Shaft connection in confined space

Categories: Conveying & Filling, Packaging, Labeling & Storage, Food & Beverage, Plant Construction, Engineering & Components

Date: 5. February 2020

Modern mechanical engineering is aimed at reducing outer masses with constant or increasing power density. With the bellows coupling series "KG", Jakob Antriebstechnik fulfills the development according to reduced dimensions and high power density.

The KG series, optionally also available in stainless steel as series "KG-VA", meets high requirements. The transmission is made via torsionally rigid, two- or four-shaft stainless steel bellows, the couplings are available for torque ranges of 5 - 1300 Nm as well as shaft diameters of 6 - 90 mm. It can be used at temperature ranges from -40 ° C to + 350 ° C.

One side is designed as a customer-specific flange or hub for the machine-side connection, the radial clamping hub of the other side facilitates easy and fast assembly and guarantees an absolutely play-free, secure and force-transmitting transmission of the torques, even without a keyway.

The connection between bellows and hub is made by a micro-plasma welding process. This offers constructive advantages, such as the reduced overall length. The coupling is absolutely backlash free, high concentric and has maximum torsional stiffness.

The couplings are particularly suitable for use on the input side of low-backlash worm or planetary gear units. In stainless steel, they are qualified for transport, packaging and filling plants in the food industry. But also in the metallurgical industry, the galvanic industry, the vacuum sector or the area of satellite technology equipment, stainless steel bellows couplings are preferably installed.