



GRAPHALLOY® | Bearings for Food Industry Applications

DS2529-44

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 contamination from grease and oil, as well as tough-to-reach maintenance requirements, are further headaches associated with rolling element bearings in food applications.

ADVANTAGES OF GRAPHALLOY

- GRAPHALLOY pillow block, flange block assemblies, inserts, and bushings eliminate maintenance, providing increased reliability and years of trouble-free operation.
- ♦ **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
- ♦ Fryers
- ♦ Mixers
- ♦ Conveyors
- ♦ Roasters
- ♦ Freezers
- ♦ Steamers
- ♦ Other food handling applications



GRAPHALLOY SUCCESS STORIES

Commercial Pizza 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 more than five years!

