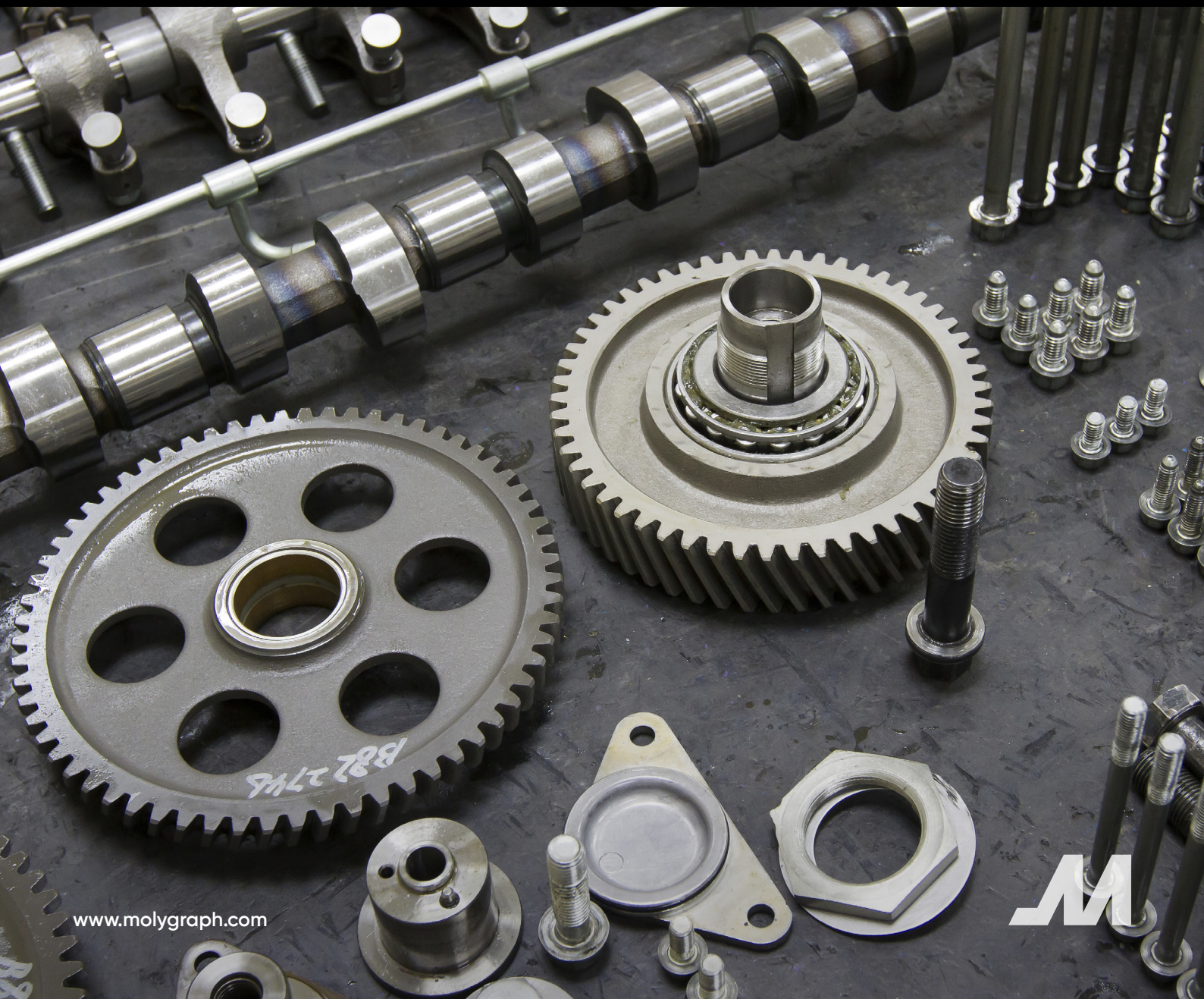


MRO

*Customized Range of
Lubricants for Maintenance,
Repairs & Operations for
the General Industries*



Solution driven diverse range of MRO products to minimize downtime, increase reliability while reducing costs.

The general engineering division at molygraph offers a range of speciality lubricant solutions for industrial electrical and mechanical maintenance. Molygraph has tailored solutions for bearings, chains, slides, wire ropes, gears, nuts and bolts and many other applications that are routinely exposed to harsh and severe conditions.

Molygraph's MRO range comprises of a comprehensive range of greases, antiseizes, synthetic gear oils, galvanised coatings, rust preventives, cleaners and degreasers which are available in bulk and aerosol form to optimised application and ease of use.

Molygraph's specialised formulations provide extended relubrication intervals and longer component life and thus ensure a more effective scheduled maintenance program.

Molygraph products are available in a wide variety of packing options. From 180 kg drums to 25 kg / 20 kg pails to 1 kg jars and 400 gms cartridges we have the right pack size to suit your needs.





01 | Greases

HIGH TEMPERATURE GREASES

Conventional greases cannot withstand continuous high operating temperatures. Molygraph's specially formulated grease chemistries give unsurpassed performance in critical high temperature applications. These greases provide superior oxidation properties, and high thermal stability.

Hot air blowers, conveyor chains bearings, furnace door hinges and applications exposed to high temperatures and corrosive atmospheres.



PRODUCT	BASE OIL THICKENER	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
NMG 460	Mineral / Inorganic	460	#2	Non-Melt	-25 / +250
FLUROTEMP 512	PFPE / PTFE	500	#2	NA	-30 / +260
PUG 9000 H	Mineral / Polyurea	220	#2	+250	-20 / +180
PUG 1000 H	Mineral / Polyurea	100	#2	+250	-20 / +180
PUG 9500 HS	Synthetic / Polyurea	400	#2	+280	-30 / +200
SGH 200 S	Mineral / CaSx	460	#2	+300	-20 / +200

EXTREME PRESSURE GREASES

Molygraph offers a full range of high performance greases for general applications that easily outperform conventional greases. These greases are fortified with Solid Lubricants, Extreme Pressure and AW additives. They reduce friction, wear and tear and offer good rust protection, that result in the reduction of overall maintenance costs.

Bearings & sliding mechanisms subjected to extreme pressure and high loads.



PRODUCT	BASE OIL / THICKENER	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
MFG 220®	Mineral / Special soap	220	#2 / 3	180	-20 / +160
EPLC	Mineral / Lithium	400	#2	+190	-20 / +150

MULTIFUNCTIONAL GREASES

Industrial applications contain a multitude of conditions and factors that pose a challenge to effective lubrication. Wide temperature ranges, high loads, water ingress, humidity and other extreme conditions can lead to lubrication failure. Molygraph has developed a range of Multifunctional greases that can withstand these challenging conditions and provide unparalleled performance.

Bearings and sliding surfaces exposed to heavy loads, water ingress and wide temperature range.



PRODUCT	BASE OIL THICKENER	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
MFG 220® PLUS	Mineral / CaSx	220	#2	+300	-20 / +200
MFG 460 EP	Mineral / CaSx	460	#2	+300	-20 / +200
MPG 2 RED	Mineral / Lithium Complex	150	#2	+260	-20 / +160
MFG 150 ST 3	Mineral / Lithium	100	#3	+180	-20 / +120
LSG 44 (M)	Silicone / Lithium	125	#2 / 3	+215	-40 / +200
ULTRASYN® PREMIUM	Synthetic / Sp.Lithium Soap	18-20	#2	+200	-60 / +140
ULTRASYN SHC 220 HT	Synthetic / Lithium Complex	220	#2	+270	-40 / +160
ULTRATAK™ MILL GREASE 460	Mineral / CaSx	460	#2	+300	-20 / +200
BRB 30	Mineral / Special Soap	120	#2	+180	-20 / +150
LONG LIFE 2 PREMIUM	Mineral / Metal Complex	150	#2	+250	-20 / +160
SUPER GREASE EP 2	Mineral / Special Soap	100	#2	+180	-20 / +120

SILICONE GREASES

Molygraph range of silicone greases are formulated with high-quality silicone fluids and thickeners to provide excellent lubrication, water resistance, and temperature stability which is used for O-rings, threads, and valve packing & other Industrial applications. It is non-toxic and odorless thus this type of grease is safe for use in food processing and packaging applications.

Mold release in plastic & rubber parts, sealant and lubricant for valves, O rings and as dielectric compound.



PRODUCT	BASE OIL / THICKENER	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
HVG 28	Silicone / Non Soap	#3	None	-40 / +260
HVG 28 / 1	Silicone / Inorganic	#1	None	-40 / +200
HVG 28 / 6	Silicone / Non Soap	#2 / 1	None	-40 / +260
HVG 14	Silicone / Inorganic	# 2 / 3	None	-40 / +260
HVG 21	Silicone / Non Soap	# 2 / 3	None	-40 / +260

HIGH SPEED GREASES

Designed to perform at high speed and low temperatures, where minimum friction / low torque is required during startup and running in. High DN value ensure that the grease at high speed does not get thrown off from the bearing.

Bearings and spindles subjected to high loads.



PRODUCT	BASE OIL THICKENER	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
ULTRASYN® 9090	Synthetic / Barium Complex	22	#2	+220	-40 / +150
HSG 9035 PREMIUM	Synthetic / Lithium	30 - 35	#2 / 1	+180	-50 / +140

OPEN GEAR GREASES

Open gears require specialised lubricants that withstand heavy loads, have enhanced adhesion and carefully selected solid lubricants. Our open gear greases prevent squeeze out and overcome pitting corrosion.

Open gear withstanding heavy load & corrosion.



PRODUCT	BASE OIL THICKENER	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	FOUR BALL WELD LOAD (KG)	OPERATING TEMPERATURE (°C)
SPRAYLUBE 1250 / 2500	Refined Mineral Oil / Alx	1250 / 2500	#0 / 00, #00	800	-25 / +180

WATER RESISTANT GREASES

Water ingress is always a factor in heavy industrial applications. Conventional greases are easily washed out resulting in frequent lubrication and high maintenance downtime. Molygraph's range of water resistant greases have excellent water washout properties and are resistant to coolants and provide good protection against rust and corrosion.

Bearings, gear couplings and applications where water resistance is required.



PRODUCT	BASE OIL THICKENER	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
SG 180 / 500 / 1000	Mineral / Lithium Calcium	180 / 500 / 1000	#2	+180	-20 / +150
EPLC WR	Mineral / Special Soap	320	#2	+175	-20 / +150

ROBOT GREASES

Molygraph's new range of greases for precision gears in robotic applications has been developed to meet the increasing demands and performance requirements for high performance robot maintenance. The Droid grease series provide optimised film formation and boundary lubrication and reduces down time.

Synthetic Robotic oils are also available in 150, 320 cSt viscosities.

Reduction gears & bearings in robotic assemblies.



PRODUCT	THICKENER	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
DROID® GREASE 0	Lithium	80	#0	+190	-40 / +130
DROID® GREASE 00	Lithium	80	#00	+195	-40 / +130

GREASES FOR CENTRALISED LUBRICATION SYSTEMS

Enclosed gearboxes, motors and other critical systems have a centralised lubrication mechanism. Normal greases have low pumpability and are thus unsuitable. Molygraph has a range of highly pumpable fluid greases that provide long life lubrication, good rust and corrosion protection and excellent water resistance.

Enclosed gearboxes, sliding, and other applications that require centralized lubrication.



PRODUCT	THICKENER	BASE OIL	NLGI GRADE	OPERATING TEMPERATURE (°C)
MPG EPLF SERIES	Special Soap	Mineral	#0 / #00 / #000	-20 / +120

CHAIN & WIRE ROPE GREASE

Lubrication of wire ropes is essential to promote longer service life and low maintenance costs. Molygraph’s wire rope lubricants reduce friction between strands and rope bends. They also protect strand surfaces against rust and corrosion due to its resistance to water and emulsification.

Wire ropes and chains.



PRODUCT	BASE OIL / THICKENER	BASE OIL VISCOSITY @ 40°C (cSt)	NLGI GRADE	DROPPING POINT (°C)	OPERATING TEMPERATURE (°C)
CRG 100 / 1	Mineral / Inorganic	460	#1	+180	-10 / +140
CRG 100 / M	Highly refined mineral oil / Inorganic	460	#00	NA	-10 / +180
CRG 100 M FLUID	Highly refined mineral oil / Inorganic	100	#00	NA	-10 / +180

02 | Pastes

ANTISEIZE FOR THREADS, NUTS & BOLTS

Threaded connections, nuts and bolts operating under high pressure and temperature tend to seize if effective lubrication is not provided. Molygraph’s antisieze compounds with a blend of different solid lubricants provides excellent anti seize and load carrying characteristics at high temperatures. It prevents threaded parts from galling, distortion and breaking. It also guards against rust and fretting corrosion.

Threaded connections, exposed to high temperature and corrosive environments.



PRODUCT	BASE OIL	SOLID LUBRICANT	SURFACE AREA COVERAGE (KG / M²)	OPERATING TEMPERATURE (°C)
KOPAL®	Mineral	Copper	45	-30 / +1100
KOPAL® 1000	Mineral	Copper / Graphite	40	-40 / +1100
WAP 100	Mineral	PTFE	40 - 45	-25 / +250

03 | Lubricating Oils

GEAR OILS

Industrial gear oils are expected to perform under conditions of high heat and heavy loads, and in environments often contaminated with dirt, debris and water. To combat these difficult conditions Molygraph offers a range of gear oils in different chemistries & viscosities, specially formulated for lubrication of enclosed gear boxes.

Enclosed gear boxes.



PRODUCT	BASE OIL	FLASH POINT (°C)	POUR POINT (°C)	COPPER CORROSION (RATING)
ULTRAGEAR SYN 150 / 220 / 320 / 460 / 460 / 1000	PAO	+220	-40	1a
LONG LIFE 0 / 00 (NLGI #0 & #00)	Mineral	+270	-20	1b

HIGH TEMPERATURE CHAIN OILS

Stenol, Molygraph's fully synthetic high temperature chain oil. The product has been formulated using the latest synthetic base oils, antioxidants, anti-wear & anti-rust additives to meet the demanding high temperature applications.

For conveyor chains exposed to high temperatures that require paint compatibility.



PRODUCT	BASE OIL	BASE OIL VISCOSITY @ 40°C (cSt)	FLASH POINT (°C)	COPPER CORROSION (RATING)
STENOL® PREMIUM 220	Synthetic	300	280	1b
STENOL® PREMIUM 100	Synthetic	165	280	1b

SILICONE OILS

Molygraph range of silicone oils provides a wide range of viscosity options to suit different industrial and automotive applications. Silicone oils are generally compatible with many materials, including metals, plastics, and elastomers.

Mold release agent, damping fluid & control cables.



PRODUCT	BASE OIL VISCOSITY @ 25°C (cSt)	FLASH POINT (°C)	POUR POINT (°C)	OPERATING TEMPERATURE (°C)
SF 350	350 ± 10%	325	-65	-60 / +200
SF 500	500 ± 10%	325	-65	-60 / +200
SF 1000	1000 ± 10%	325	-50	-40 / +200



04 | Rust Preventives, Cleaners & Degreasers and General Maintenance Products

GALVANISED COATINGS (GENERAL MAINTENANCE)

Molygraph's zinc and aluminium galvanised coatings have been developed to seal out moisture and prevent corrosion on metallic surfaces. They are highly resistant to salt water and acidic environments. They can replace hot dip coatings and can be used as a primer prior to painting.

Equipment and installations exposed to corrosive atmosphere especially sea water corrosion.




PRODUCT	APPLICATIONS
ZINCKOTE 	<p>Zinc based cold galvanised coating. Contains high purity zinc providing excellent adhesion and cathodic protection on substrate metals as well as protection from sea water corrosion.</p> <p> For make-up of galvanised items.</p>

RUST PREVENTIVES

Molygraph has developed a range of rust preventives that have given excellent performance in industrial applications. From heavy duty corrosion protectors to solvent based chemistries, we have every industrial application covered. Molygraphs corrosion protectors displace moisture effectively and thus provide protection from rust, corrosion abrasion and scratches.

Machine parts, forging components, cutting tools, machined components, precision tools.





PRODUCT		FILM TYPE	HUMIDITY CABINET TEST	PROTECTION PERIOD (MONTH)
NEVERUST® 20		Oily non-drying	> 1000 hours	12 (indoor), 3-6 (indoor)
NEVERUST® 530		Ultrathin Soft	> 720 hours	6 (indoor)
NEVERUST® HD 504		Wet Film	> 720 hours	6-9 (indoor), 3 (indoor)
NEVERUST® HD 506		Wet Film	> 720 hours	6-9 (indoor), 3 (indoor)
NEVERUST® HD 508		Wet Film	> 720 hours	6-9 (indoor), 3 (indoor)
NEVERUST® 308		Wet Film	> 720 hours	3-4 (indoor)

MULTIPURPOSE LUBRICANT (GENERAL MAINTENANCE)

Molygraph has an extensive range of lubricants used for maintenance and repair of day to day operating equipment. Our range of oils, sprays, bonded coatings and silicone compounds have been extensively used in challenging conditions and applications and have helped industries in considerable reduction in maintenance downtime and decreased costs.

Penetrating oil, rust loosener and anticorrosion fluid.





PRODUCT	DESCRIPTION	BENEFITS
EASYLUBE® / EASYLUBE® SUPER 	Multifunctional Lubricant	Excellent penetrating property. Loosens rust, carbon, dirt etc. Single multifunctional product that cleans, penetrates, lubricates and provides corrosion protection.  Dismantling of jammed bolts, nuts, screws, links, chains, hinges, valves and host of other electro mechanical fittings.

CLEANERS & DEGREASERS

Safe and effective cleaning should be a mainstay for industrial cleaners and degreasers. Molygraph's range of cleaners, degreasers have been a benchmark in the MRO industry. Our range of solvent and water based chemistries have been tailored to meet the demanding needs of customers and are suitable for a variety of applications.

Cleaning of electro mechanical assemblies, dies, molds, bearings and various other components.



PRODUCT	DESCRIPTION
ECOKLEEN PLUS 	Water based eco friendly cleaner & degreaser.
U-KLEEN 	Universal cleaner & degreaser.
U-KLEEN L 65 	High performance cleaner & degreaser.
MOLDKLEEN 	Mold cleaner and degreaser.
UILTRAKLEEN 99 	Concentrated multipurpose cleaner & degreaser.
SAFEKLEEN 	On line cleaner & degreaser.

Accelerating industrial performances across the world

Designed by empiric 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

