

# Important information - please read carefully!

### USING SEALING RINGS CORRECTLY

**Fischer & Plath** has developed and manufactured quality metallic sealing rings for over 55 years. The company is certified in accordance with DIN ISO 9001: 2008, ISO/TS 16949: 2009 and EN ISO 14001: 2015. All manufacturing steps are subject to stringent monitoring and controls. Our expertise ensures that the highest quality standards are adhered with throughout the entire manufacturing process from planning, procurement, manufacturing and delivery.

An important criterion for the proper functioning of a sealing ring is its degree of hardness. The stresses in the structure of the metal is relieved through the heat treatment. The differences in strength between the surface and the middle of the ring that occur, among other things during the production process, are

compensated and balanced. This makes the seals flexible and malleable, giving it optimal flowability for a 100% sealing result. For example, copper sealing rings may have a maximum hardness of 45 HB in accordance with the requirements of DIN 7603. In this state, the copper ring can be very easily bent.

In connection with the, at times, high weight of the products themselves, the requirements with respect to transport and handling are high. In order to ensure that the level of quality that our sealing rings have when they leave our manufacturing facility is maintained during transport, storage and through to assembly, we have put together the following instructions on the handling of sealing rings that should definitely be complied with.



### Inspect for any damage caused during transport

Examine the transport packaging for any external damage / anything conspicuous. External forces on the packaging could result in deformations of the sealing rings or damage to the surface.



### Careful handling of the packaging

Move the packaged goods carefully and gently. Packages may not, under any circumstances, be thrown or put down hard. Putting down the package hard could result in the sealing rings becoming deformed.



### Take care when using a knife

When opening packages - especially with pointed or sharp objects, please be particularly careful. Sharp objects can damage the surface of the sealing rings and so have a negative effect on the sealing properties.



### Plastic instead of metal

Please ensure that plastic materials are always preferred to metal. E.g. Transport boxes, small load carriers or other objects for the storage/transferring of the sealing rings should be made of plastics, in order to minimise deformations or scratches.



## **Correct installation**

The prescribed tightening torque must absolutely be adhered with in order that the sealing ring is not destroyed during installation and 100% sealing is guaranteed.



#### **Avoiding dirt**

Select suitable storage and transport containers for the sealing rings. The containers definitely need to be clean, dry and free of all fats and grease. Ensure that no dirt can get into the containers. This could cause scratches or striae on the sensitive surface. When installing the sealing rings, you should also ensure that such dirts are avoided.



### Careful removal from packaging

Do not spill the sealing rings out of the packaging uncontrollably, but instead allow them to gently slide out of the container from just a small height. The installation or supply container should be completely filled immediately in order to avoid having to transfer and refill the sealing rings several times (potential for stress/damage to the material).



## 2 - 3 times fill height

The filling height of the transport container may not be more than 2 to 3 times the fill height. Due to the sealing rings own weight, too great a filling height could lead to deformations, scratches or striae on the surface of the sealing rings.



### Packaging possibilities

You can contact us at any time with questions on what packaging options are available for a safe and secure transport, e.g. with flat, tube or shrink films.