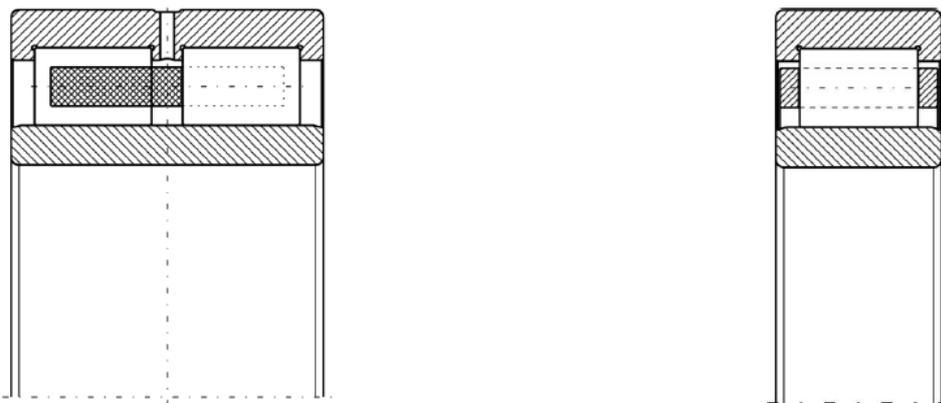




Mounting of Cylindrical Roller Bearings (CRB)

CRBs are a widely used machine element. They provide exceptional carrying capacities and stiffness. A CRB is usually consisting of an inner and outer ring, and a roller cage assembly. Their typical applications are highly loaded ones, as for instance rolling mills or gear boxes.

As a rule, CRB are not self-retaining, which means the bearing parts are separable. Depending from the type either the inner or the outer ring has got shoulders, which makes it possible to pull out either one of them off the bearing. This feature is making the mounting easier and facilitates controlling the bearing.



Roller Bearings are units of precision; for this reason, competent mounting is of high importance, and it is demanding much accuracy.

Please ensure that the forces that emerge while mounting are not carried over by the rolling elements. By this, a pre-existing defect would be created and the trouble-free operation would not be safe-guarded.

The mounting of the CRB recommended as described below:

1. Clean Environment – preferably a separate mounting area
2. Clean the connecting parts, as for instance shaft and bore, before starting mounting. Check the dimensions. The inner ring as a rotating part is usually loaded circumferentially. For this reason a strong fit is the aim. The outer ring is point loaded (non-rotating part); consequently a loose fit is standard.



3. The mounting of the inner ring on the shaft is performed by an appropriate tool. On oversize fit, the inner ring needs to be heated, for instance in an oil bath of 80°C to 100°C.
4. Once the inner ring is placed in its position the outer ring along with the roller cage assembly will be slipped onto the inner ring. It should be greased slightly to avoid a possible damage of the inner ring while sliding these parts on it. Sometimes, it is of assistance to mount the outer ring by means of a mounting bushing.
5. We want to direct your attention to the following:
Once the Roller Bearings are mounted onto the roll bodies they must not be transported in another way than by means of a crane or a crossbeam.

