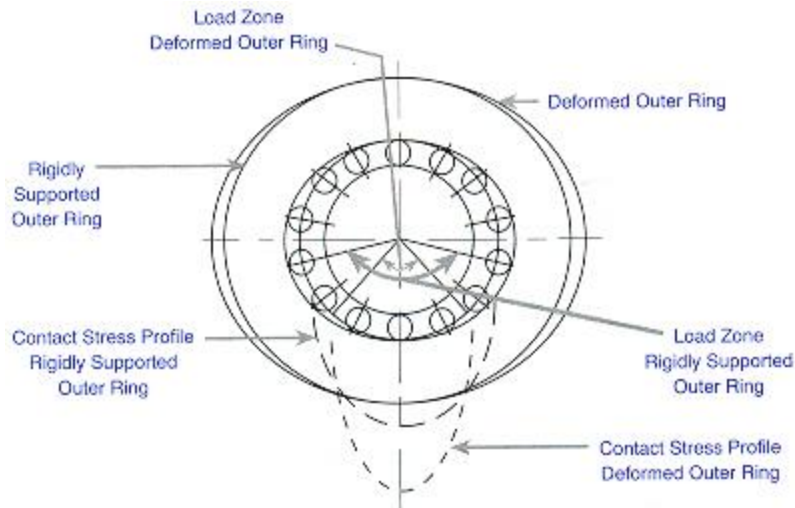


DIFFERENCE FROM STANDARD BEARINGS

The outer rings of regular ball and roller bearings are typically mounted in rigid housings providing support around the entire circumference. Individual roller forces are transmitted through the outer ring directly into the housing with no major deformations.

By contrast, cam followers and yoke rollers are supported at a single point on their circumference. Individual roller forces produce bending moments on the outer ring around the point of contact. The effects are outer ring deformation with reversed bending stresses in dynamic applications, a reduced load zone, and a higher maximum roller load. See Figure 1.



Load Zone & Maximum
Fig. 1

To keep deformation to a minimum, the outer ring of a cam follower must have a considerably heavier cross section than a standard bearing. This requirement conflicts with the desire for maximum dynamic bearing capacity which needs as large a roller diameter as possible. RBC cam followers and yoke rollers provide an optimum compromise between outer ring strength and theoretical bearing capacity.