

Screw centrifugal pumps for the food industry

Hidrostal invented the screw centrifugal impeller decades ago to pump fish without damage. Since then, we have been the often copied but never reached pioneer in the field of pumping sensitive media. Our broad product portfolio is successfully used in the fruit & vegetable, fish & aquaculture, brewing & wine, sugar, molasses & pastes and slaughterhouse waste pumping sectors. Low operating costs, high efficiency, good cleanability and gentle handling of the products make the Hidrostal screw centrifugal pump a favorite among plant managers.

Specifications

- → Gentle pumping properties thanks to optimized screw centrifugal product ranges
- → Wide range of applications from 1 - 100 m (3.28 - 328 ft) head and 10 - 3000 l/s (158.5 - 47 550 gpm) flow rate
- → Various materials such as duplex stainless steel design
- → Wide range of sealing options
- → Flexible connection and monitoring options
- ightarrow Wide range of accessories

Impeller type	Conveying from	Examples
Open Q- & K-Line	Liquids with coarse solids, viscous media, shear force-sensitive media	Edible oils, algae, honey, molasses, micro- organisms, pastes, waste products in food production
Closed V-Linie	Highly abrasive media, sensitive solids, impact-sensitive objects, long-fibered solids	Potatoes & vegetables, fruit, berries, sugar production, gelatine, breweries, viticulture
Closed F-Linie	Sensitive solids, impact and pressure-sensitive objects, live animals	Live fish, fruit, lettuce & spinach, vegetables, berries, mushrooms

Diverse application examples



Fish & aquaculture*

The name says it all. Type 'F' within the various Hidrostal product ranges actually means 'fish' and, with the closed pump impeller used here, is uniquely suitable for pumping live fish.



Algae cultivation

Protein nutrition and energy production of the future is becoming increasingly important through algae production in coastal aquafarms. Hidrostal pumps are ideal for the production and processing of these efficient yet sensitive plants.



Edible oils

Whether rapeseed, sunflower, coconut, peanut, fish or olive oil: gentle, low-shear pumping is essential for the quality and taste of the edible oil. All this is guaranteed by the use of a Hidrostal screw centrifugal pump.



Potatoes & vegetables*

Hidrostal pumps are successfully used for the damage-free transportation, feeding, pitting and washing of potatoes or all types of vegetables and mushrooms. We are also happy to help you with the right feeders.



Lettuce & spinach

Pumping leafy foods such as lettuce or spinach is the pinnacle of food pumping. Feeders, the entire contour of the pump and the operating conditions must prevent the leaves from kinking and tearing. Hidrostal can do this.



Pome & citrus fruits*

Hidrostal's screw centrifugal impeller proves its strengths when processing large quantities of fruit: no crushing, no damage and gentle handling. This enables you to achieve optimum product quality.



Berries

Berries must be handled gently throughout the entire processing procedure. In order to be able to process large quantities efficiently, cranberry wet harvests, for example, are first flooded together and collected using a Hidrostal pump.



Breweries*

Pumping beer wort during brewing is a demanding task. High solids concentrations (up to 50%) and temperatures place high demands on the pump. Gentle treatment means that the germination process of the barley remains undisturbed and meets the highest quality standards for the end product, malt.



Gelatine*

Slaughter by-products such as bones, cartilage and blood are processed in the food industry. The Hidrostal pump gently conveys delicate, viscous media, handles liquids with a high solids content and can be used for a wide range of applications, from bone meal to pasty media in various stages of production.



Honey, molasses & pastes

The Hidrostal screw centrifugal pump gently conveys even tough, highly viscous media. In contrast to other systems, it enables continuous and consistent transportation without changing the condition of the medium, even in extremely demanding production processes.



Viticulture

Grape pumps are used to convey grapes, mash, musts and wines. Gentle handling of the raw materials without damaging or crushing them is the basis for a good wine.



Sugar production

When processing sugar beet pulp and sugar cane, performance and reliability count. Even under the most adverse conditions: Long-fibered, solid-containing and sticky media that must not clog - a prime application for the Hidrostal screw centrifugal pump.

Our worldwide specialists can support you with all special requirements and challenges around food processing. Find your personal contact on <u>hidrostal.com</u>

* Detailed brochures can be found on our website.

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



Hidrostal pumps

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











