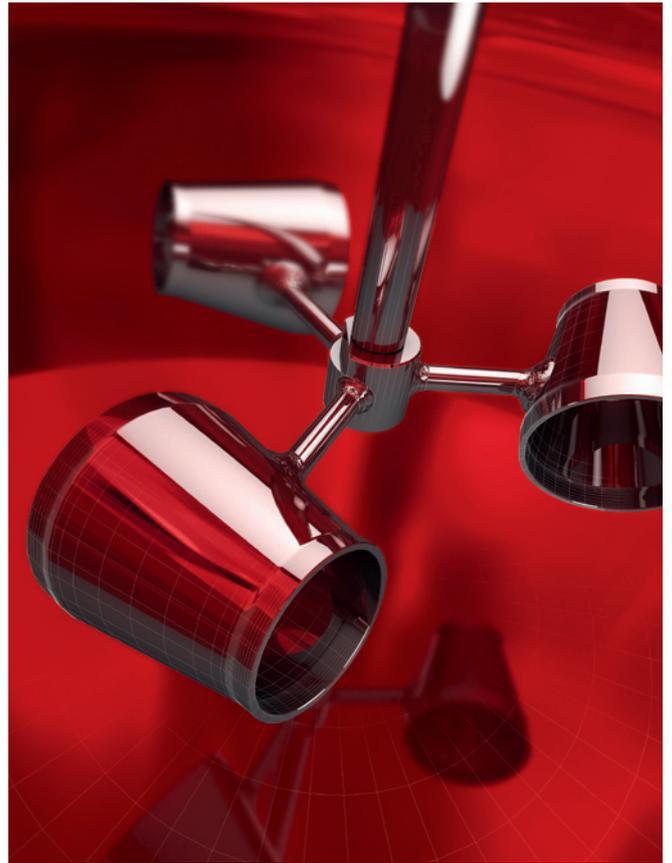


*Conical, cup-shaped
mixing elements
generate high-
momentum currents*

Universal low speed system



Mix high and low viscosity media efficiently

Cup-shaped mixing elements generate high-momentum currents

With the innovative VISCO JET agitator system, you can mix and homogenise liquid and pasty media much faster and more easily than with traditional agitators. This agitator system has virtually revolutionised the field of agitation and mixing technology. With three mixing cups, it achieves high-momentum mixing even at low rotation and circumferential speeds. It also minimises the effects of shear forces on the material being mixed. This means that, among other applications, the system is perfect for homogenising food with chunky ingredients,

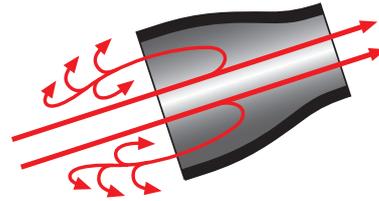
for example jams containing whole fruits. In addition, VISCO JET mixing elements operate at low speeds, and so do not produce the spout that otherwise occur. No air is drawn in during the mixture. On the contrary, any air pockets already in the mixture are concentrated. As a stable, large air bubble at the centre of the agitator, it can then rise and escape from the mixture. This makes the VISCO JET agitator system suitable for effective de-aeration of liquid and pasty media. Another advantage of this technology is that often only about one third

of the power that used to be required is sufficient to drive the agitators. This saves energy, and therefore costs. In addition, VISCO JET agitators introduce only minimal energy into the material being mixed. Warming of the mixture is therefore substantially reduced. All of these factors contribute to the optimum product-friendliness of the agitators from Waldshut-Tiengen. This means that products such as for example foodstuffs or resins which are sensitive to the breakdown of long-chain chemical compounds can be easily homogenised.

Special edition for process engineering

Agitators are mostly used for mixing different media and for homogenising or maintaining the homogeneity of media with a range of different components. For example upstream products in the food and beverage industries, in chemical and pharmaceutical process engineering, and in the production of paints and varnishes require intensive mixing. You can achieve this in a particularly economic and efficient manner with the

innovative VISCO JET agitator system, an original product manufactured by VISCO JET Rührsysteme GmbH. The system's mixing elements, which are designed as conical cups, ensure that the media are thoroughly mixed within a short time. By means of dynamic pressure at the cup entrance and acceleration at the cup exit, they generate turbulent, high-momentum currents which are propagated throughout the mixture.



Effect of the cup-shaped VISCO JET mixing elements: turbulent currents in the mixture

For viscosities of 1 to 150,000 mPas and more

Another special advantage of the VISCO JET agitator technology is its universality. Because its cup-shaped mixing elements operate extremely efficiently in all media, from low to high viscosity. This applies to liquids and pastes with viscosities up to 150,000 mPas and more. The mixing result is also independent of the basic shape and dimensions of the containers. This means for example that a single agitation setting with a 1200 mm mixing element diameter can homogenise the entire contents of an upright cylindrical tank with 15 m³ capacity and a diameter of 3 metres. The mixing result is independent of the level to which the tank is filled.

VISCO JET also mixes and homogenises the entire contents of horizontal cylindrical tanks containing up to 25 m³ very quickly with a single agitation setting, for example on

long-distance road trains or on railway wagons. VISCO JET therefore replaces the wide variety of agitators previously required. VISCO JET also operates completely without baffles. Even in cubic containers, the high-momentum currents generated reach the entire mixture within a very short time, ensuring that it is completely homogenised quickly and reliably. „Dead“ zones in the container are a thing of the past.

For users, this means that operational logistics are greatly simplified, making work practices much more efficient. For businesses working in the food and beverage industries, in chemical and pharmaceutical process engineering, and in the production of paints and varnishes, VISCO JET considerably increases flexibility. For adjustment of the rotation speed to different fill levels and viscosities, the gear motor is available with either mechanical continu-

ously adjustable gear ratios or with a built-in frequency converter.

Folding mixing elements for the smallest container openings

The VISCO JET agitator system does not require counter bearings or any other additional fixtures in the tank. This means it can be used flexibly in changing standard tanks. Folding versions are also available for even greater flexibility.

Once inside the container, the mixing elements unfold to their full diameter, even at low rotation speeds. To give an example with barrels, the mixing element fits through the filler plug, which measures only 25 mm in diameter. For cubic, 1m³ containers, your people can easily insert the VISCO JET mixing element through the 150 mm diameter container opening.

New: The patented VISCO JET CRACK

Dispersion and homogenisation with a single mixing element. That's what the revolutionary VISCO JET CRACK can do. With its unique design, it combines high dispersion power with the proven principle of the VISCO JET mixing elements. Low rotation speed, low drive power, strong effect. That saves energy, time and costs. VISCO JET CRACK.



Special edition for process engineering

In horizontal tanks with up to 25 m³ capacity, a single agitation setting also homogenises low and high viscosity media very quickly



Folding VISCO JET mixing elements are suitable for mixing and homogenisation in transport containers with narrow openings such as barrels

Variants with a stable cross brace and transport fittings are available for flexible use, especially in conjunction with standard containers (IBC containers and ECOB-ULK). This allows you to easily lift, move and deploy your VISCO JET agitator on different containers with standard lifting equipment such as cranes or forklifts. All necessary electrical and

drive components are assembled, installed and ready for use. The folding VISCO JET agitator systems can also be inserted through the 400 mm openings in horizontal tanks on trucks or on railway wagons.

In these tanks, a single agitation setting with two cups is sufficient to completely and effec-



tively homogenise the entire contents within a very short time. With their simple geometries and contours, without indentations and cavities, VISCO JET agitator systems are very quickly and easily cleaned. This offers significant advantages, especially when mixing and homogenising in the food and beverage industry.

Because VISCO JET agitator systems are fully CIP compliant in accordance with all relevant hygiene guidelines. VISCO JET Rührsysteme GmbH is a member of the EHEDG.

Versions with ignition and explosion protection in accordance with ATEX are available specifically for use in paint and varnish production, and also for other processes in chemical process engineering.

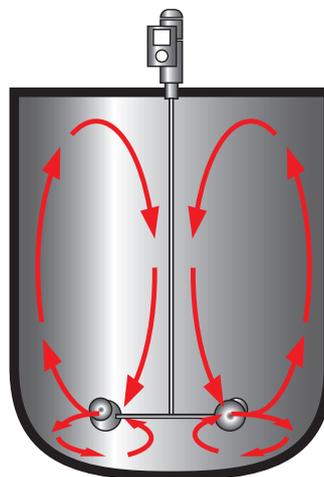
Complete systems for stationary use

For stationary systems, users receive a range of supports for floor and wall mounting. The mixing element shafts can be changed quickly and safely using quick-release couplings. This allows you to use VISCO JET agitators with different diameters with two and three mixing elements alternately for different container sizes and shapes. Complete mixing stations with technically sophisticated controls, from simple relay control to sophisticated memory control with pre-programmed recipes for speeds, mixing times and immersion depths, ensure high-quality mixing results in the minimum possible time.

Conclusion

VISCO JET is the ideal and universal agitation system for an extremely broad range of applications. Users in all sectors in which low to high viscosity liquids must be mixed and homogenised economically profit from its many advantages.

www.viscojet.com



Wherever you need us
VISCO JET is working for you
around the world

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