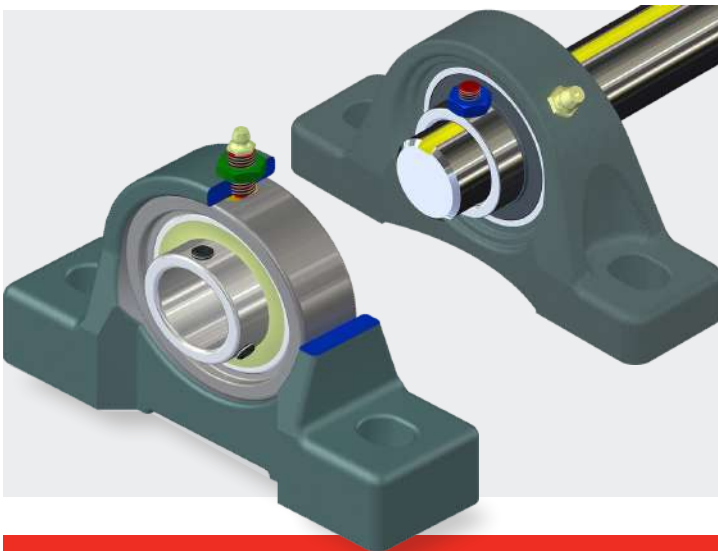


When you have an application in a tough environment under certain temperature extremes, the proper bearing selection is essential to achieve optimal bearing performance. For over 30 years AMI Bearings has led the industry for manufacturing a true high temperature mounted ball bearing unit. Our high temp bearing inserts are the ideal choice for specific applications such as industrial ovens for the baking industry and conveyor furnaces for heat treating steel.

We have a wide variety of specific shaft sizes and housing styles to meet your application specifics and dimensional requirements.



AMI offers two types of custom locking devices that are both designed to accommodate axial shaft expansion caused by high temperatures from an oven application. The two design options are specifically intended for the expansion side of an application. (Float side). \*A fixed mounted ball bearing unit should be used on the opposite side of the shaft.\* (Fixed and Float setup).

## Zinc Anodized Slinger

In order to allow the silicone to properly do its job as a seal, AMI uses a special zinc anodized slinger to protect it. The purpose of a slinger is not only to protect the seal, but also to provide the first line of defense for the balls and retainer against contaminants. Using a standard cold rolled steel slinger in a High-Temp application may initially provide protection, but quite possibly corrode and lead to premature bearing failure. AMI's process of zinc anodization produces a slinger with two key attributes—heat and abrasion resistance. A resistance that will maintain its properties well past the operating temperature of the bearings.

## High Temperature Greases; Bearings up to 450° F

Lubrication is what some bearing manufacturers consider to be the only difference between a standard and High-Temp insert. The use of High-Temperature grease alone does not create a High-Temperature bearing insert. For AMI it is one of the many important elements that make up a true High-Temp bearing. Listed below are the greases used in AMI's C4HR5 and C4HR23 bearing units:

**C4HR5** = Max bearing operating temp (400°F) Yuken Super-Lube No.3/Oil Research Industrial \*soap based (compound)

**C4HR23** = Max bearing operating temp (450°F) Noxhub BF4026/Nok Kluber Co.

\* fluorinated base (proprietary mixture), max. operating temperature of the grease (500°F),

\*NSF H-1 rated food grade grease available. Call for availability.

## Internal Clearance

In the manufacturing of ball bearings, it is a standard practice for AMI to assemble its rings and balls with a specified internal clearance. In the case of High-Temp inserts, internal clearance is even more important in compensating for thermal expansion of bearings, shafts and housings. AMI uses internal clearance standard of (C4) on all of its High-Temp inserts.

## Silicone Rubber Seals

Most standard units are supplied with a nitrile rubber seal. Nitrile rubber is an excellent seal at temperatures ranging from 0 to 212 degrees F. Soon after that temperature, nitrile rubber starts to breakdown, leaving no sealing element to retain the High-Temp lubrication. Silicone seals have excellent temperature stability, exceptional release from sticking, resistance to aging, ozone, sunlight and outstanding water repellence. The use of silicone seals insures that the high-temp lube stays where it belongs—in the bearing.