

# Cobra™ Solid Lubricants

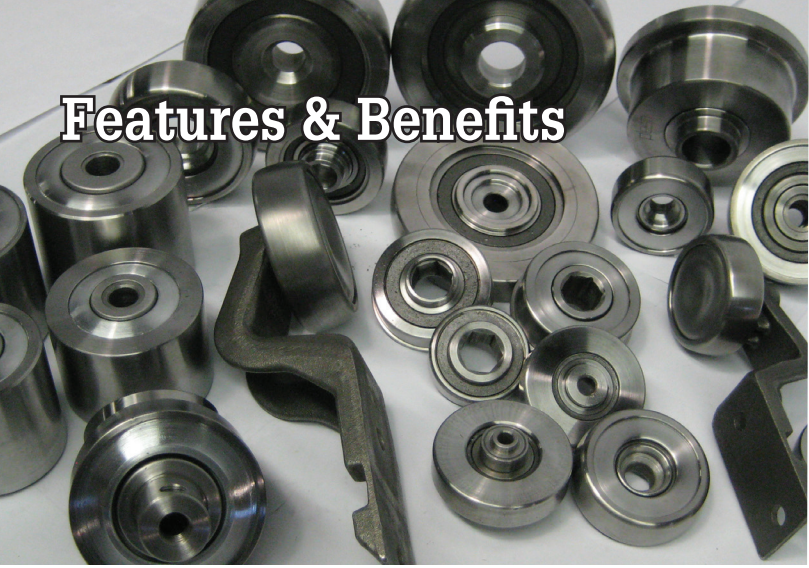
Cobra™ is a dry, graphite based, oil free lubricant specially formulated for a wide array of bearing applications.

Cobra™ lubricant fills all the space between the inner and outer race, and becomes a permanent part of the bearing.

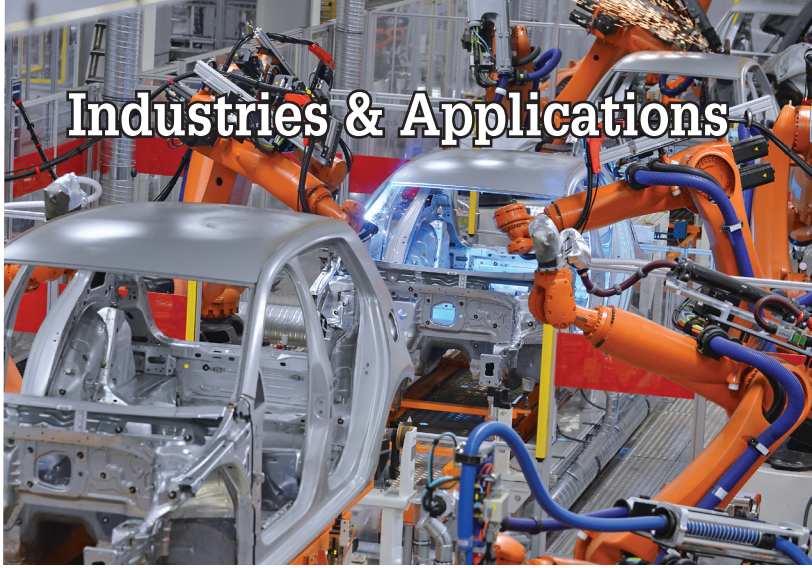




# Features & Benefits



# Industries & Applications



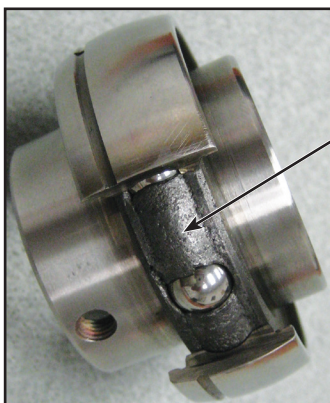
## Features & Benefits

Dry lubricated bearings offer the following benefits over Grease and Oil Lubrication:

- Consistent, Permanent Lubrication over the life of the bearing resulting in very Low Maintenance.
- Exceptional high temperature capability
- Certified NSF H1 Food Grade
- Water, Steam, and Chemical Resistance
- Will Not Wash Out of the bearing even with solvents
- Low Torque, Free Spinning
- Effectively seals against Dust, Dirt and Debris
- No Outgassing in a vacuum
- Excellent Resistance to Radiation

## Performance

- Cobra™ is more cost effective and longer lasting than competing high temperature Lubricants.
- Cobra™ is environmentally safe
- Cobra™ can help reduce operating costs, extend maintenance intervals and improve equipment reliability.



The Cobra™ material is molded around the ball and retainer assembly

## Primary Metals

- High Temperatures, Water, Chemical and Debris Resistance
- Roller Hearth Furnaces, Continuous Casters, Cooling Beds, Table Rolls, Torch Cars, Crane Wheels

## Food & Beverage

- Bakeries, Meat Processing, Beverage
- Food Grade, High Temperatures, Low Temperatures, Wash Down, Chemical Resistance, Debris Resistance
- Ovens, Conveyors, Bottling, Packaging, Mixing

## Automotive

- High temperature, chemical resistance, low maintenance
- Paint line, powder coating and E coat conveyor systems - roller turn rolls, conveyor trolley wheels, load bar carriers and in floor inverted carriers
- Collaboration on all system requirements including chain and carrier assemblies refurbishing
- Curing ovens
- Wash tanks
- Parts conveyors

## Paper, Printing & Media

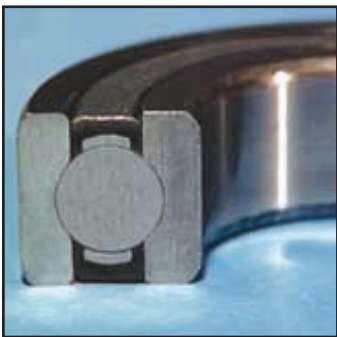
- Low Torque, Low Wrap, Non Dripping, Compatibility with Ink, Low Maintenance
- Idler Rolls, Dancer Rolls, Accumulators, Calendering, Curing Ovens, Adhesives

## Mining and Aggregate

- Water, dust and debris resistance, low maintenance
- Separators
- Clinker chain
- Conveyors
- Kilns
- Head shaft and tail pulley mounted units
- Bucket elevators

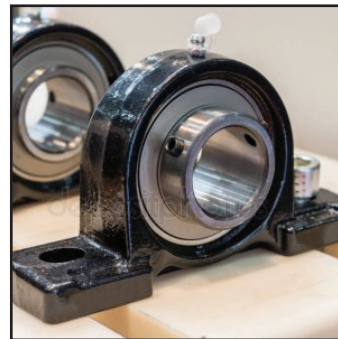


# Applicable Bearing Types



**Ball Bearings**

Single Row  
Double Row  
Self Aligning  
Angular Contact  
Banded Thrust  
Thin Section



**Mounted Units**

Pillow Blocks  
Flange Blocks  
Inserts  
Type E  
ER Series  
Take-Ups  
Hangers  
Split Bore



**Roller Bearings**

Sphericals  
Cylindricals  
Tapers  
Split Bores  
Berliss  
Thrust Units  
Cam Followers



**Specialty Units\***

Overhead Trolleys  
Free Trolleys  
Roller Turn Rolls  
Hex Bores

## Processing Requirements

Most bearings processed with Cobra™ require a stamped steel cage. Cobra™ is not suitable for use with polymer cages. For applications with bronze cages, contact a UTA representative.

## Special Applications

**Stainless Steel** - Cobra™ Lube installed in a stainless steel bearing can provide a powerful combination in wash down applications and highly corrosive environments. If a stainless steel bearing is not available, Cobra Blue™ may be an alternative solution.

\*Ideal for Paint Booths, finishing lines, powder coating lines and other material handling applications. Eliminate costly lube systems, reduce product defects, never re-lube, reduce wear and lower energy consumption.





## Formulations

- CSL is formulated for 3 temperature levels, CSL250, CSL450, and CL660\*\* - NDM Speed Factor of 80,000.
- EP additive provides an enhancement of the lubricant within the bearing and is highly recommended for tapers, sphericals, and higher speed applications - NDM Speed Factor of 120,000.
- EPN consists of the EP additive combined with Nano sized particles of Tungsten Disulfide. Recommended for higher load and higher speed applications - NDM Speed Factor of 160,000.
- Molybdenum Disulfide - for applications where motion is occurring in the presence of a vacuum. Specified as CSL250-V, CSL450-V & CSL660-V.

\*\*Please note: 660°F is a continuous rating, CSL660 has a practical limit of 1200°F with very slow degradation over time.

## Limitations

- Cobra™ is an engineered solution and not suitable for every application. Please contact a UTA representative to see if Cobra™ will work for your application.
- Speed (RPMs) is the primary factor in determining suitability for the application.
- Impact load to the bearing as in improper bearing installation may contribute to an unacceptable application.
- Extreme temperature applications may require a bearing to have an increased internal clearance to address thermal expansion.
- If corrosion is found to be the primary cause of failure with conventional lubricants CSLs are not a corrosion inhibitor.
- Cobra Blue™ (ferritic nitrocarburizing) offers high surface hardness, improved fatigue and wear resistance and offers exceptional corrosion resistance to treated bearings where corrosion is a concern.

## Contact Us:



Please visit our website at [www.utausa.com](http://www.utausa.com)

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