

SOLID LUBRICANTS FOR BEARINGS AND CONVEYORS



WHY CSL?

CSL is not the only lubricant capable of working well at high temperatures, nor is it the only lubricant capable of working well at low temperatures. It is the only one that works at high temperatures (660F) and low temperatures (-150F) without any change in torque and without the need for seals or shields to keep the lubricant in the bearing. And CSL allows the bearing to spin freely without dripping grease or oil.

CONTENT

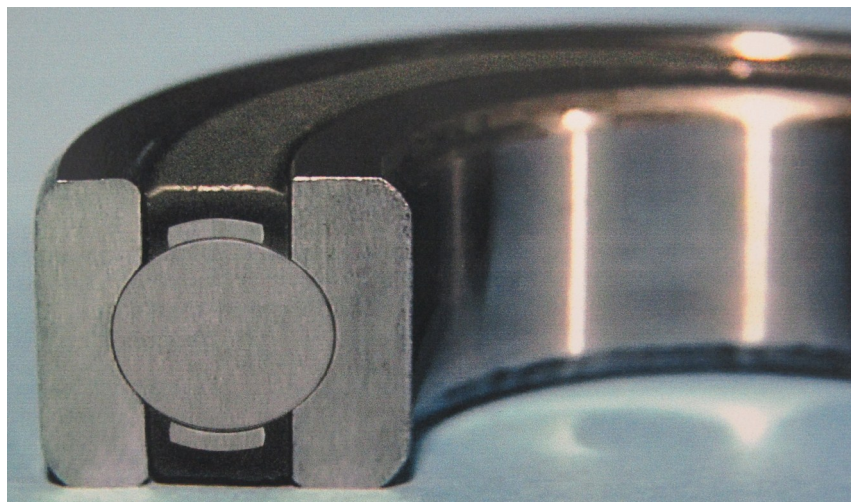
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COBRA SOLID LUBRICANT

- Provides continuous replenishment of graphite lubricant on all internal moving parts.
- Bearings treated with Cobra Solid Lubricants spin very free and are very energy efficient.
- The dry lubricant provides for a constant turning torque regardless of temperature variations.
- Provides free spinning lubrication from subzero temperatures up to 660F.
- Momentary spikes of very high temperatures (1500+) will not damage Cobra Solid Lubricants.
- Cobra Solid Lubricants will not be washed out or adversely affected by steam or chemical wash down.
- Cobra Solid Lubricants can be used submerged in most chemicals (even mild acid or alkali) because it will not dissolve.
- Cobra Solid Lubricants will not drip

out or fling.

- Most external contaminants are restricted from entering and damaging the bearing.
- Most external contaminants will not "stick" to the exterior of the bearing and thus the bearings will be cleaner than with oil or grease lubricants.
- Cobra Solid Lubricants exhibit very low outgassing, even at high temperatures, making it ideal for vacuum applications.
- Cobra Solid Lubricants are resistive to deterioration due to radiation or UV.
- Cobra Solid Lubricants are non-toxic.
- Disposal of Cobra Solid Lubricants are not harmful to the environment.
- Cobra Solid Lubricants are an NSF H-1 listed product.



COBRA SOLID LUBRICANTS (CSL) FOR BEARINGS

BASE LINE LUBRICANTS



Bearing Solutions

“The dry lubricant provides for a constant turning torque regardless of temperature variations”



Unprocessed Bearing



Bearing Processed with CSL

CSL 250

This product is most popular in applications where high temperatures are not a problem. It's free spinning characteristic is desired in many idler, converting, packaging, radiation, and food applications. This product is also well suited for use in conveyor applications such as paint or powder coat lines, and assembly lines. The bearing will spin free regardless of temperature.

Useable temperature range: -150F up to +250F (note: stainless steel bearings may be required for subzero temperatures).

CSL 450

This product is most popular in applications where medium high temperatures are a problem. It's free spinning characteristic is desired in many idler, converting, packaging, and food applications. This product is also well suited for use in conveyor applications such as paint or powder coat lines, and assembly lines. The bearing will spin free regardless of temperature.

Useable temperature range: 250F up to +450F (note: C4 internal clearance bearing may be required at temperatures above 300F).

CSL 660

This product is most popular in applications where high temperatures are a problem. It's free spinning characteristic is desired in many idler, converting, packaging, and food applications. This product is also well suited for use in conveyor applications such as paint or powder coat lines, and assembly lines. The bearing will spin free regardless of temperature.

Useable temperature range: 450F up to +660F (note: C4 or greater internal clearance and heat stabilized bearings may be required at temperatures above 450F).

EP LINE LUBRICANTS

Bearings, processed with an EP line lubricants, will have a tacky feel and will have slightly more drag than the bearings with CSL base line lubricant.

EP line lubricants may provide some corrosion protection against caustic chemical vapors or temperature caused oxidation.

CSL 250 EP

This product is generally used in applications requiring higher speed, quieter and smoother operation. It is generally not used in sub-zero applications or in applications where contaminants could migrate into the bearing.

Useable temperature range: +32F up to +250F.

CSL 450 EP

This product is generally used in medium high temperature applications requiring higher speed, quieter and smoother operation. It is generally not used in applications where contaminants could migrate into the bearing.

Useable temperature range: +250F up to +450F (note: C4 internal clearance bearing may be required at temperatures above 300F).

CSL 660 EP

This product is generally used in high temperature applications requiring higher speed, quieter and smoother operation. It is generally not used in applications where contaminants could migrate into the bearing.

Useable temperature range: +450F up to +660F (note: C4 or greater internal clearance and heat stabilized bearings may be required at temperatures above 450F).

V (VACUUM) LINE LUBRICANTS

V line lubricants are dry and will not attract contaminants. This product will not drip or fling lubricant.

The bearing processed with V line lubricant will spin free regardless of temperature.

CSL 250 V

This product is designed for use in vacuum applications. It will have very low out-gassing even in high vacuum applications.

Useable temperature range: -150F up to +250F (note: stainless steel bearings may be required for subzero temperatures).

CSL 450 V

This product is designed for use in medium high temperature vacuum applications. It will have very low out-gassing even in high vacuum applications.

Useable temperature range: 250F up to +450F (note: note: C4 internal clearance bearing may be required at temperatures above 300F).

CSL 660 V

This product is designed for use in high temperature vacuum applications. It will have very low out-gassing even in high vacuum applications.

Useable temperature range: 450F up to +660F (note: note: C4 or greater internal clearance and heat stabilized bearings may be required at temperatures above 450F).

EPN LINE LUBRICANTS

This product utilizes the proprietary UTA Nano Technology to achieve the highest speeds, quietest and smoothest performance of the CSL products. It is unprecedented in its ability to increase service life by reducing wear caused by high speed, high loads, and

high temperatures. The superior performance of the product is a result of the unique shape and size of the nanomaterial and innovative and patented method of their utilization with CSL.

This product is generally not used in sub-zero temperatures or in applications where extreme contamination is present.

The bearing will have a tacky feel, leave black residue on hands (easily washed off and not harmful to skin), and will have slightly more drag than the dry CSL base line lubricant.

This product may provide some corrosion protection against caustic chemical vapors or temperature caused oxidation.

CSL 250 EPN

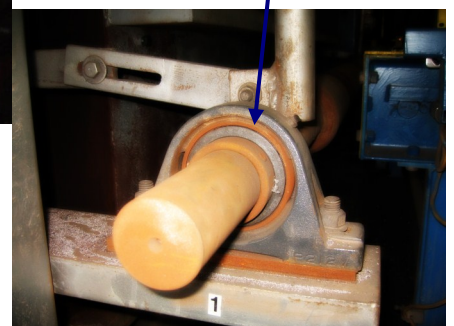
Useable temperature range: up to +250F.

CSL 450 EPN

Useable temperature range: 250F up to +450F (note: C4 or greater internal clearance and heat stabilized bearings may be required at temperatures above 450F).

CSL 660 EPN

Useable temperature range: 450F up to +660F (note: C4 or greater internal clearance and heat stabilized bearings may be required at temperatures above 450F).

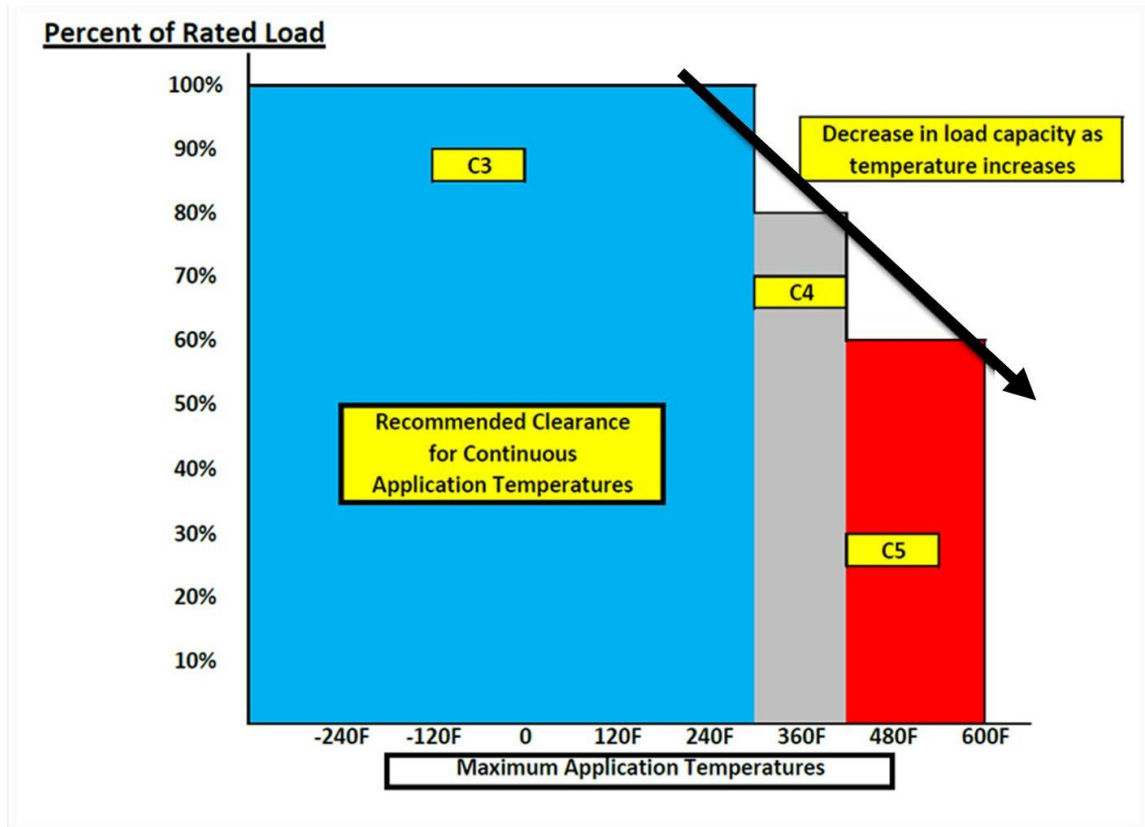


“Cobra Solid Lubricants will not drip out or fling.”

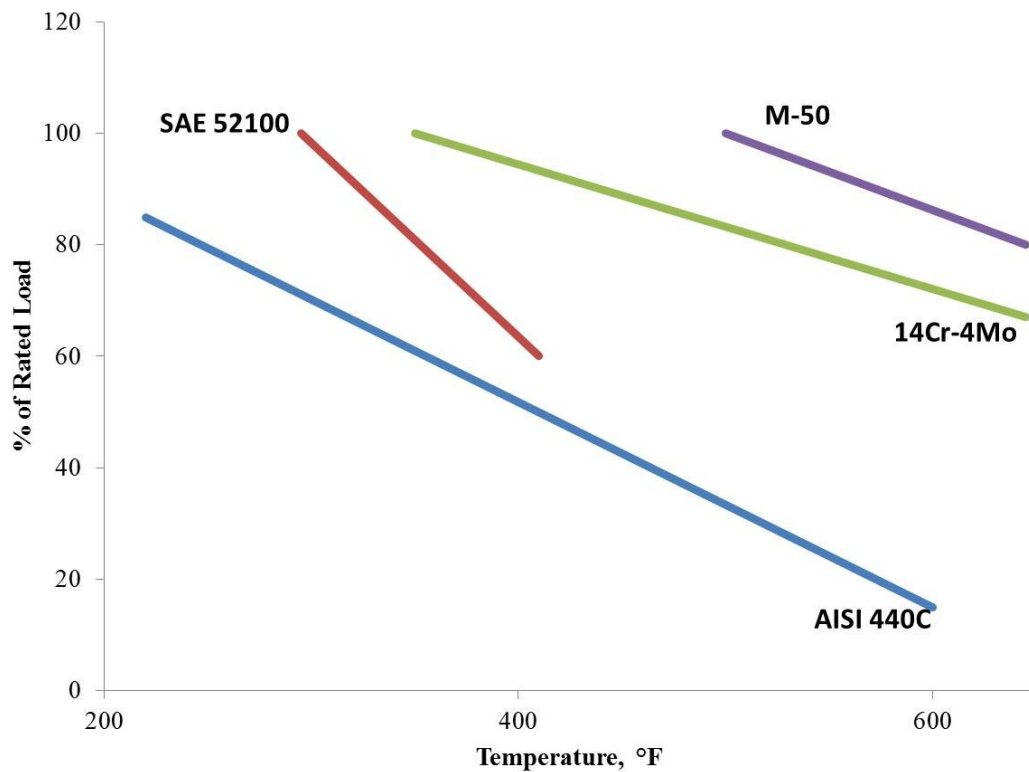
After **7 years** of constant operation

- No change to solid lubricant
- Protected bearing from dust and contamination

Selection guidelines for clearance at rated load and temperature



Guidelines for steel hardness change at certain temperatures.



Steel will start losing hardness at high temperatures. Above 300 F heat stabilized steel bearings are recommended

COBRA SOLID LUBRICANTS (CSL) FOR CONVEYORS



Conveyor Solutions

“Cobra Solid Lubricants are non-toxic and not harmful for the environment”

CSL has proven to be a great lubricant for nearly all conveyor systems. Overhead systems, inverted systems, Enclosed Track systems, Power & Free, gravity conveyors, roller turn rolls, track rollers, hex bore bearings, etc. can all be lubricated with CSL. The benefits are often amazing!

The first big benefit is lower drag on the system. Lower drag means less stress on the links, pins, gearbox, drive motor, and roller turn rolls. Those components may also last longer and energy usage (your electricity bill) will be less!

In some applications, like paint lines, other benefits are realized. Unlike oil or grease, the CSL cannot drip. Newly painted parts will not be ruined by oil drips on them! No more scrapping defects or stripping and repainting due to drips.

With conveyor systems that are not processed with CSL, auto lube systems are often used to provide some re-lubrication for trolleys that have dripped out the oil due to high temperature. Most often, these systems require the trolley to be open on at least one side. Airborne contaminants can quickly clog up the trolley, sometimes causing the trolley to drag along the track creating a flat spot on the wheel, wear on the pins and links, chain stretch, and even worse, cause excessive wear on the rail!

With CSL, the trolley is shielded and the auto

lube system should be shut down or removed. The facility can look better and smell better with CSL and with no more oil or grease dripping on parts or on the floor, some safety issues may be eliminated.

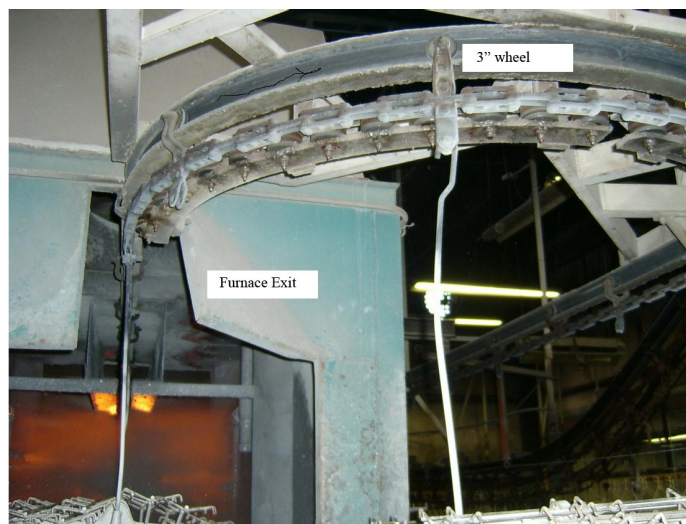
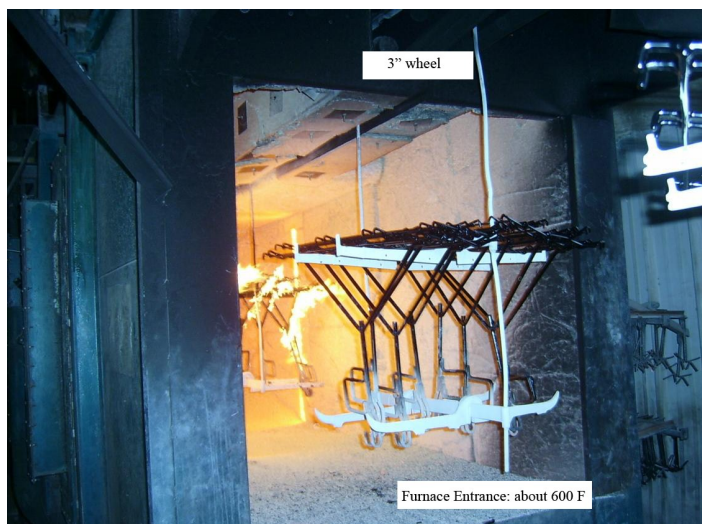
- When processed with CSL, conveyor products are "lubed for life". AutoLube Systems should be shut off.

- All conveyor products processed with CSL are engineered to perform from sub-zero temperatures up to 660F.

- Trolleys must be processed with CSL prior to mounting on the arm or installation of shields. UTA has special arrangements with several conveyor manufacturers to accommodate this requirement. Because of this, it is usually required that UTA supply the whole package of trolley with CSL. Equivalent replacement for original equipment is usually no problem.

- Wheels and Hex Bore bearings should be processed with CSL before shields are installed. It is often more convenient for UTA to supply the whole package of wheel and CSL.

- Roller Turn Rolls are only available as complete products processed with CSL.



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Unique Technologies Associates is the manufacturer of Cobra Solid Lubricants for bearings. From our Avenel, NJ factory, we furnish product throughout North America.

Cobra Solid Lubricant is a proprietary, dry, solid graphite formula engineered to seal and lubricate bearings and conveyor wheels. It exhibits extraordinary performance even in the most difficult applications. The characteristics of our products allow for great extremes in temperature without any change in starting torque or lubricity.

Unlike common petroleum based lubricants, Cobra Solid Lubricants cannot be washed out by steam or other common solvents, acids, or alkalis except under direct high pressure stream. It cannot drip or fling and has virtually no outgassing when used in vacuum applications – even at high temperatures! Paper dust, fly ash, sand or other harsh particles have little opportunity to enter the ball path and clog the bearings. In severe conditions, these environmentally clean lubricants may substantially increase bearing life and eliminate periodic maintenance.



Check calculators, converters and charts for bearing and conveyor applications
on our website:

www.utausa.com
