LONE STAR
GREASE & LUBRICANTS

LSG SYNTHETIC LITHIUM COMPLEX 100 GREASE NO. 1 & 2

High Performance PAO Synthetic Grease for Extreme Temperatures and Speeds in Steel Mills

Superior Protection Against Heat, Water, Contaminants, and High Speeds for Steel Mill Equipment.

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is a premium synthetic PAO grease engineered with a synthetic base oil to meet the rigorous demands of the steel mill industry. Designed for extended service life, optimal performance, and superior protection against harsh elements, this high-performance lubricant delivers outstanding stability for components exposed to extreme high temperatures, heavy loads, water, steam, scale, and continuous operation.

Utilizing a state-of-the-art synthetic base oil and a precision lithium complex thickener system, LSG Synthetic Lithium Complex 100 Greases resist thermal breakdown, water and steam intrusion, and corrosive elements. Its superior mechanical integrity and stable consistency make it ideal for use in high-speed bearings, critical components, and centralized lubrication systems across various steel-making processes.

Engineered to minimize wear and reduce friction under high-load and high-RPM conditions, this grease provides long-lasting performance and consistent lubrication even in the most challenging areas of the mill. It maintains its structure and position in demanding steel mill environments, reducing leakage or component failure, even when subjected to intense heat, constant vibration, or frequent washdowns. The availability of NLGI #1 and #2 allows versatile application, including excellent pumpability for automated systems or robust adherence for general-purpose bearings.

Recommended for vital steel mill machinery, **LSG Synthetic Lithium Complex 100 Greases** support equipment reliability, lowers maintenance requirements, and contributes to safe, smooth, and efficient operations within hot and cold rolling mills, continuous casters, and other critical areas.

KEY FEATURES

- **Fully PAO synthetic base oil** for exceptional thermal stability, wide operating temperatures, and extended service life in high-heat areas and reliable start up in extreme cold.
- **Lithium complex thickener** for robust high-temperature performance and excellent mechanical stability under heavy loads.
- **NLGI #1 and #2 consistency** for versatile application, offering excellent pumpability in centralized lubrication systems and firm adherence in bearings.
- **Outstanding resistance to water, steam, and coolant washout**, providing superior protection against common steel mill contaminants.
- Low bleed and oil separation to maintain clean operation and prevent contamination in sensitive machinery.
- Reduces friction and wear under high-speed and heavy-load conditions, prolonging component life.

CUSTOMER BENEFITS

- ✔ Ensures long-term protection and extended regreasing intervals for valuable steel mill assets, reducing costly downtime.
- ✔ Prevents costly wear and corrosion on critical components exposed to extreme heat, water, and contaminants.
- ✔ Potential to improve energy efficiency by reducing friction and operating temperatures in heavy machinery.
- ✔ Maintains grease consistency under centrifugal and thermal stress, preventing premature failure and leakage.
- ✔ Minimizes risk of leakage or contamination, supporting operational efficiency and safety standards.
- ✔ Reliable performance in areas with high heat and water ingress, crucial for continuous production.

APPLICATIONS

LSG Synthetic Lithium Complex 100 Grease No. 1 & 2 is recommended for:

- **Continuous Casters:** Bearings, guides, and roller assemblies.
- **Hot and Cold Rolling Mills:** Mill stand bearings, roll neck bearings, screw-downs.
- **Overhead Cranes:** High speed bearings, sheaves, and trolley components.
- Annealing lines, galvanizing lines, and other finishing processes with high speed berarings.
- Conveyor systems, crushers, and general heavy industrial machinery bearings.
- Electric motor bearings, pumps, and fans operating in challenging steel mill environments.
- Industrial components operating under high heat, heavy load, and continuous stress.
- Centralized lubrication systems and enclosed gearboxes where softer greases are required.

PACKAGING:

Cartridges
14 oz.

Pails
35 lbs.

Kegs
120 lbs.

Drums
400 lbs.

*Custom and Bulk Packaging available upon request.

TYPICAL PROPERTIES

Property	No. 1	No. 2	Test Method
NLGI Grade	310–340	265–295	ASTM D217
Worked Penetration (60X)	>260	>260	ASTM D2265
Dropping Point (°C)	100	100	ASTM D445
Base Oil Viscosity @ 40°C (cSt)	315	315	ASTM D2596
Four Ball Weld Load (kg)	0.45	0.45	ASTM D2266
Four Ball Wear (mm)	<3	<3	ASTM D1742
Timken OK Load (lbs)	Pass (No Rust)	Pass (No Rust)	ASTM D665, Proc. B
Water Washout, % @ 175°F	40	40	ASTM D2509
Corrosion Protection	<10%	<10%	ASTM D4049
Water Spray Off Test	Blue	Blue	Visual
Color	Smooth / Buttery	Smooth / Buttery	Visual
Oil Separation (24 hr @ 100°C), %	<2	<2	ASTM D1264

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Typical properties reflect the expected results within normal production tolerances but do not constitute a specification. Minor variations that do not impact product performance may occur during standard manufacturing processes or at different blending locations. The information provided here is subject to change without notice.

Health and Safety:
When used as intended, this product is not expected to pose any health risks or safety concerns. To minimize exposure, avoid direct skin contact and wear resistant gloves when handling used lubricants. If contact occurs, wash the affected area immediately with soap and water. For comprehensive guidelines on safe handling and detailed product information, please refer to the Material Safety Data Sheet (MSDS) available on our website. https://lonestargl.com