



What is the importance of bearing ring chamfers?

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It is important that bearings are mounted onto a shaft or into a housing properly. Even bearings made of the highest quality steel with adequate lubrication may fail quickly if it not installed properly. A key dimension affecting the mounting quality is the inner and outer ring chamfers. Figure 1 and Figure 2 shows how bearings are pressed onto shafts and/or into housings. If the bearing face is to be pressed flush against another surface, it is critical that the curvature of the shaft/housing be smaller than the curvature of the bearing edge (see Figure 3). If the bearing cannot seat properly, then it may become misaligned with the shaft/housing and possibly lead to undesirable bearing performance (see Figure 4).

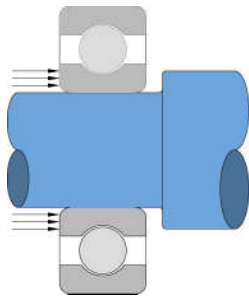


Figure 1: Pressed onto shaft.

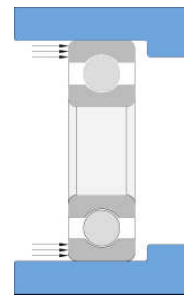


Figure 2: Pressed into housing.

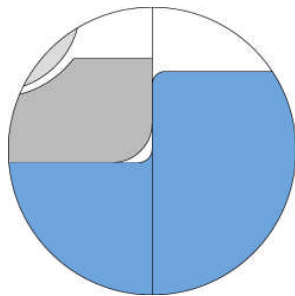


Figure 3: Seated Properly.

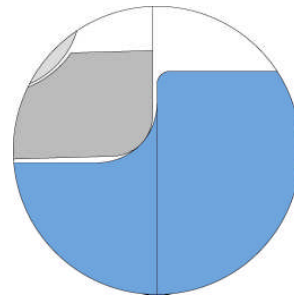


Figure 4: Seated Improperly.

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