

## Herbal Solution Pumping in a Distillery

Market segment	Food
Application market	Fruit & Vegetable
Pumped medium	Solution of water & herbs
Pump product	Bearing frame
Country	Slovakia



### Challenge

The customer was looking for a suitable pump in a distillery, for pumping a solution consisting of water and various types of herbs, with a high solids content and correspondingly high density, as well as a medium temperature of up to 90 °C. For use as a circulation pump in the reactor for leaching the herbs, a pump solution was required that could also prevent the previously known problem of debris in the suction line.

### Solution

Use of a specially for the application configured **Hidrostat Screw Centrifugal Bearing Frame Pump** with shaft extension (cantilever system). With this system, the electric motor is located outside the pump chamber. Quench function for the seal chamber by supplying clean, cool water from an external source under pressure prevents accumulation of solids on the product side mechanical seal.

### Benefits

The cantilever system (with shaft extension) ensures the required distance from the pump and the hot liquid to the electric motor. Thanks to the exceptionally high suction capacity of the **Screw Centrifugal Pump**, debris no longer forms in the suction line. Quench for the seal chamber ensures maximum service life of the mechanical seals. Gentle handling of the herbs also guarantees undiminished high quality during further processing.

Quantity of units sold	1
Pump type	C03R-LHN1R + CDM1F-GQ
Motor data	IEC-frame size 100 / 2.2 kW / 4-pole
Material combination	Cast iron pump body and wear parts with ductile iron impeller Mechanical seals: G-type (product side), F-type (atmosphere)
Duty point	Flow (metric) : 5.5 liters per second / Head : 1.6 meters Flow (US) : 87.2 US gallons per minute / Head : 5.2 feet
In operation since	January 2022