



Food Applications: Tough Environments for Bearings

Food applications present many problems for traditionally lubricated bearings. High temperature applications can cook out grease/oil lubricants, and low temperature applications can also present problems for lubricants. Washdowns wash out grease and oil, leading to bearing failure. And some bearings are in tough-to-reach locations for regular maintenance.

Advantages of Graphalloy

GRAPHALLOY pillow block, flange block assemblies, inserts have the following advantages:

- ◇ **Self-lubricating:** Requires no grease or oil. Eliminates downtime.
- ◇ **Temperature Range:** Performs in temperatures from -400°F to +1000°F (-240 to +535°C).
- ◇ **Direct replacement inserts** for industry standard pillow and flange block assemblies.
- ◇ **Withstands Steam and Pressure Washes**
- ◇ **FDA Acceptable Grades Available**
- ◇ **(EC) No. 1935/2004 Grades Available**



Where to Use Graphalloy

- | | |
|----------------|-------------|
| ◇ Baking Ovens | ◇ Roasters |
| ◇ Fryers | ◇ Freezers |
| ◇ Mixers | ◇ Steamers |
| ◇ Conveyors | ◇ And more! |



Commercial Bakery Solves Weekly Failures

The bakery uses two continuous belt-type baking ovens. A typical operating temperature is 525°F. The steel belts in the ovens are 145 feet long, 4 feet wide and travel at 55 FPM. Conventional oil lubricated cam followers only lasted one week in such a high temperature environment. They replaced 16 to 20 burned out cam followers every week for a year. They upgraded to GRAPHALLOY cam followers which went sixteen weeks (and counting) with no sign of wear. Both of their ovens are now equipped with Graphalloy.



Oven Manufacturer Solves Major Maintenance Problem

A bakery oven OEM was using rolling element bearings on the conveyor circuit of a tunnel oven with a temperature range from 450°F to 650°F. To reach these bearings, mechanics would have to crawl over the oven belt when the machine was shut down, thus causing damage and presenting a safety risk. Another issue was caustic washdowns that rusted the ball bearings. In some applications, bearing life was as little as 2 weeks. They were researching solutions when they discovered GRAPHALLOY. Now, Graphalloy bushings in stainless steel pillow block housings have been running in this application for several years with no issues.



Seafood Freezer Conveyor Extends Bearing Life by 30x

A seafood processing plant in the Southeast was running a conveyor in their freezer area to "flash-freeze" fresh seafood. The environment is a difficult one: it is cold (28°F/-2°C) and wet and the system requires frequent washdown. The conveyor bearings were being replaced every month. The plant maintenance superintendent contacted GRAPHALLOY about the problem. It was determined that the current bearings could not hold lubrication under these conditions and, as a result, breakdowns were occurring frequently. Graphalloy 4-bolt flange block assemblies were installed and have been running successfully for 5+ years!



Pizza Restaurant Ends Downtime

This restaurant was having bearing failures on their classic Fauld's oven, a staple of their pizza's distinctive taste. These bearings were difficult to maintain due to their location, and this was causing downtime at important times such as Friday night. An engineering firm they hired found GRAPHALLOY Bearings, which meant no more greasing and no more downtime.

