- The traditional measure of planicity between housing and mounting surface has been 0.0010 inches per 12 inches of measure. This has proven to work in all types of applications but is often a challenge to meet. If the application is critical, the tighter flatness tolerance of 0.0010 per 12 inches should be maintained. For less critical locations, the broader tolerance of IT7 can be applied. These can be checked by taking a feeler gauge and measuring for any gaps between the housing and the mounting surface.

- If the housing must be raised in order to improve alignment, a full width shim should be used to make sure that housing support is even across the underside of the housing. Use of shims to fill low points under the housing is not typically recommended. Rather, machining the surface to the correct flatness tolerance is the recommended solution.

- If low points under the housing are present and machining of the surface is not practical due to time or resource limitations, shimming may be required. This must be approached carefully to make sure that housing support is even and that high points are not created by the addition of shims. Once a shim is in place, verify that no additional gaps greater than the allowable tolerance are present.

- After installation of housings on structure, it is recommended to use a feeler gauge to check ample clearance between the metal housing of the taconite seal and the shaft, as shown in the picture below. This will ensure the seal will not bind on the shaft and generate heat within the bearing which may lead to premature failure. If enough clearance between the taconite seal and the shaft is not present, additional shimming may be required. The typical allowable angular misalignment for pillow blocks with taconite seals is 0.1°.

MINIMUM OF 0.005 CLEARANCE REQUIRED
MEASURE WITH 0.005 FEELER GAUGE FOR 360°

Contact your sales representative for more information