Installation instructions
for
JOST ball bearing turntables
and slewing rings with splined bolts

When used on single-axle bogie steering systems at axle loads of up to 10 t, the standard hole patterns can be used as per the JOST product data sheet in combination with splined bolts for attachment to the vehicle without the use of thrust plates. If the axle load of the bogie is greater than 10 t, we recommend using at least 12 securing points per ring, distributed as evenly as possible, with splined bolts.

In order to ensure that the fitting of the turntable or slewing ring is under as little strain as possible, a positional accuracy for the hole pattern of 0.6 mm and a drilling diameter of 18 +/- 0.1 mm should be observed. If necessary, slight misalignments of the hole pattern between the components can be rectified using a reamer.

The entire grip length of the splined bolt dimension k must be between 16 and 25 mm.

For installation, the splined bolts must be placed in the foreseen installation direction through the ball bearing turntable or slewing ring and frame panel and tightened by tightening the nuts. This causes the splined bolt to travel slowly through both components, allowing it to positively support large thrust forces.

The prescribed tightening torque must be complied with.

Alternatively, the screw fastening can be made in accordance with variant X or Y.

1. Upper ring
2. Lower ring
3. Chassis
4. A-frame

The ball bearing turntable or slewing ring must be fitted on a flat (max. offset 1 mm) support construction that provides torsional, longitudinal and lateral rigidity.

To ensure there is an adequate transfer of force, at least 50% of the flange surfaces must be supported with weight-bearing structures.

The support zones must be distributed evenly in and perpendicular to the direction of travel and be designed so that the turntable or slewing ring is supported in the area of the vertical profile bridges, i.e. the ball tracks.

Larger differences in flatness can be compensated with panels.
With un-drilled turntable or slewing ring, the following must be noted when installing the fastening holes:

- That a positional accuracy for the hole pattern of 0.6 mm and a drilling diameter of 18 +/- 0.1 mm must be complied with,
- That no drill chips or cutting fluid gets into the raceway,
- That no holes are drilled in the vicinity (+/- 15 mm) of the ball insertion hole or in the vicinity of the welds,
- That the type plate is placed at 90° to the right of the vehicle and, if the ball insertion hole is inside, this is placed at 90° to the left of the vehicle to remove the smaller cross-sections from the area under maximum stress,
- That the grease nipples are easily accessible,
- That the components must be freely mobile.

Further information about our ball bearing turntables and slewing rings can be found at www.jost-world.com.