

Steel

*Customized Range of
Speciality Lubricants for
Steel Industry*





A range of multifunctional lubricants designed to meet the most demanding applications in integrated Steel Plant.

Molygraph's speciality lubricants have helped the steel manufacturing industry reduce costs and maintain operations successfully. Steel manufacturing is a tough process putting high demands on lubricants. Factors such as high temperatures, extreme loads, caustic and humid environments make it extremely challenging for lubricants to work optimally.

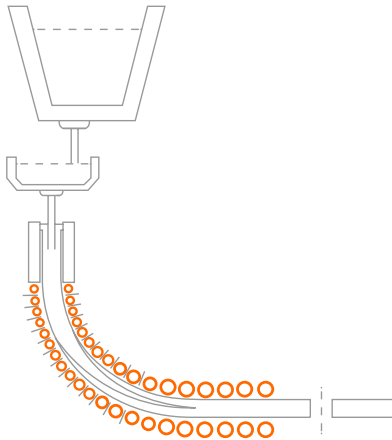
Molygraph has been continuously working with different chemistries to develop a diverse range of lubricants. Our systemised approach to lubrication challenges provides our customers with key benefits including:

- **Cost & productivity savings through Molygraph high performance lubricants.**
- **Complete range of lubricant solutions for critical steel manufacturing processes.**
- **Health and safety protection for operators by the use of safe and environment-friendly products.**
- **End-to-end lubrication education, support and guidance from our field engineering services team.**

OPERATING CONDITIONS

- | | |
|----------------------|--------------------|
| ➤ Humid environments | ➤ Water ingress |
| ➤ Extreme loads | ➤ High temperature |

Featured Products



Ultramill Grease PU Premium

Heavy duty Polyurea grease formulated for Continuous Casting applications.

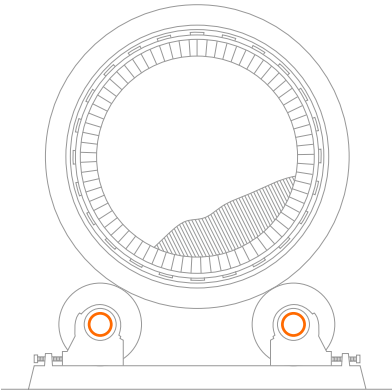


Continuous casters in steel mills are used to solidify molten steel into a solid shape, such as a slab or billet. These machines are subject to high temperatures and high loads, and proper lubrication is essential to maintain the efficiency and lifespan of the equipment.

Ultramill PU Premium grease is known for its high-temperature stability, high load-carrying capacity, & excellent water resistance. This makes it an ideal lubricant for use in continuous casters, as it can withstand high temperatures & heavy loads encountered in this application.

Key Features:

- Withstand temperatures up to 180°C (356 °F) and above.
- Excellent choice for the continuous caster application in the steel industry.



SG 1000 M 50

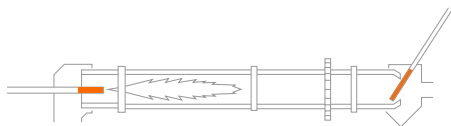
High viscosity Calcium Sulphonate grease fortified with solid lubricants for heavily loaded applications.



SG 1000 M 50 has been specifically developed for Kiln Support roller bearings. These roller bearings are typically lubricated with high-temperature grease or oil. The lubricant must be able to withstand the high temperatures and heavy loads that kiln support roller bearings are subjected to. It is also important for the lubricant to have good water resistance & high oxidation stability.

Key Features:

- SG 1000 M50 has a special soap complex with MoS₂ as a solid lubricant additive.
- Support roller bearings are prone to frequent lubrication due to the harsh conditions.
- SG 1000 M50 has been shown to increase relubrication intervals by 50% against conventional greases.



SG 460 SS

High performance grease designed for optimal lubrication of slip seals.



Slip seal lubrication is a method used to lubricate the slip seal in a sponge iron plant. Sponge iron plants use rotary kilns to produce sponge iron from iron ore, coal, and other raw materials. The rotary kiln is a large, rotating cylinder that is subject to significant wear and tear during operation, and proper lubrication of the slip seal is essential to maintain the efficiency and lifespan of the equipment.

SG 460 SS is delivered to the stationary slip seal through a rotating seal. The seal is designed to rotate with the open gear, and as it rotates, it delivers a small amount of lubricant to the slip seal. The lubricant is then "slipped" through the seal.

Key Features:

- Molygraph's SG 320 SS has been a market leader in slip seal lubrication technology.
- Our proprietary thickener technology ensures the slip seal segment are continuously lubricated through a centralized lubrication system.
- Helps reduce friction and wear while prolonging the lifespan of the equipment.

Integrated Steel Plant

AREA	APPLICATIONS	COMPONENTS	FEATURES & BENEFITS	PRODUCT
Sinter Plant	Rotary Mixer	Open Gear	Open gear grease with high purity graphite and specially chosen extreme pressure additives that help prevent squeeze out, ratio change, meshing & withstand shock loads and pressures.	OGG 2500
	Sinter Machine	Pallet Car Wheels	Premium grade high temperature grease for long life lubrication.	LONG LIFE PREMIUM
		Slide Tracks	Thermally stable aluminium complex grease for high temperature applications.	ALCOPLEX 462
Blast Furnace	Hydraulic Mud Gun	Bearings / Drill Machine Chains	Heavy duty long life polyurea based high temperature grease with good pumpability.	ULTRAMILL GREASE PU PREMIUM / PUG 9000 H
	Charging System	Skip Car Bearings	Heavy duty long life polyurea based high temperature grease with good pumpability.	
		Skip Car Wire Ropes	High performance wire rope, chain & cable grease.	CRG 100 GRADE 1
	Hot Blast Valve	Ht Valve	Non dropping special grade high temperature grease for heavy duty applications.	SGHT 600
Continuous Caster	Converter	Bearings	A sheer stable EP fortified water resistant grease for high load application.	SG 1000 M 50
	Ladle Turret	Withdrawal Bearings & Discharge Roller Table (DRT)	Heavy duty long life polyurea based high temperature grease with good pumpability.	ULTRAMILL GREASE PU PREMIUM
	Cooling Beds Rollers & Moving Beams	Bearings	Heavy duty long life polyurea based high temperature grease with good pumpability.	ULTRAMILL GREASE PU PREMIUM
		Gear Couplings	A sheer stable EP fortified water resistant grease for high load application.	SG 1000 M 50
Hot Rolling Mill	Work / Back-Up Roll	Bearings	A special grade high temperature grease for extremely slow moving bearings.	ULTRATAK™ MILL GREASE 460
	Rolling Mill Drive Shaft	Gear Couplings	A sheer stable EP fortified water resistant grease for high load application.	SG 1000 M 50
	Re-Heating Furnace Table	Roll Bearing	Heavy duty long life polyurea based high temperature grease with good pumpability.	ULTRAMILL GREASE PU PREMIUM
Bar And Rod Mill	Reheating Furnace Withdrawal / Roll Table	Bearing	Heavy duty long life polyurea based high temperature grease with good pumpability.	MFG 220® / SGH 220 PLUS / ULTRAMILL GREASE PU PREMIUM
	Rolling Mill Drive Shaft Gear	Couplings	A sheer stable EP fortified water resistant grease for high load application.	SG 1000 M 50
	Roller Stand	Bearing	Multifunctional extreme pressure water resistant grease with good shear stability.	MFG 220® / SGH 220 PLUS

Integrated Steel Plant

AREA	APPLICATIONS	COMPONENTS	FEATURES & BENEFITS	PRODUCT
Cold Rolling Mill	Work / Back-Up Roll	Bearings	A premium grade shear stable calcium sulphonate grease to withstand high load & high temperature.	ULTRATAK™ MILL GREASE 460
	Roll Chokes	Liner	A sheer stable ep fortified water resistant grease for high load application.	SG 1000 M 50
	Rolling Mill Drive Shaft	Gear Couplings	A sheer stable EP fortified water resistant grease for high load application.	SG 1000 M 50
	Pickling Line	Squeezer Roll Bearing	A premium grade shear stable calcium sulphonate grease to withstand high load & high temperature.	ULTRATAK™ MILL GREASE 460
		Water Rinse Tank Bearing		
		Wringer Roll Bearing		
		Blower Fan Bearing	Multifunctional high temperature extreme pressure greases for long term lubrication for bearings.	MPG RED
			High temperature, long life polyurea grease.	PUG 9000 H

Sponge Iron Plant

AREA	APPLICATIONS	FEATURES & BENEFITS	PRODUCT
Sponge Iron	Kiln & Cooler Slip Seal	Medium viscosity, high performance high load slip seal grease designed for maximum wear protection.	SG 460 SS
		Highly effective for high load and high temperature slip seal application.	SG 320 SS
		A premium grade high viscosity, high load slip seal grease to withstand high temperature with maximum wear protection.	SG 680 SS
	Kiln & Cooler Girth Gear-Spray	Medium viscosity sprayable fluid grease for open gear that prevents scoring, scuffing, galling, clawing, pitting, sliding and slipping.	SPRAY LUBE 1000
		Premium grade sprayable fluid grease for heavy duty open gear that prevents scoring, scuffing, galling, clawing, pitting, sliding and slipping.	SPRAYLUBE 1250
	Kiln & Cooler Girth Gear-Sump	Premium grade high viscosity sprayable fluid grease for heavy duty open gear that prevents scoring, scuffing, galling, clawing, pitting, sliding & slipping.	SG 1000 M SS
	Support Roller Bearing	Semi-fluid girth gear grease fortified with solid lubricant to withstand high load.	SG 1000 M 50
	Vibrator Screen Bearing	Multifunctional extreme pressure water resistant grease with good shear stability.	MFG 220®
	Id / Fd Fan & Motor Bearing	Multifunctional high temperature extreme pressure greases for long term lubrication for bearings.	MPG RED
	Kiln Chair Plate	Copper based high performance antiseize compound for maintaining the creeping.	KOPAL®



Pelletizing Plant

AREA	APPLICATIONS	FEATURES & BENEFITS	PRODUCT
Grinding Mill	Ball Mill Girth Gear	Premium grade sprayable fluid grease for heavy duty open gear that prevents scoring, scuffing, galling, clawing, pitting, sliding and slipping.	SPRAYLUBE 1250
	Ball Mill Girth Gear Pinion Bearing	A sheer stable EP fortified water resistant grease for high load application.	SG 1000 M 50
Mixture Machine & Balling Disc	Mixture Machine Bearing	High temperature, long life polyurea grease.	PUG 9000 H
	Mixture Machine Gear / Balling Disc Girth Gear	Premium grade sprayable fluid grease for heavy duty open gear that prevents scoring, scuffing, galling, clawing, pitting, sliding and slipping.	SPRAYLUBE 1250
		Premium grade high viscosity sprayable fluid grease for heavy duty open gear that prevents scoring, scuffing, galling, clawing, pitting, sliding & slipping.	SPRAYLUBE 2500
	Balling Disc Bearing	Premium grade high temperature grease for long life lubrication.	LONG LIFE PREMIUM SERIES / SGH 220 PLUS
Travelling Grate	Plummer Block Bearing	Premium grade high temperature grease for long life lubrication.	LONG LIFE PREMIUM SERIES
		Heavy duty, high load, high temperature long life bearing grease.	ULTRATAK™ MILL GREASE 700 EP
Kiln	Kiln Girth Gear Spray System	Premium grade sprayable fluid grease for heavy duty open gear that prevents scoring, scuffing, galling, clawing, pitting, sliding and slipping.	SPRAYLUBE 1250
		Premium grade sprayable fluid grease for heavy duty open gear that prevents scoring, scuffing, galling, clawing, pitting, sliding and slipping.	SPRAYLUBE 2500
	Thrust / Bucket Elevator / Support Roller Bearing	A sheer stable EP fortified water resistant grease for high load application.	SG 1000 M 50
	Sliding Surface of Track	Premium grade high temperature grease for long life lubrication.	LONG LIFE PREMIUM / SGH 220 PLUS

Product Specifications

GREASES

PRODUCT	THICKENER / OIL	BASE OIL VISCOSITY @ 40 °C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
ULTRAMILL GREASE CS HT	Calcium Sulfonate Complex / Mineral	460	#2	+300	-20 / +200
MFG 220®	Special Soap / Mineral	220	#2 / 3	180	-20 / +160

PRODUCT	THICKENER / OIL	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
SG 1000 M SS	Special Soap / Mineral	1000	#1	+300	-20 / +160
SG 1000 M 50	Special Complex / Mineral	1000	#2	300	-20 / +200
OGG 2500	Special Complex / Mineral	2500	#2	+250	-20 / +150
LONG LIFE PREMIUM	Lithium Complex / Mineral	220	#1, #2	+240	-20 / +160
ALCOPLEX 462	Aluminum Complex / Mineral	460	#1 / 2	+250	-10 / +200
ULTRAMILL GREASE PU PREMIUM	Polyurea / Refined Mineral Oil	460	#1 / 2	+260	-20 / +180
CRG 100 GRADE 1	Lithium / Mineral	460	#1	+180	-10 / +140
SGHT 600	Special Grade Carbon / Synthetic	100	#2	NA	-20 / +600
ULTRATAK™ MILL GREASE 460	Calcium Sulfonate Complex / Mineral	460	#2	+300	-20 / +200
MPG RED	Lithium Complex / Mineral	150	#2	+260	-20 / +160
PUG 9000 H	Polyurea/Mineral	220	#2	+250	-20 / +180
SG 460 SS	Special Complex / Mineral	460	#2 / 1	+330	-20 / +250
SG 320 SS	Special Complex / Mineral	320	#2 / 1	+330	-20 / +240
SG 680 SS	Special Complex / Mineral	680	#2 / 1	+330	-20 / +250
SPRAYLUBE 1000	Special Complex / Mineral	1000	#0	NA	-20 / +150
SPRAYLUBE 1250	Aluminium Complex / Refined Mineral	1250	#0 / 00	NA	-20 / +180
SPRAYLUBE 2500	Aluminium Complex / Refined Mineral	2500	#00	NA	-25 / +180
KOPAL®	Lithium Complex / Mineral	120	#1 / 2	+170	-30 / +1100
ULTRATAK™ MILL GREASE 700 EP	Lithium / Mineral	400	#2	+190	-20 / +150
SGH 220 PLUS	Special Complex / Mineral	320	#2	+300	-20 / +200

Accelerating industrial performances across the world

Designed by empirici designs



Efficient lubrication solutions to drive industries forward

Molygraph is India's leading engineered lubricants company. For over 32 years we have mastered the art of making high quality speciality lubricants for various industries & applications. At the core of each of our products lies our strong emphasis on Research & Development and a deep understanding of the client's expectations, which helps us deliver optimal solutions.

The consultative selling approach lays emphasis on value creation for our clients & has led Molygraph to be a front runner in the speciality Lubricants market in India as well as developing a global footprint with a presence in over 25 countries around the world.

BUSINESS VERTICALS

- Animal Feed
- Automotive Components & Manufacturing
- Cement
- Food
- Forging
- Metal Cutting & Forming
- Mining
- MRO
- Oil & Gas
- Pharmaceutical
- Plastic Moulding
- Pulp & Paper
- Punching & Stamping
- Steel
- Sugar
- Textile
- Wind Power

PRODUCT LINE

- Aerosol Sprays
- Cleaners & Degreasers
- Dispersions
- Lubricating Greases & Pastes
- Lubricating Oils
- Metal Forming Fluids
- Rust Preventives
- Solid Lubricants
- Thread Dope Compounds

PRODUCT APPLICATIONS

- Bearings
- Chain & Wire Ropes
- Conveyor Chains
- Forging & Extrusion
- Gears
- Metal Cutting & Grinding
- Metal Punching & Stamping
- Nuts, Bolts & Threads
- Sheet Metal Drawing
- Valves

