

# **Product Information**

### **WEAR-PRO Shaft Protection Sleeves**



WSI WEAR-PRO Shaft Repair Sleeves are a highly engineered steel sleeve made of high-quality stainless steel with precise finish and hardness. It is an economic solution for repair and protection of metal shafts. Eliminating damage to shafts and spindles,

WSI WEAR-PRO Sleeves provide a protective seal running surface and reduce the need for complex, expensive traditional shaft repair processes or replacement involving disassembling and machining the shaft.

### **Application**

WEAR-PRO Sleeves can be used anywhere there is a radial shaft seal such as in industrial gearboxes, motors, pumps, reducers, construction and agriculture equipment, and automotive parts. The WEAR-PRO Sleeves provide significant advantages for both OEM and aftermarket customers in quick, easy maintenance and cost-effective equipment life cycle.



duty applications, it is the preferred choice.



For OEM applications, WEAR-PRO sleeves can be an economic alternative to costly shaft finishing processes, and offer a long lasting surface for the most efficient and effective life performance of shaft seals.

combined with a seal manufactured in Fluorocarbon rubber material. For heavy



### **Cost-effective, quick and easy**

## WEAR-PRO Sleeve offers excellent sealing surface for radial shaft seals while reducing costly shaft machining or maintenance. The features are:

- Simple and quick installation
- Cost -effective; no need to re-machine the worn shaft, or replace with a new shaft
- Very thin-walled design allows the same size of seal to be used; no need to change seal size
- Precise surface finish achieved by advanced plunge grinding technology
- High-grade surface hardness to ensure abrasion resistance
- A wide range of sizes







### **Material and Specification**

**Material: Sleeve - SAE 30304:** 

**Assembly tool - JIS G3302 SGCC** 

**Wall Thickness : 0.28 mm +/-0.05** 

Surface roughness Ra 0.20~0.80 um

Rz 1~5um

Surface hardness : Over HV 220 min LL Surface hardness (Gold) : Approx.HV 2,300

Rmax under 6.3 pm max

#### **Installation Procedure**

Simply push WEAR-PRO Sleeve in position with the installation tool readily supplied and the work is done. After installing WEAR-PRO Sleeve, the same size of seal can be continued to use. Although installation is simple, it should be done carefully to achieve the best results.







- 1. Clean the worn shaft and remove the burrs.
- 2. Measure the shaft diameter and choose a suitable sleeve size. (Picture 1)
- 3. Put sleeve onto the top of the shaft. (Picture 2)
- 4. Check to see if there will be a clearance issue with the flange, with a cutting tool using the pre-cut groove on elbow at the sleeve flange. This flange removal process should be done prior to sleeve installation, and very carefully to avoid harming the seal contact surface. (Picture 4)

After removal of the flange all burrs should be eliminated to keep the sealing lips from being damaged.

- 5. Put the assembly tool over the sleeve. If the tool supplied with the sleeve is too short, a length of pipe or tubing can be substituted. (Picture 3)
- 6. Apply a uniform pressure to the assembly tool to push the sleeve into place, until the worn area is covered by the sleeve.
- 7. Lubricate the sleeve.
- 8. Proceed with seal installation.







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