



EN

Application Swarf and Cutting Fluid

Energy-efficient, gentle and blockage-free pumping of fluids
with particles from machining.



Hidrostal pumps for liquids containing swarf

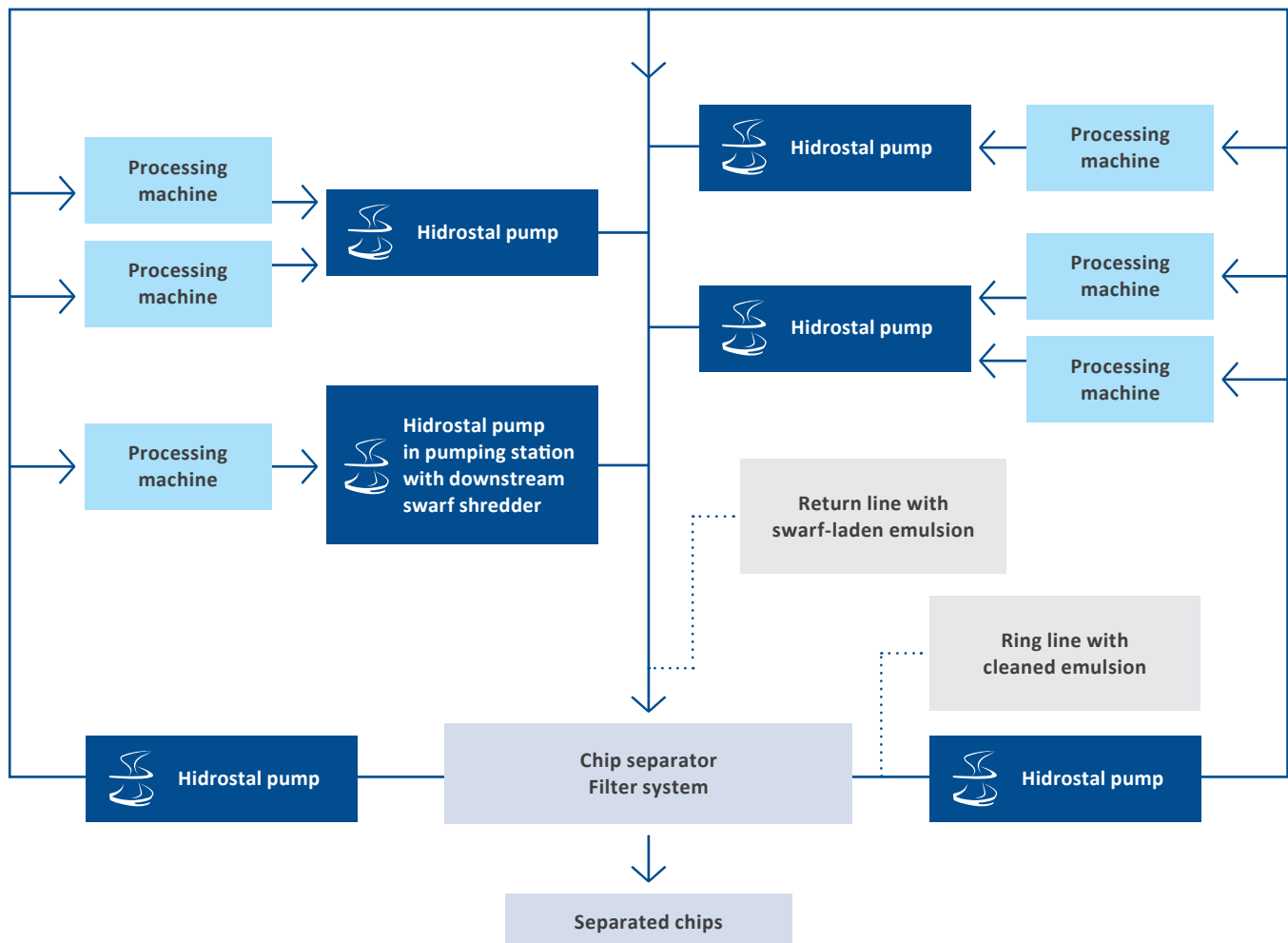
The Hidrostal screw centrifugal impeller makes our pumps the ideal solution for pumping liquids from machining operations.

In metalworking, chips of various sizes, from the finest grinding dust to long spiral chips, often accumulate in a cooling lubricant emulsion. This chip-containing medium is often fed to a processing system via conveyor belt systems of various designs.

The use of pumps and piping systems is a space-saving and efficient alternative for conveying the pre-shredded chips.

The Hidrostal screw centrifugal pump is particularly suitable for this task, as its special impeller geometry has all the properties that enable the following:

- Conveying of media with a high solids content
- Operation with low tendency to clogging, even when conveying large solids.
- Conveying of highly viscous media
- Efficient operation with low energy consumption and low operating costs due to the high hydraulic efficiency
- Start of conveying even with partially filled hydraulics, i.e. low fill levels in the feed tank
- Conveying of the chip-laden medium while avoiding additional foaming.



Configure your Hidrostral pump according to your needs!

Adapting your Hidrostral pump to specific requirements is crucial for optimizing performance in different applications.

Material options

- Standard cast iron for neutral pH values
- Suction-side wear plate made of chrome chilled cast iron
- Stainless steel or duplex for pumping an acidic or alkaline medium
- Various elastomer materials are possible depending on the pumped medium: NBR, EPDM, FKM, FFKM.
- The hydraulic parts of Hidrostral pumps are silicone-free.

Mounting options

Horizontally on base plates

- To save time during maintenance or in the event of a fault, easily removable base plates are available for Hidrostral pumps, also with pull-out maintenance slides.

Vertical

- Connected to pipes on the pressure side (and suction side)
- With Hidrostral lowering device to enable installation and removal even when the tank is full

- On the flow-optimized Hidrostral foot bend: Select this option if the installation space is limited. The foot bend ensures that the liquid enters the pump with an optimum velocity profile.

Drive options

- A standard IEC motor with an additional bearing bracket to absorb the forces generated by the impeller. Customer requirements, such as special voltages or motor brands, can be taken into account.
- Hidrostral submersible motors for various voltages and frequencies for installation in pumped liquids or areas where there is a risk of splashing.

Options for mechanical seals

- Double mechanical seal in tandem execution, with oil-filling or cross flushing with other media, for example water
- Cartridge seals

Our global specialists can support you with any special needs and challenges relating to swarf and cutting fluid pumping. Find your personal contact at [hidrostral.com](https://www.hidrostral.com)



Pump carrier media with high solids loads



Compact pump with threaded connection



Compact pump with flange



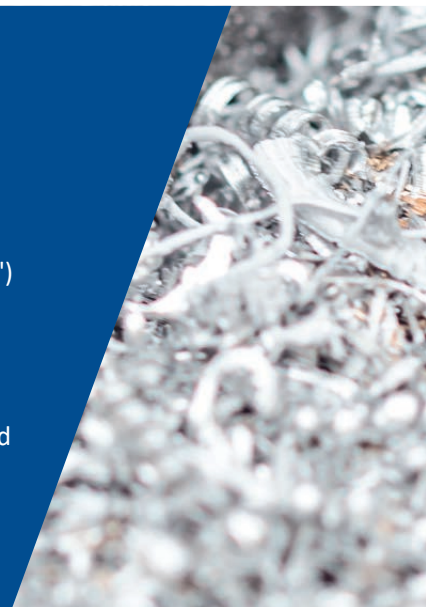
Customer solution for pumping swarf-containing liquids

Applications

- Feed to chip processors
- Recirculation of cooling lubricants
- As auxiliary units for drainage, e.g. in the event of leaks and accidents

Specifications

- Discharge nozzle sizes: 50 - 200 mm (2" to 8")
- Suction nozzle sizes: 50 - 200 mm (2" to 8")
- Delivery head: 1.5 - 35 m (5 ft to 115 ft)
- Flow rate: 2 - 200 l/s (32 to 3,170 GPM)
- LPower 0.5 - 45 kW (0.67 to 60.4 HP)
- Materials: Duplex, cast iron, chrome chilled cast iron



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 Hidrostat 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.

Hidrostal pumps

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



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

