

## Rust-free shaft-hub connections

Clamping sets & locking bushes

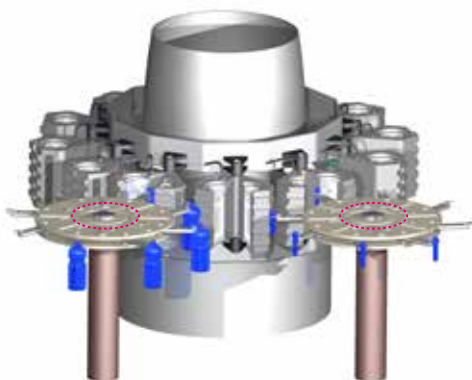
# Corrosion-resistant shaft-hub connections.



In industrial sectors such as the food industry, process engineering, the petrochemical industry, and in the pharmaceutical industry, the demand for rust-free shaft-hub connections is steadily increasing. With our locking assemblies, we are able to meet the most diverse customer requirements.

## Highlights

- Corrosion-resistant, friction-fit shaft-hub connections
- Frequent mounting/dismounting processes
- 1-screw solutions
- Mechanical or hydraulic design



*A solution in a stretch blow moulding machine in bottling plants. Use of the ETP® locking bush for fastening the two distributor gears with only one screw.*



*Fastening the lever arm by means of ETP® locking bushes provides for quick readjustment and minimum downtimes.*

# Rust-free shaft-hub connections.

## Structure/function

Locking assemblies serve to provide for the friction-fit and backlash-free transmission of torques and/or axial forces between shafts and hubs or machine parts. What is beneficial in contrast to keyway connections is for instance the permanent and non-destructive connection, absolute zero backlash, the absence of fretting corrosion, etc. Depending on the type of locking assembly, friction locking is generated in different ways.

In the case of mechanical clamping sets, it is produced by shifting two cones with regard to each other. With hydraulic bushes, pressure is applied to a medium enclosed in a steel bush by tightening (a) pressure screw(s). The pressure spreads evenly in all directions and generates friction locking. External hydraulic components are not required. The pressure medium for the hydraulic locking bushes is, of course, approved for the food industry.



Type of locking assemblies	Mechanical	Hydraulic	Hydraulic
Diameter range [mm]	6 ... 14	15 ... 50	15 ... 80
Torque range [Nm]	5 ... 48	45 ... 1.550	46 ... 8.700
Number of mounting/dismounting	50	50	200 ... 800
1-screw solution	No	No	Yes
Radial mounting	No	No	Yes
Simple and exact positioning of the hub	No	No	Yes
Without axial hub movement during mounting	Yes	Yes	Yes
Concentricity factor [mm]	≤ 0,02	0,03 – 0,06	≤ 0,02
Permissible radial load	High	Medium	Low

The implementation of individual solutions is standard practice for us. Together with you, we'll find the suitable solution for your rust-free shaft-hub connection.