SHAFT REPAIR SLEEVES

Shaft sleeves offer an economical alternative to the replacement of elaborate post-processing of the shaft. Shaft sleeves naturally can also be used as original equipment in machines, assemblies or facilities to avoid the complex, cost-intensive or difficult processing of shaft running surfaces.

DIMENSIONS

The currently available dimensions can be found on our website **dichtomatik.fst.com** or on our online ordering platform **EASY.**

APPLICATIONS

Shaft sleeves are used to repair badly worn or degraded shaft surfaces in powertrain systems. By pushing them over a worn running surface, the shaft sleeve acts as a running surface for the radial shaft seal ring as part of a tribological sealing system.

MOUNTING

Mounting a shaft sleeve is quite easy and takes very little time since it can be handled with a mounting sleeve, which arrives with the product, and a detachable mounting ange. The radial shaft seal ring running surface should be cleaned before mounting and checked for damage because the transfer of shaft unevenness to the surface of the shaft sleeve is possible due to its thin walls.

This can have a negative impact on the seal's effectiveness. Any burrs should be removed, and any run-in grooves, notches, score marks or major roughness should be smoothed over with an appropriate epoxy filler. In these cases, the shaft sleeve is delayed until the ller hardens. Shaft sleeves must not be placed over shaft grooves, indentations or thread run-outs.

DISMANTLING

When necessary, the shaft sleeves can be dismantled from the shaft in various ways:

- **by heating:** a thermally widened shaft sleeve can be easily pulled off the shaft without damaging it
- **with the help of light blows with a hammer peen** across the width of the sleeve, the shaft sleeve expands and can be easily removed
- **by slitting** the shaft sleeve using a cutter

Shaft sleeves cannot be reused.

YOUR ADVANTAGES AT A GLANCE

- Simple and fast repair (mounting sleeve and instructions are delivered with the product)
- Economical rebuilding of the shaft running surface since dismantling and reworking of the shaft are eliminated
- Elimination of costly machine downtime since the repair time is reduced to a minimum
- The radial shaft seal ring running surface is rebuilt permanently with full functionality
- Secure fit on the shaft due to press fit
- Optimally processed and wear-resistant surface guarantees a long lifespan
- Retention of the original seal dimensions, which simplies stocking of replacement parts

TECHNICAL DATA

The running surface of the radial shaft seal ring is an important mechanical element in rotary sealing systems and must therefore meet a series of technical requirements to achieve a good sealing effect and a long lifespan.

Surface quality/ Roughness values:

- Ra = 0.2 to 0.8 µm
- Rz = 1 to 5 µm
- Rmax ≤ 6,3 µm
- Processing of the surface: twist-free grinding
- Surface hardness: HV 220 (95 HRB) processed wear-resistant
- Wall thickness: design with thin 0.28 mm wall

Profile	Design	Material
	WSH	Rust and acid-resistant steel 1.4301 (AISI 304)