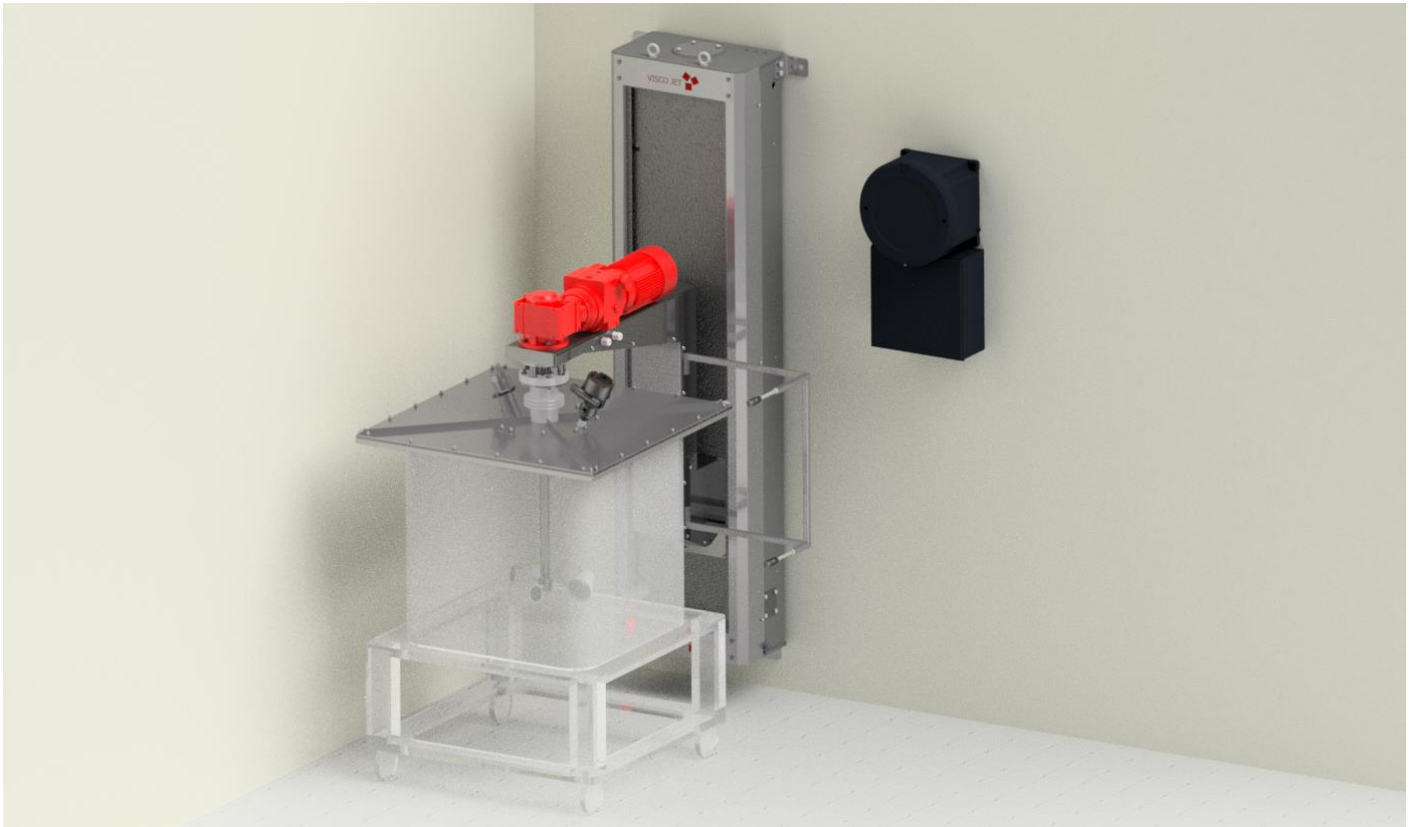


JOB REPORT VISCO JET® COLUMN AGITATOR VJ450 EX
FOR THE CHEMICAL INDUSTRY



FLEXIBLE AND CUSTOM-FIT SOLUTIONS FOR YOUR MIXING PROCESS

Our customer is a global manufacturer of high-quality metallized foils for packaging and labeling solutions in the food, pharmaceutical and cosmetics industries. During production, the foils are vacuum-deposited with a very thin layer of aluminum to give them their metallic sheen. Subsequently, these foils are additionally coated or even refined. For this purpose, various coating masses and lacquers are used.

For the complete homogenization of these coating masses, our customer requires an agitator which can be used in combination with different container sizes as well as in the explosion-proof area with a maximum of safety. Zone 0 inside the vessel and zone 1 outside the vessel were specified for the mixing process.

It was also important that the agitator could be used flexibly and quickly, as well as being easy to clean. The product quality must be constant and reproducible after the mixing process in order to be able to guarantee the high quality of the foils throughout.

After reviewing all requirements, the flexible VJ450 EX stand agitator with manual lifting for easy and fast handling as well as a lid solution for a safe zone separation was the ideal solution for our customer.

THE VISCO JET® AGITATOR SOLUTION

Agitator type	VJ450 EX
Mounting type	Wall mounted version
Lift version	Manual lifting device
Drive	1,85 kW EX with mechanical gear drive
Mixing units	2 mixing units with VISCO JET® CLASSIC inclusive quick change coupling
ATEX version	Inside Ex II 1G h IIB TX Ga Outside Ex II 2G h IIB T4 Gb
Zone separation	Safe zone separation takes place via a lid with axial compensator including connection for a customer-side extraction system for generating a vacuum in the vessel



THE ADVANTAGES OF THE SOLUTION AT A GLANCE



MAXIMUM FLEXIBILITY DURING THE PRODUCTION PROCESS

The VISCO JET® VJ450 EX column agitator offers maximum flexibility in our customer's production process with a manual lifting height adjustment for different vessel heights, an individual speed control for different agitating applications and the design with quick-change coupling for the use of different mixing units..



COMPLETE INSTALLATION OF THE AGITATOR INCLUDING CONTROL UNIT IN THE ATEX AREA

Normally the zone separation with zone 0 in the vessel is ensured by means of grinding pressure via the electric lifting solution of the column agitator. This requires a two-part control system with control panel in the the ATEX area and control cabinet installation in a nearby non-atex area. However, this was not feasible at our customer's facility because there was no appropriate non-atex area nearby. Due to the combination of manual lifting device, agitator drive with mechanical adjustable gear unit and lid solution including connection for the customer's extraction system, both the agitator and the control unit can be completely mounted in the ATEX area and do not require cable routing and installation of a split control system in a nearby non-atex area.



MAXIMUM SAFETY IN THE PRODUCTION PROCESS

For safe operation in accordance with ATEX RL2014/34/EU, the zones inside and outside the vessel are separated by means of a lid specially designed for this application, including seals and axial compensator, as well as the connection of an extraction system provided by the customer.

Prior to operation, the lid is placed on the container via the manual lift; thanks to the axial compensator, it adapts optimally to the different container geometries. Subsequently, the customer's extraction system, which is connected to the lid of the agitator, is switched on and builds up a constant vacuum in the container, thus ensuring separation of the zones. The vacuum sensor integrated in the vessel does not release the agitator for operation until the vacuum has been positively checked.

The closed cover unit also covers all rotating components and protects against unauthorized access to the vessel during agitating operation.



INCREASED PRODUCT QUALITY AND EASY CLEANING

In order to be able to ensure a complete homogenization of the coating compounds in the various vessels and thus the product quality for further processing, the VJ450 EX was equipped with two VISCO JET® CLASSIC mixing units. These have been individually designed for the vessel geometries and the agitating task and provide all the well-known advantages of VISCO JET® agitating technology.

The mixing units can be easily attached to the agitator via a quick-change coupling and thus allow a flexible design of the production process with different mixing applications as well as a quick and uncomplicated cleaning of the mixing element after the process.

Would you also like to make your mixing process more efficient and safer?

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