



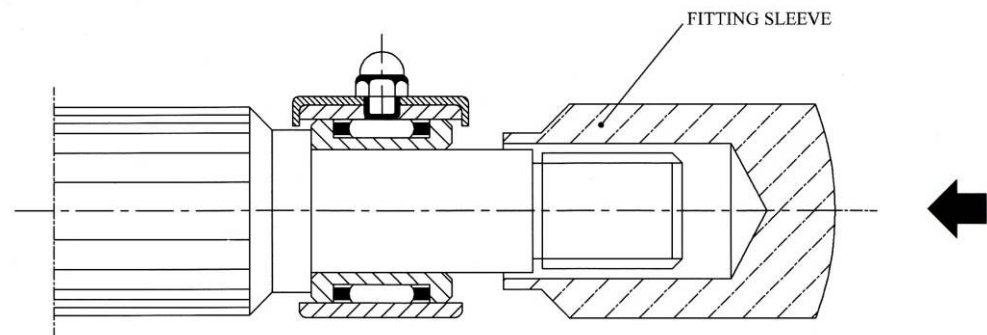
BOTTOM ROLLER BEARINGS



MOVING THE WHEELS OF INDUSTRY

BOTTOM ROLLER BEARINGS

MOUNTING



To mount the bearings on the Bottom Rollers, we recommend the following:

1. Light mineral oil should be applied on the journal seating. Care should be taken to ensure that the faces and journals of the Bottom Rollers are neither damaged nor dirty.
2. The inner ring is press fit on the journal. A special tubular dummy should be placed against the inner ring face and the force for mounting should be applied uniformly (use of a pneumatic cylinder is advisable) until the bearing ring abuts the face of the Bottom Roller. No sharp tool or pointed edge should be used against the bearing ring face.
3. After the rollers are placed on the stands and the holders are in position, the alignment in the longitudinal direction should be checked to ensure true running. Excessive misalignment can reduce the service life of the bearings.

LUBRICATION

On delivery NIBL Bottom Roller Bearings are supplied with rust preventive oil and are not greased. Therefore, all bearings should be greased before use. We recommend the use of good quality lithium base grease of consistency to NLGI2.

Relubrication frequency depends on the operating conditions and can vary from mill to mill. However, relubrication interval between 1500 to 3000 operating hours can be taken as a guideline.

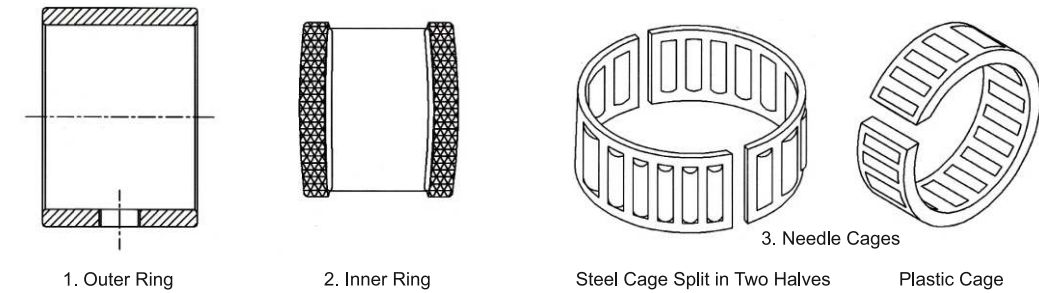
It is recommended to relubricate the bearing while the bottom rollers are revolving and it is very important to ensure that the same grease is used, which was used at the time of initial greasing.

BOTTOM ROLLER BEARINGS

NIBL manufactures a wide range of Bottom Roller Bearings for supporting bottom rollers in Ring Spinning Frames and Speed Frames of textile industry.

NIBL Bottom Roller Bearings confirm to International Standards. Holders (locating caps) for these bearings are made suitable for various sizes of roller stands. Special sizes of Bottom Roller bearings are also manufactured as per customer's requirements.

FEATURES



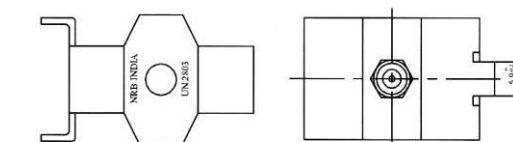
NIBL Bottom Roller Bearings – UN series are specially constructed Needle Roller Bearings for long and trouble free service. Every component of the bearing is manufactured to strict quality norms.

The stringent limits of manufacture ensure the running accuracy of the bearing.

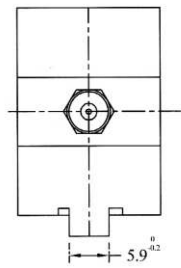
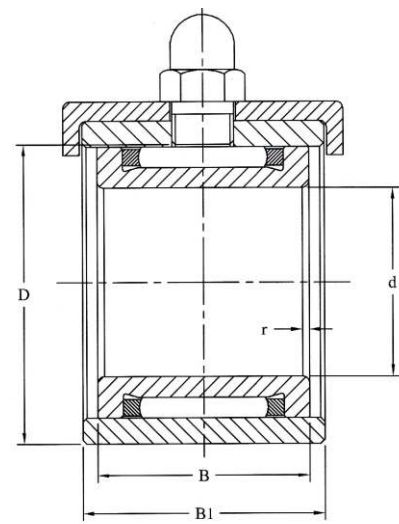
The outer ring (1) of the bearing is crowned to accommodate some misalignment in the roller stands. Crowning also helps in preventing early failure of the bearing by distributing the load uniformly.

The inner ring (2) has knurling on its flanges, which provides an effective seal to prevent entry of fibres in the bearing and protect it from damage.

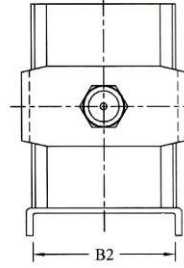
NIBL Bottom Roller Bearings incorporate a steel cage split in two halves or plastic cage (3). The design of cage pockets ensures that the needles (4) do not fall and also give them positive and accurate guidance. Lubrication to the bearing is effected through the grease nipple (5). The bearing is secured on the roller stand very easily by a holder (locating cap) (6). Holder (locating cap) in different designs as per customer's requirement can be supplied.



6. Holder (Locating Cap)
Side Location - Type SL. Central Location - Type CL



Holder Central Location - Type CL



Holder Side Location - Type SL

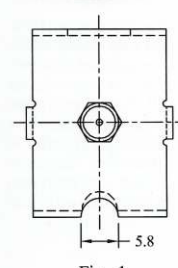


Fig. 1

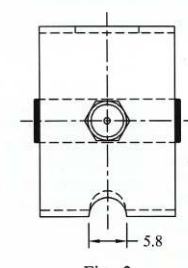
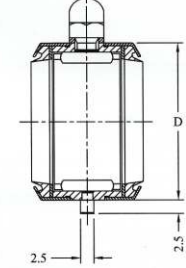


Fig. 2



Holder Pin Type Pin

| Journal Dia mm | NIBL No. | Equivalent | | d (mm) | D (mm) | B (mm) | B1 (mm) | r* (mm) | Holder Type** | B2 (mm) | C (newtons) | C ₀ (newtons) |
|--------------------|----------|-----------------|-----------|--------|--------|--------|---------|---------|-----------------------------|---------|-------------|--------------------------|
| | | SKF No. | INA No. | | | | | | | | | |
| 14.2 | UN2813 | UL112-28 | - | 14.2 | 28.0 | 16.6 | 23.0 | 0.5 | SL | 22.2 | 9900 | 14100 |
| 16.5 | UN2803 | - | UW2128.20 | 16.5 | 28.0 | 19.0 | 22.0 | 0.6 | SL | 20.0 | 9900 | 14100 |
| 16.5 | UN2804 | - | UWL2800 | 16.5 | 28.0 | 19.0 | 22.0 | 0.6 | CL | - | 9900 | 14100 |
| 16.5 | UN2809 | - | UW2128.22 | 16.5 | 28.0 | 19.0 | 22.0 | 0.6 | SL | 22.0 | 9900 | 14100 |
| 16.5 | UN2821 | - | UW2128.22 | 16.5 | 28.0 | 19.0 | 22.0 | 0.6 | SL | 22.0 | 9900 | 14100 |
| 16.5 ¹⁾ | UN2810 | - | UW2128.22 | 16.5 | 28.0 | 19.0 | 22.0 | 0.6 | SL | 22.0 | 9900 | 14100 |
| 16.5 | UN2814 | UL2528-0 000417 | - | 16.5 | 28.0 | 19.0 | 23.0 | 0.6 | SL | 22.2 | 9900 | 14100 |
| 16.5 | UN2822 | UL2800-00417 | - | 16.5 | 28.0 | 19.0 | 23.0 | 0.6 | SL | 22.3 | 9900 | 14100 |
| 16.5 | UN3229 | - | - | 16.5 | 32.0 | 19.0 | 23.0 | 0.6 | SL | 22.2 | 9700 | 14200 |
| 16.5 | UN2815 | UL2800-10080 | - | 16.5 | 28.0 | 23.0 | 23.0 | 0.5 | SL | 24.0 | 9900 | 14100 |
| 16.5 | UN3001 | - | - | 16.5 | 30.0 | 19.0 | 23.0 | 0.6 | SL | 22.0 | 9900 | 14100 |
| 17.0 | UN3203 | - | - | 17.0 | 32.0 | 22.0 | 25.0 | 0.4 | SL | 20.4 | 15800 | 20000 |
| 17.0 | UN3204 | - | - | 17.0 | 32.0 | 22.0 | 25.0 | 0.4 | SL | 20.4 | 15800 | 20000 |
| 18.5 | UN3003 | UL30-0 007871 | UWL3000 | 18.5 | 30.0 | 19.0 | 22.0 | 0.6 | CL | - | 9000 | 12700 |
| 18.5 | UN3003D3 | - | - | 18.5 | 30.0 | 19.0 | 22.0 | 0.6 | SL | 22.2 | 9000 | 12700 |
| 19.0 ²⁾ | UN3209 | - | UW2132.22 | 19.0 | 32.0 | 20.0 | 23.0 | 0.25 | SL | 22.2 | 12200 | 19200 |
| 19.0 ²⁾ | UN3230 | - | UW2132.22 | 19.0 | 32.0 | 20.0 | 23.0 | 0.25 | SL | 22.2 | 12200 | 19200 |
| 19.0 ²⁾ | UN3210 | - | UWL3200 | 19.0 | 32.0 | 20.0 | 23.0 | 0.25 | CL | - | 12200 | 19200 |
| 19.0 ²⁾ | UN3211 | - | UW2132.20 | 19.0 | 32.0 | 20.0 | 23.0 | 0.25 | SL | 20.0 | 12200 | 19200 |
| 19.0 ²⁾ | UN3213B | - | UWL3200 | 19.0 | 32.0 | 20.0 | 23.0 | 0.25 | CL | - | 12200 | 19200 |
| 19.0 ³⁾ | UN3224 | - | - | 19.0 | 32.0 | 20.0 | 23.0 | 0.6 | SPECIAL ^(fig. 1) | - | 12200 | 19200 |
| 19.0 ³⁾ | UN3225 | - | - | 19.0 | 32.0 | 20.0 | 23.0 | 0.6 | SPECIAL ^(fig. 2) | - | 12200 | 19200 |
| 19.0 | UN3233 | UL3200-0 0421 | - | 19.0 | 32.0 | 20.0 | 24.0 | 0.6 | SL | 22.3 | 12200 | 19200 |
| 24.0 | UN3216 | - | F-18636 | 24.0 | 32.0 | - | 22.0 | - | PIN | - | 10600 | 16400 |

Note: *r: max. shaft fillet radius

** Holder type: design features of holders can vary from bearing to bearing. Pictures shown above indicate the basic type of holders.

Equivalent Suessen bearing no. ¹⁾UZ2808, ²⁾UZ328, ³⁾UZ3202

MAJOR APPLICATION IN TEXTILE MACHINERY



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