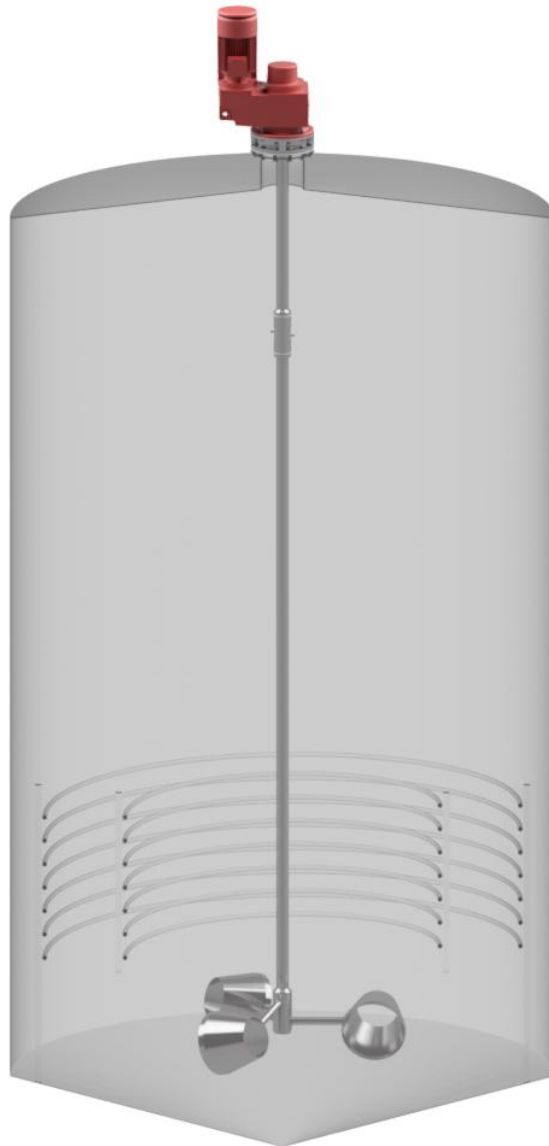


**JOB REPORT VISCO JET® TANK AGITATOR VJ500**

**FOR THE FOOD AND ANIMAL FEED INDUSTRY**



## SUSTAINABLE PROGRESS WITH VISCO JET®

Schweizer Zucker AG processes up to 230,000 tons of sugar annually and is the only producer of crystal sugar, sugar cubes, and gelling sugar, as well as their by-products in Switzerland.

Since 1912, this traditional Swiss company has been delivering top-quality products for the food processing industry, gastronomy, and animal feed sector while continuously setting new benchmarks in sustainability.

Our customer planned to retrofit an existing storage tank with a circulation pump used to process molasses, aiming to significantly improve energy and process efficiency. After carefully assessing all requirements, we designed and manufactured a customized agitator for this application. The integrated agitator solution ensures that the tank contents are homogenized, which significantly improves heat transfer.



### VESSEL INFORMATION

Vessel Type	Stainless steel vessel with conical bottom and integrated heating elements
Diameter	3,400 mm
Height	6,400 mm

### PRODUCT INFORMATION

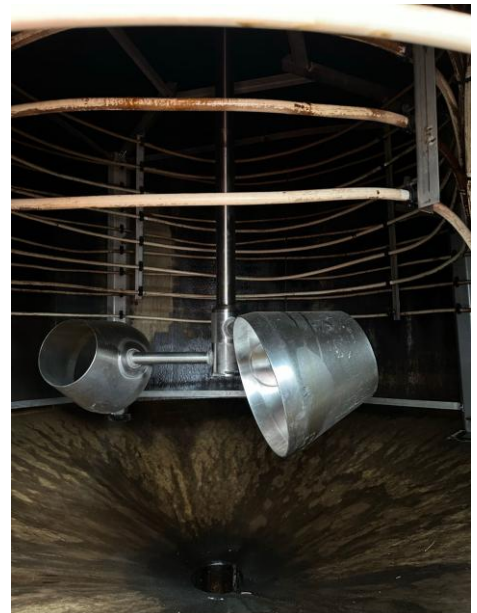
Product Type	Sugar molasses
Density	1,500 kg/m <sup>3</sup>
Viscosity	6,000 mPas

### THE EXISTING SYSTEM

Type	Tank without an agitator, equipped with trace heating
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### THE NEW VISCO JET® AGITATOR SOLUTION

Agitator Type	VJ500
Drive Power	5.5 kW
Impeller	VISCO JET® CLASSIC with a single mixing unit
Shaft Diameter	80 mm
Material	Stainless steel



## THE ADVANTAGES OF THE SOLUTION AT A GLANCE

### IMPROVED PRODUCT QUALITY

To achieve complete homogenization of the heated molasses and ensure optimal product quality for further processing, the tank agitator was equipped with a VISCO JET® CLASSIC impeller. The agitator was specifically tailored to the tank geometry, including the existing heating coils, and optimized for the mixing task. It creates an ideal flow pattern within the tank, ensuring the entire contents are thoroughly mixed and homogenized.

VISCO JET® technology is also characterized by low rotational speeds and a gentle mixing process that minimizes foam formation while preserving product integrity.

### IMPROVEMENT OF PROCESS EFFICIENCY

In our customer's existing process, the molasses is heated over two days using heating coils and homogenized with a circulation pump and a submersible agitator to ensure a uniform temperature distribution in the product. This step is essential for the molasses to be properly filled into trucks for transport.

By retrofitting the storage tank with a VISCO JET® agitator solution, faster circulation of the molasses and a more uniform temperature distribution are achieved. This process now takes approximately 5 hours, resulting in a reduction of the total process time by 20%.

### OPTIMIZATION OF TOTAL OPERATIONAL COSTS

The use of VISCO JET® agitator technology enables a sustainable reduction of total operating costs. The low drive power and significantly reduced rotational speeds of the VISCO JET® agitator result in minimal wear of agitator components, leading to reduced maintenance requirements and lower spare parts costs.



## **Would you also like to make your mixing process more efficient and sustainable?**

If you have any questions, please do not hesitate to contact your worldwide VISCO JET® distributor or the VISCO JET® team!