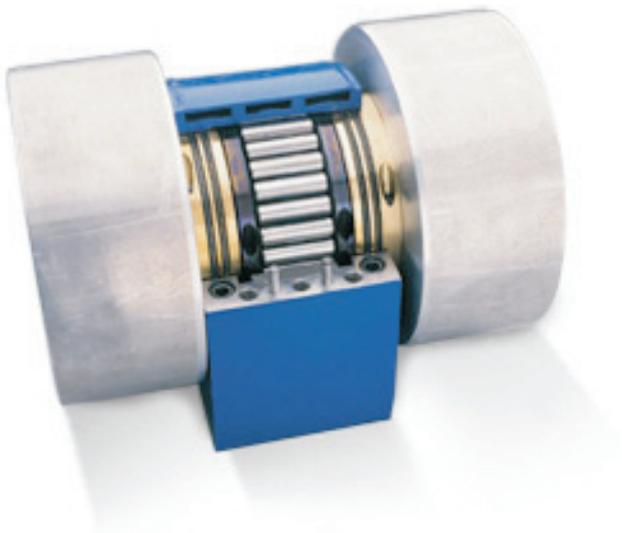


# Installation Instructions

## Split bearings for continuous casting plants



### Preparing for installation

First clean all the bearing components thoroughly. Ensure that nothing is damaged while unpacking the bearings. The bearing components from one packaging unit must not be mixed up with other bearings or with parts of identical bearings.

The individual components bear identification marks/numbers at their separation points and **these must match!**

### Step 1

Inspect the shaft diameter for roundness, tolerance and parallelism. After inspection, coat the bearing surface for the inner ring with a thin layer of oil. This oil combats fretting and allows the inner ring to be pushed easily along the shaft during installation.

### Step 2

Place the two halves of the inner ring in the correct position on the shaft. Install the clamping ring in its seat on the inner ring on one side. Be sure to observe the identification marks. The separation lines of the inner ring must be offset by 90° to the separation lines of the clamping rings. All the gaps of the split units should be roughly equal. Do not tighten the screws on the clamping rings. Then install the seal ring that supports the lamellar rings on the side where there is no clamping ring. Install the seal ring in the roller grooves with a sealing agent – DEVCON or WEICON. Then install the second clamping ring and press the seal ring firmly against the roller with this clamping ring. **Warning: the screws of the clamping ring must not be firmly tightened.**

Now remove the clamping ring that was installed on the inner ring and install the seal ring on this side. Check that the clamping ring will fit into the groove of the inner ring when the seal ring is fitted correctly in the roller groove. To do this, place the seal ring in its position without sealing compound and install the clamping ring. If this is not possible, check whether too much

sealing compound has been used on the opposite side or whether the ring has not been fitted into the roller properly. If everything fits correctly, install the seal ring with sealing compound – DEVCON or WEICON – in the roller groove again. When all the components are in their correct positions, the clamping rings must be tightened to their specified tightening torque. Make absolutely sure that the gaps of the clamping ring-halves have the same gap on both sides. Install the lamellar rings in their grooves in the seal rings

### Step 3

The parts of the bearing should never be assembled dry. Use the grease that will be used later during operation of the bearing. Place the outer ring half of the bearing in the lower half of the housing and, if provided, check that the lubricating bore in the outer ring is aligned with the connecting bore in the housing lower section. Now position the lower section of the housing with the outer ring exactly under the inner ring and seals and lift it as high as possible. Place a greased roller from the set of rollers in the guide between the clamping rings and push to the side until it contacts the outer ring. Then lower the housing **very carefully** until the roller can be pressed down easily between the inner ring and outer ring.

**During this step, ensure that the housing is not lowered too much and that the rollers slide downwards out of their guided controls, otherwise the housing cannot be closed and the bearing will not be able to rotate because the rollers are tilted.** All the other rollers are now installed as described and inserted from one side. If the first roller reappears on the opposite side at the upper edge of the outer ring, install the rollers for the upper side of the inner ring. This must be carried out a lot of grease so that they do not fall down under their own weight and become damaged.

**Never forget the grease when installing the rollers.**

### Step 4

Spread a liberal amount of grease over the seals and the bearing so that it infiltrates the bearing sufficiently. Place the upper section of the housing – observing the markings on the components once again – and tighten the bolts firmly. All the bolts of the bearings and housings are high-tensile bolts. Rotate the completely assembled bearing unit to ensure that it functions smoothly. It could be a little more difficult to rotate the bearing because of the amount of grease used. However, mechanical resistance should not be felt.

### Step 5

While assembling the bearing unit on its sub-structure, care must be taken to ensure that the bearing is not placed too deep. The casing must be pushed upwards during assembling, so that all the rollers in the lower region actually make contact with the outer ring and the bearing can carry out its supportive function. The clearance between the sub-structure and the lower part of the housing must be measured while assembling. If necessary, insert the corresponding spacer plates with an additional 0.1 mm – 0.2 mm. Note: Shims are only used when the roll length is rather big or possible deflection of the frame might occur. These instructions for installation serve as a guideline for the general process of installing EICH split bearings for continuous casting plants. Performance of the steps in another sequence than that described here are possible on site as long as the function of the bearing is not disturbed.

For further questions on installation of our bearings, please contact our Technical Department:



Ideen, die bewegen