

Application

Collagen/Gelatine extraction

Hidrostal is the reliable solids-handling choice for very demanding process applications, especially in the pre-treatment of raw material for Collagen and Gelatine production.



Hidrostal pumps drive gelatine production, from bones to wastewater.

Hidrostal pumps offer unparalleled performance for critical applications in gelatine production plants. Ideal for bulk material handling, raw material feeding, macerated bone processing and ossein pumping, our pumps are proven in a wide range of applications.

Efficient solids handling

Hidrostal's superior solids handling capability allows for efficient management of varying solid sizes and concentrations. This feature reduces water usage, shortens process cycles, and enhances production rates for increased profitability.

Robust Screw-Centrifugal Impeller

Equipped with a unique screw-centrifugal impeller, our pumps handle media with large solid content and fibrous materials. This design minimizes downtime caused by blockages, ensuring a reliable and effective pumping process.

Tailored solutions for varied needs

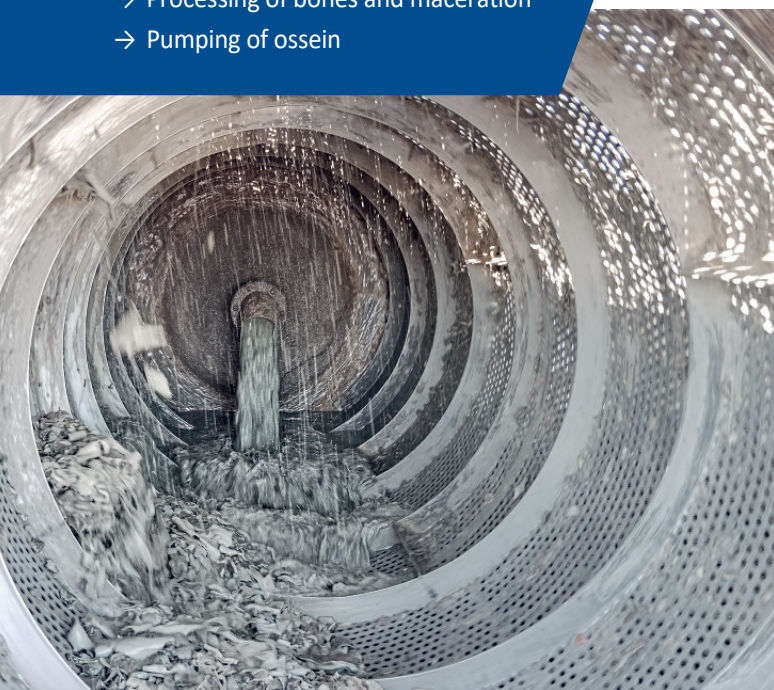
Addressing the challenges of diverse pre-treatment processes in gelatine production, Hidrostal offers customized pump solutions. Our team collaborates with clients to create tailored pumps that adapt seamlessly to specific applications, whether producing type A or B gelatine (acid- or alkali-treated raw material).

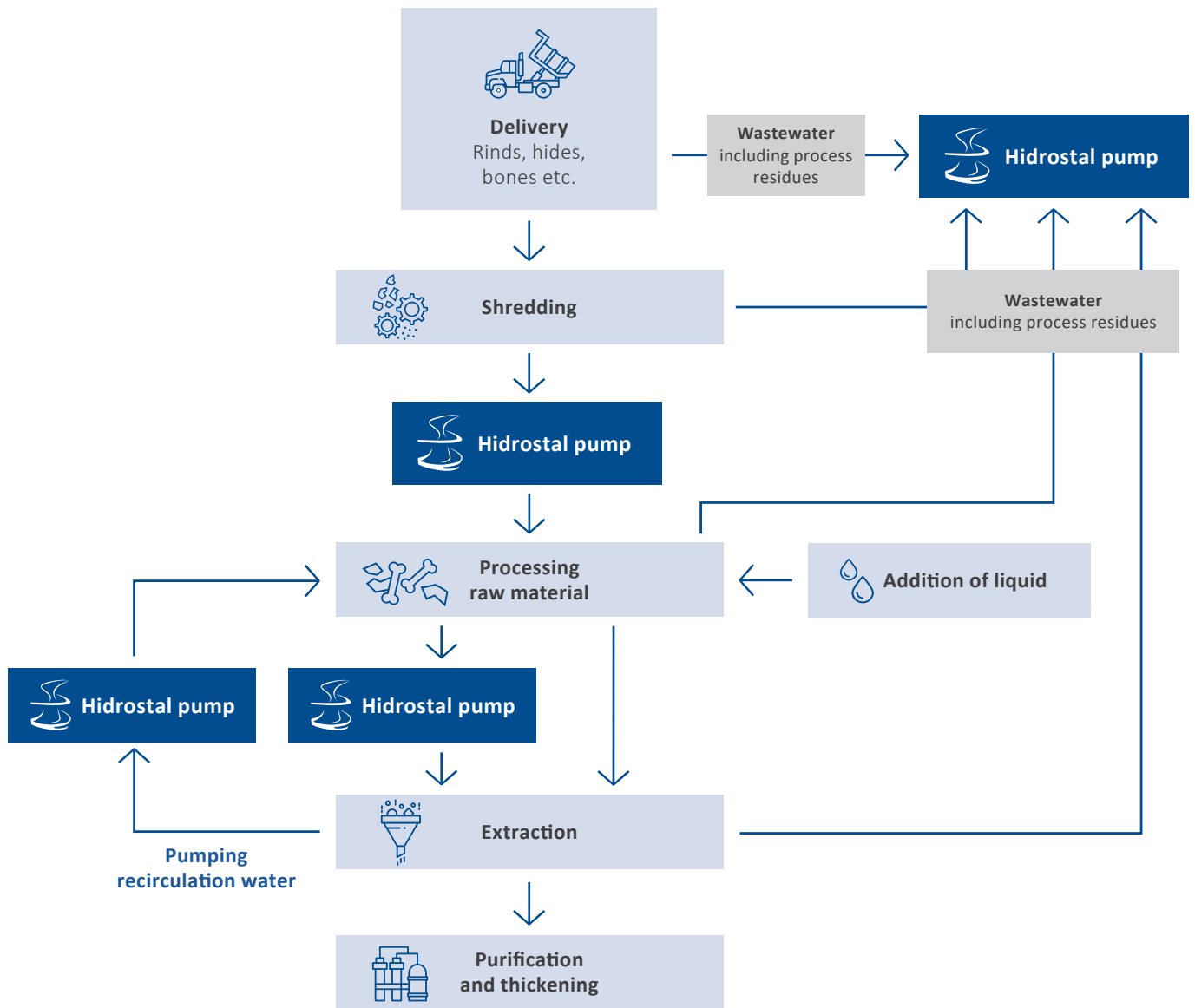
Material and impeller types

Hidrostal provides a range of proven material combinations and different impeller types for each gelatine type and step of the process. For "coarse meal" applications, pumps feature also a V-type impeller (closed). For durability in challenging environments, parts in contact with the medium are made of duplex steel.

Applications

- Conveying raw-product
- Pumping of waste and wastewater
- Feeding the extraction process
- Pumping "coarse meal" from bones
- Processing of bones and maceration
- Pumping of ossein





Unique Screw Centrifugal Impeller for demanding environments

When it comes to pumping gelatine, Hidrostal stands out as the premier choice, offering unparalleled advantages that elevate the efficiency and reliability of your production process. Here's why Hidrostal is the right product for your gelatine application:

Unique Screw Centrifugal Impeller for proven performance in demanding environments

- **Large free ball-passages** – Less prone to blockages in raw, unscreened material, reducing plant downtime and enhancing production efficiency.
- **Minimal flow deflection** – Fewer changes in direction minimize pump blockage risks.
- **Delicate handling ability** – Maintains the raw material's size and condition during pumping, preserving its integrity.
- **Good hydraulic efficiency** – High efficiency saves on energy costs and requires less installed power.
- **Capacity to handle high solid contents** – Reduces process water and energy consumption, enhancing processing efficiency.
- **Various impeller types and material combinations** – Specific choices to meet the requirements for each step of the process (acidic, alkaline, or abrasive media).
- **Adjustable impeller clearance without dismantling the pump** – Ensures longer wear part lifespan and lower energy consumption.

Specifications

- Discharge Sizes: 50–500mm (2–20")
- Suction Sizes: 50–500mm (2–20")
- Head: 5–35m (15–115ft)
- Flow: 5–1000l/s (80–16000gpm)
- Power: 3–300kW (4–400HP)
- Frequencies: 50Hz, 60Hz, VFD



Customize your Hidrostral pump to your needs!

Customizing your Hidrostral pump to meet specific requirements is crucial for optimizing its performance in various applications.

Material options

- Standard cast iron for neutral pH-values
- Stainless steel, or duplex for pumping a medium of acidic or alkaline nature
- Depending on the pumped fluid, different elastomer materials are possible: NBR, EPDM, FKM, FFKM.

Installation options

- Horizontally on base plates. This is the standard installation for dry installed pumps.
- Vertically on the Hidrostral flow optimized suction stand. Choose this option, where place of installation is limited. The suction stand takes care that the fluid enters the pump with an optimal velocity profile.

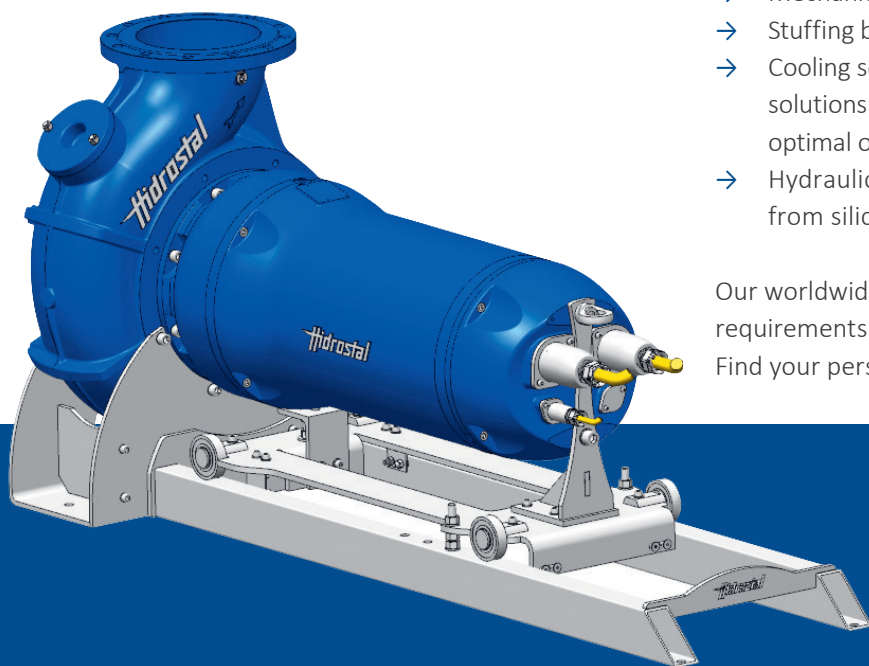
Drive options

- A standard IEC-Motor using an additional bearing frame to absorb the occurring forces from the impeller. Customers' needs such as special voltage or motor brand can be considered.
- An immersible Hidrostral motor in case of wet well installation, outside installation or if flooding, e.g. when cleaning the plant, is possible.
- To save time during maintenance or in the event of a fault, base plates for Hidrostral pumps are also available as easy-dismounting base plates.

Shaft Seal options

- Double (tandem) mechanical seal with oil filling (also food degradable) or for water flushing.
- Mechanical cartridge seals
- Stuffing box
- Cooling solutions for hot media. Hidrostral provides solutions for cooling parts of the pump to maintain optimal operating temperatures.
- Hydraulic parts of Hidrostral pumps are free from silicone.

Our worldwide specialists can support you with all special requirements and challenges around gelatine extraction. Find your personal contact on [hidrostral.com](https://www.hidrostral.com)



Materials

- Cast iron, duplex, spheroidal graphite iron, hi-chrome, stainless steel.

Motor

- IP 55 (splashproof)
- IP 68 (submersible), robust and waterproof

Installation

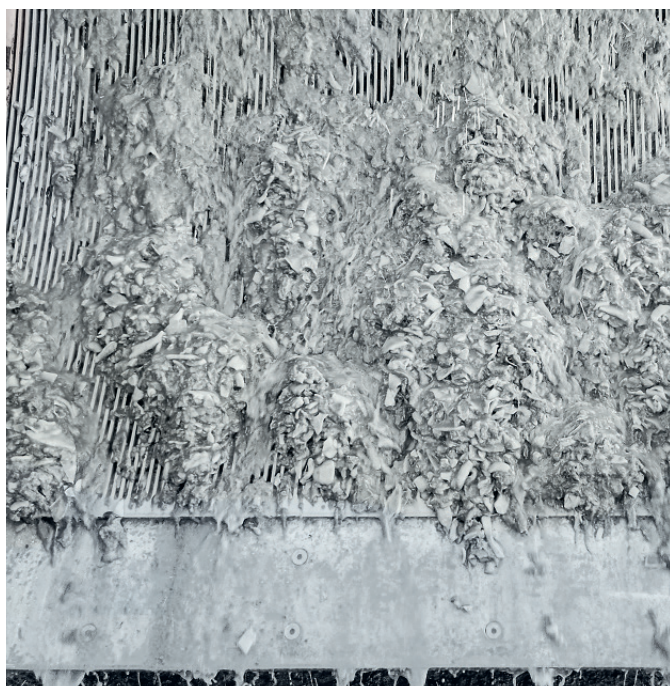
- Dry
Horizontally on base plate
Vertically on suction stand
- Wet well

Gelatine applications with Hidrostal expertise

With a rich legacy spanning back to the 1970s, Hidrostal has consistently stood as a reliable and innovative pump supplier, demonstrating commitment to excellence in gelatine applications.

GELITA
Improving Quality of Life


Rousselot



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.

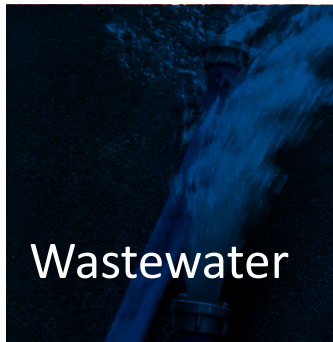
Hidrostal pumps

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



Wastewater



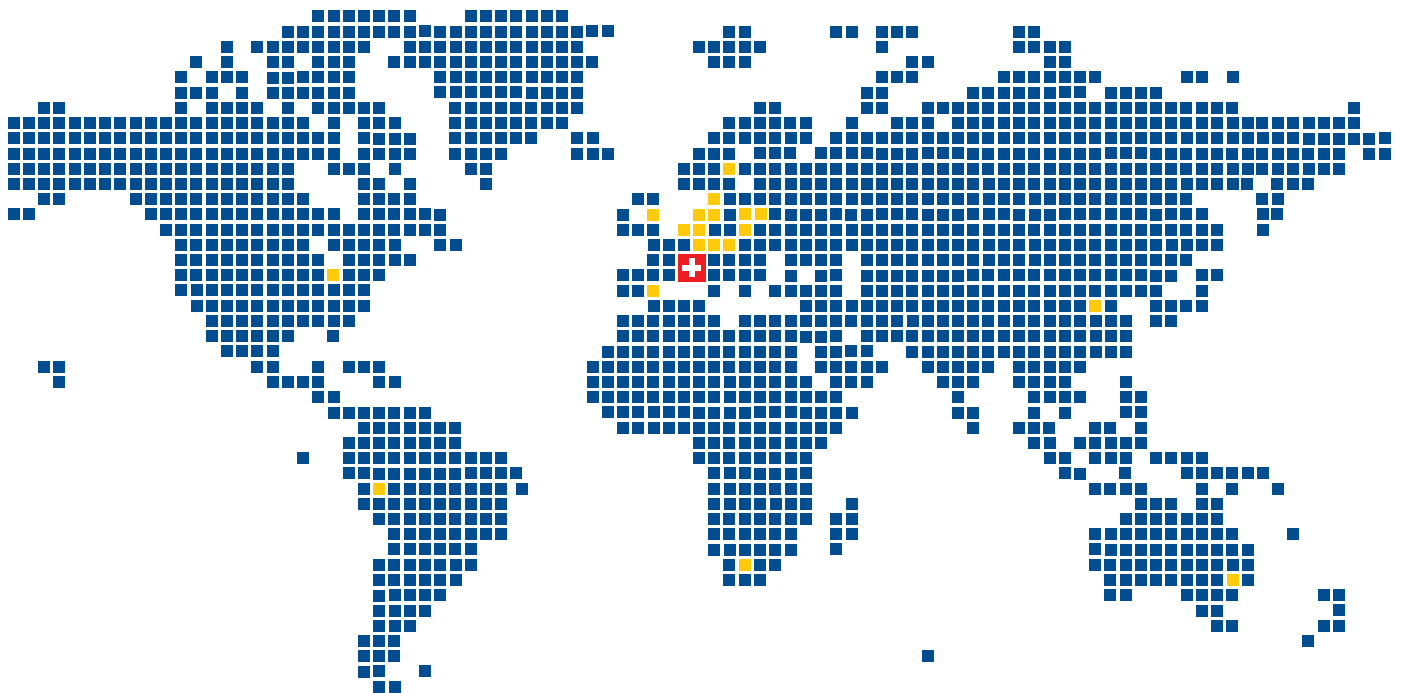
Construction



Industry



Food



info@hidrostal.com
www.hidrostal.com

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Pioneers in Pump Technology