METALS INDUSTRY

UTA Cobra Solid Lubricant™ Bearings

UTA Cobra Solid Lubricant™ Bearings Need No Re-Lubrication For Loop Guide Rolls In Bar Mills



Engineered Graphite Solution Helps Drive Productivity and Profitability

Exposed to operating conditions that make adequate lubrication difficult, loop guide roll bearings have short service lives. Product surface temperatures up to 900°C and variable speeds demand a centralized lubrication system that applies grease frequently. Often, an outside watercooling system is also required.

Both systems increase energy and maintenance costs as well as adding system complexity. Compromised or failed bearings can cause product surface defects, reducing productivity. Excess grease accumulating outside the rolls is a substantial fire hazard. To mitigate some of these risks, many rod and bar mills install oil-air lubrication systems. Yet, these systems come with problems of their own, including air quality issues and higher investment, maintenance, energy, and operating costs.

The Solution: UTA Cobra Solid Lubricant™ Bearings

Featuring an engineered graphite mixture that fills the empty space inside the bearing, UTA Cobra Solid Lubricant™ eliminates re-lubrication requirements. Almost any bearing type can be supplied as a UTA Cobra Solid Lubricant™ providing very low and constant friction, and an extremely high temperature limit of 350°C.

By moving away from grease lubrication the associated operating costs and productivity limitations that come with it -UTA Cobra Solid Lubricant™ bearings can help rod and bar mills boost reliability and safety while reducing their maintenance costs and environmental impact.



Benefits

- Increased System Reliability — Extended service life
- Less unplanned downtime
- Reduced Maintenance
 - Virtually maintenance-free
- No need for re-lubrication

Reduced Environmental Impact

- No grease consumption
- No lubricant leakage
- Reduced or eliminated need for cooling

Improved Safety

- Reduced risk of fires from excess grease
- Elimination of slippery work
- surfaces caused by grease
- Reduced total operating costs
 Reduced risk of bar surface damage
- Reduced lubrication & energy costs
- Reduced cost for water treatment process

Typical Applications

- Loop guide rolls in bar mills
- Cooling and roll out tables in casters of all types
- Reheating furnace rolls
- Roller tables in hot rolling mills
- Rolls in bloom and billet casters
- Sinter machine wheels



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For more information on UTA products and solutions, visit **www.utausa.com**

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Increase The Return On Your Maintenance Investment with UTA

UTA Cobra Solid Lubricant™ Bearings Help Mill Increase Loop Guide Roll Service Life Dramatically!



The Challenge

A rod and bar mill was suffering from frequent bearing failures in their loop guide rolls. On average, the bearing service life was only one month, resulting in frequent product surface defects and lost productivity, as well as intensive and costly maintenance efforts.

Worse yet, the intensive maintenance would often lead to shaft and housing damage during mounting and disassembly operations. The frequent rebuilds were also limiting performance of the oil-air lubrication system. Looking to stop this recurring cycle, reducing unplanned downtime, and related costs the company looked to UTA.



The UTA Solution UTA representatives accessed the situation and presented the mill with a high-temperature bearing solution. The mill agreed to run a test with UTA Cobra Solid Lubricant™ bearings.

The Result

UTA Cobra Solid Lubricant[™] bearings boosted loop guide roll service life dramatically. Rolls that were previously failing monthly are now lasting over two years.

Return On Investment (ROI) Summary*

Investment in UTA solution per guide roll line\$16	5,900
Average mean time between repair before UTA solution1 m	nonth
Average mean time between repair with UTA solution	onths
Annual savings per line\$300),000

* All numbers are rounded and based on customer's estimates. Your particular cost savings may vary.



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