

## Double-Row Designs

### SR (two-row set-right spacer assembly)

ID 1.0625 to 7.8740 in. (26.987 to 200.000 mm)  
OD 2.4409 to 11.811 in. (61.999 to 300.000 mm)

Design attributes:

- Two TS bearings mounted indirectly with cone and cup spacers
- Cup spacer features lubrication slots to allow commercial snap rings to locate bearings axially



### SD (square bore)

ID 1.0312 to 1.5468 in. flats (26.192 to 39.289 mm)  
ID 1.38000 to 2.0300 in. corners (35.052 to 51.562 mm)  
OD (cups) 2.5625 to 3.8125 in. (65.088 to 96.838 mm)

Design attributes:

- Timken® seamless square bore steel tube
- Square bore locks the inner race of the bearing to gang bolts
- Each cone provides its own ground sealing seats

Potential applications: Disc harrows and industrial applications where dirt, shock and misalignment are common



### SS (two-row snap ring spacer assembly)

ID 0.6875 to 3.2813 in. (17.462 to 83.345 mm)  
OD 1.5700 to 4.9375 in. (39.878 to 125.412 mm)

Design attributes:

- High-volume TS bearings with a snap ring cup spacer and a rolled ring cone spacer
- Rings provide a preset assembly
- Snap ring allows cups to be located axially in through-bored housings
- Some varieties are available with DUO FACE-PLUS seals on one or both cones



**TDI (two-row double-inner race)**

ID 1.0000 to 47.2500 in. (25.400 to 1200.150 mm)  
 OD 1.2000 to 96.8504 in. (30.480 to 2460.000 mm)

Design attributes:

- Double cone and two single cups, with or without a cup spacer
- When spacer is used, bearing is furnished as a matched assembly

Potential applications: Gear reduction units, cranes, calendar rolls, industrial machinery

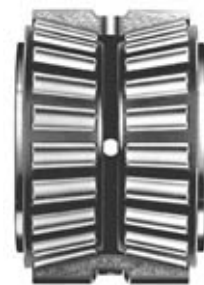
**TDO (two-row double-outer race)**

ID 1.0000 to 47.2500 in. (25.400 to 1200.150 mm)  
 OD 1.2000 to 96.8504 in. (30.480 to 2460.000 mm)

Design attributes:

- Double cup and two single cones, with or without a spacer
- When spacers are used, bearing is furnished as a preset, matched assembly
- Cup features groove and lubrication holes in the OD
- Spacers available with or without lubricant grooves and holes

Potential applications: heavy-duty gear drives and a variety of industrial configurations

**TNA/TNASW/TNASWE (two-row non-adjustable/TNA with lubrication grooves/TNA with extended ribs)**

Design attributes:

- Double cup and two single cones
- Internal bearing clearance controlled by extending the front faces of the cones so they contact each other
- SW variation features chamfers in the bores at the front faces of the two single cones to form a lubrication groove
- SE variation features a backface rib design to accommodate radial lip seals or stamped closure

Potential applications: sheaves, crane sheaves, oil-field drilling rig sheaves and applications where two-row preset bearings are required



**TNASWH (TNA with heavy wall cup)**

ID 0.3125 to 5.0000 in. (7.937 to 127.000 mm)  
 OD 1.1250 to 13.0000 in. (28.575 to 330.200 mm)

Design attributes:

- Similar to TNA, but copy is made with a self-supporting heavy wall section
- Cup extends at both ends and is counter-bored for seals or stamped closures
- Can be furnished with closures or seals pressed in to make a unit assembly

Potential applications: back-up rolls in sheet and strip levelers, sendzimir mill arbors, steady rest rolls for lathes



**TNASWHF (TNASWH with flanged cup)**

ID 0.4375 to 5.0000 in. (11.112 to 127.000 mm)  
 OD 1.5750 to 14.0000 in. (40.005 to 355.600 mm)

Design attributes:

- Similar to TNASWH, except that the cup is made with a flange

Potential applications: wheels on rails

