

## SLEEVES

Sleeves are most common accessories used for tapered bore bearings. They make it easier to mount and set the clearance of a tapered bore bearing on a cylindrical shaft seat. Sleeve offers a flexible and cost-effective solution that reduces mounting/dismounting time and cost and increases equipment uptime. In addition, if any damage occurs, the sleeve protects the shaft.

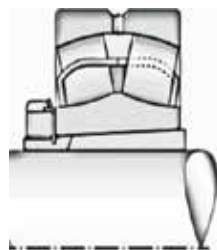
NBC sleeves are manufactured with a high-quality standards similar as bearings to ensure a secure fit on straight and stepped shafts.

NBC offers two most popular sleeve designs :

- o Adapter sleeve
- o Withdrawal sleeve

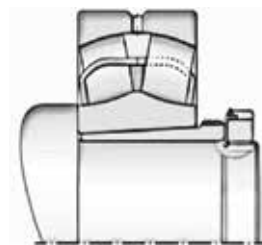
### Adapter Sleeves

They can be used on plain and stepped both types of shaft. When an adapter sleeve is used, the bearing can be positioned anywhere on the plain shaft. It requires no additional support for retention on the shaft and is easy to mount and dismount.



### Withdrawal Sleeves

Withdrawal sleeves are used to mount tapered bore bearings on stepped cylindrical shaft. Withdrawal sleeve is located on the shaft using nuts or end plates. It facilitates easy dismounting of the bearings.



Both the variants come with locknuts and retainers:

**Lock nut**  
Used To Locate Bearings on Sleeve



**Retainers**  
Used To Secure Locknuts



**Lock washer**  
Used for smaller locknuts

**Lock plate**  
Used for bigger locknuts

### HYDRAULIC ASSISTED SLEEVES

The friction between the bearing, sleeves, and shaft surface may require a significant amount of force during mounting and dismounting, especially in the case of large bearings.

Using hydraulic versions, installing and removing bearings on adapter or withdrawal sleeves can be significantly eased. They have oil grooves in the tapered outside surface and holes for the oil injection.



Hydraulic Adapter Sleeve



Hydraulic Withdrawal Sleeve

<b>Sizes</b>	Available for shaft sizes from 25 mm to 500 mm
<b>Surface Taper</b>	Depending on the series, the outside surface of the sleeves has a taper of 1:12 or of 1:30
<b>Features</b>	Wide product range, including hydraulic assist to suit full range of industrial applications
<b>Benefits</b>	<ul style="list-style-type: none"> <li>Minimizes the chance for bearing damage</li> <li>Covers full range of installation and removal needs</li> </ul>

### Industries:

- o Textile industry
- o Paper Mill
- o Metallurgy industry

- o Conveyor equipment industries
- o Heavy duty transmission and shock vibration applications

