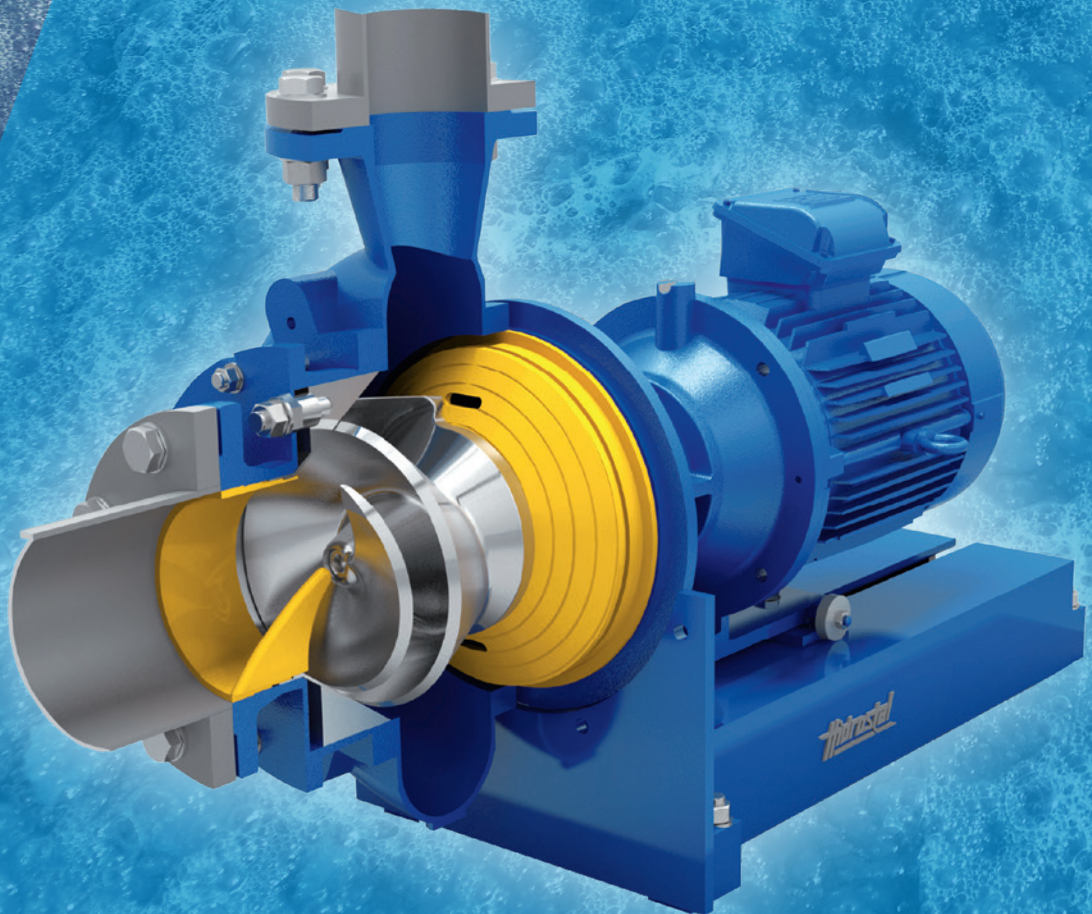


# FreeFlow-Technology in wastewater

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



# 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:

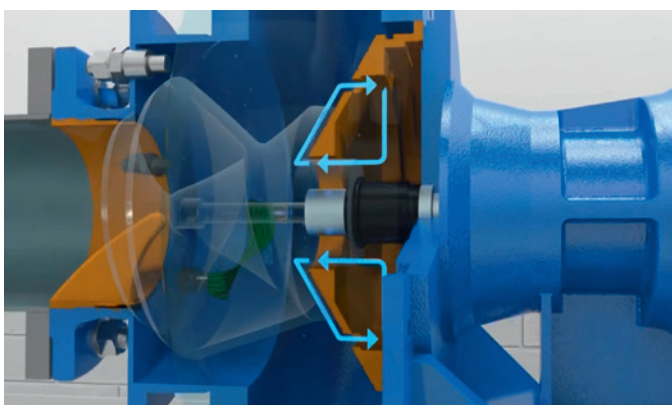
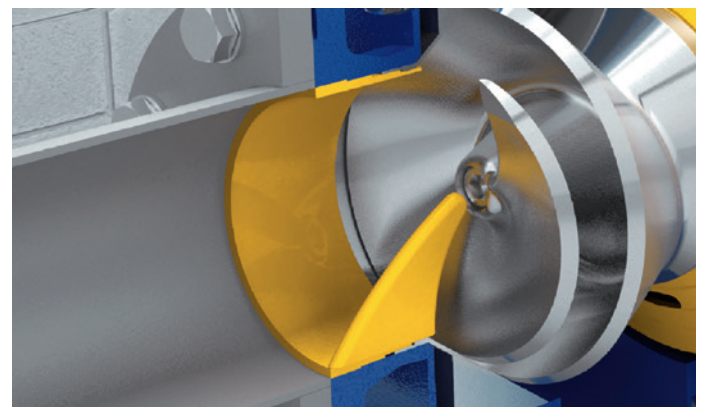
- high efficiency
- steep and stable Q-H curve
- flat power curve
- low NPSH requirements

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/immersion 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
- high suction capacity
- gentle delivery due to low shear forces
- high efficiency
- stable, steep pump curve
- long service life
- low pulsation
- continuous flow proportional to the speed
- high pressure stability across a wide speed range

## Wastewater

Wastewater collection  
Wastewater & sewage-sludge treatment  
Industrial wastewater  
Manure  
Ship wastewater

## Industry

Paper  
Cellulose & Chips  
Biomass  
Oil and gas  
Adhesives  
Paint  
Plastic granulates  
Solvents  
Swarf and cooling lubricants  
Brine

Dewatering & drainage  
Bentonite  
Sewer rerouting  
Mine drainage  
Water intake & power  
Flood protection

## Construction

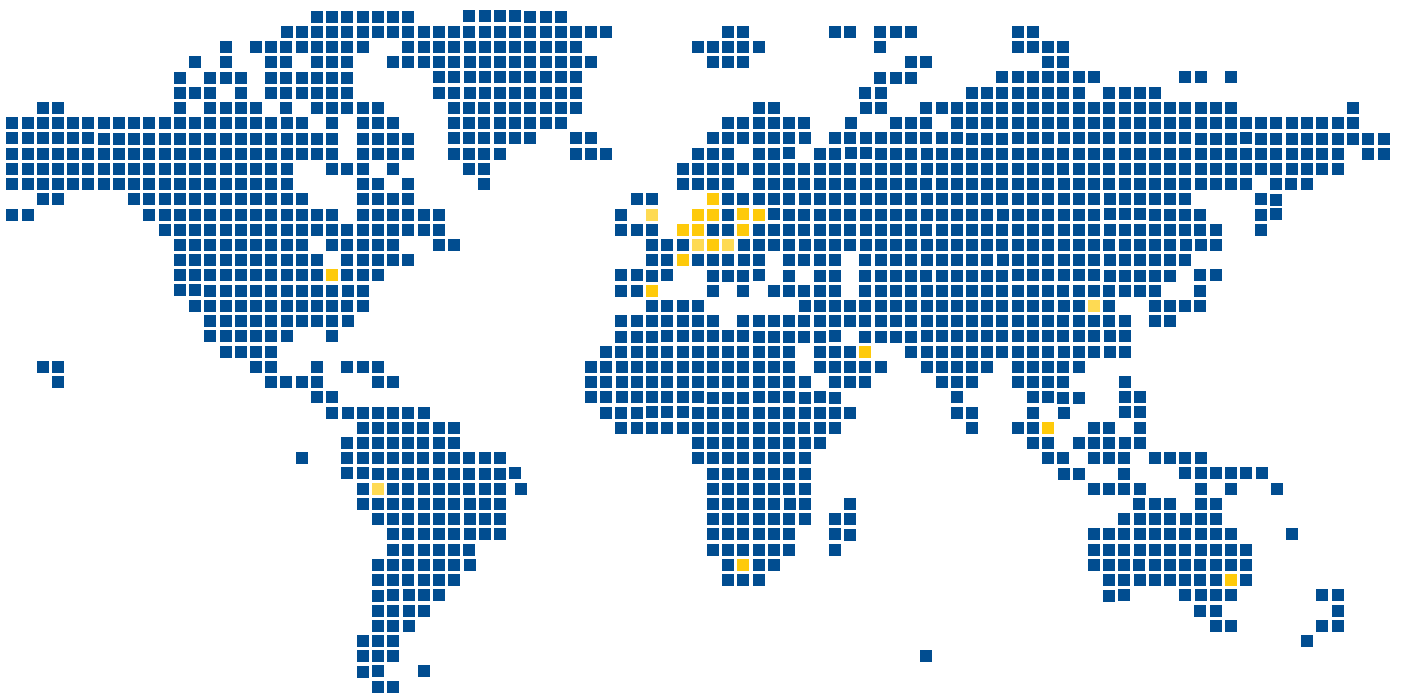
Fruits  
Vegetables  
Live fish  
Brewery  
Molasses  
Oils and pastes  
Gels

## Food

# 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-maintenance, 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](http://www.hidrostal.com)



Make a quick and accurate pump selection:  
[www.hidrostal.com/pumpselector.php](http://www.hidrostal.com/pumpselector.php)

[info@hidrostal.com](mailto:info@hidrostal.com)  
[www.hidrostal.com](http://www.hidrostal.com)

