

A new breed of Robotic Axis Grease!

Robotic-00 grease is technically superior grease that provides a performance level **not** normally found in lighter viscosity greases. Robotic-00 uses the latest "Enhanced Polymer Technology" (E.P.T.)

- Quieter operation of gearbox. Robotic-00 reduces motor whine, improving the working environment.
- Superior corrosion protection. Robotic-00 uses a Calcium Sulphonate base that provides inbuilt resistance to oxidation.
- Superior anti-wear and extreme pressure (E.P.) properties.
- Water Washout. Robotic-00 offers very high resistance to removal by water spray in manufacturing's aggressive environment.
- High Dropping Point. Robotic-00 retains it's integrity at high operating temperatures.
- High Load Resistance. Robotic-00 protects equipment under high applied loads by reducing scuffing, scoring and seizure of contacting surfaces.

NLGI Grade	ASTMD217	00
Colour	VISUAL	TAN
Texture	VISUAL	SMOOTH
Dropping Point °C	ASTMD2265	318
Consistency, 60 strokes, mm/10	ASTMD217	280
Mechanical Stability, 10,000 Strokes, % change	ASTMD217	-1
Roll Stability, 50% water, % change in pen.	ASTMD1831	2.1
Timken OK Load, kg	ASTMD2509	27.2
4-Ball EP	ASTMD2596	
LWI, kgf		62
Weld Point, Kg		500
4-Ball Wear, mm	ASTMD2266	0.45
Rust Test, Rating	ASTMD1743	PASS
Salt Fog Corrosion, 1 mil dft, Hours	ASTMB117	>300
Copper Corrosion, Rating	ASTMD4048	1B
Wheel Bearing Leakage, Grams	ASTMD4290	1
Bearing Life Performance, Hours	ASTMD3627	180
Bomb Oxidation, PSI Drop, >10000h	ASTMD942	6
Water Washout @ 80°C, % lost	ASTMD1264	0.5
Oil Separation, % lost	ASTMD1742	0.1
Low Temperature Torque, -18°C, g-cm	ASTMD1478	
Start		1404
60 Min		247
Mobility @ 150 PSI, -18°C, g-min	US STEEL	19.3



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Robotic-00 combines the strength of Calcium Sulphonate with the added protection of our new E.P.T. (Enhanced Polymer Technology) and P.T.F.E.

Calcium Sulphonate has long been used as a detergent, anti-rust, anti-wear additive in general lubricants, but its use in greases is a comparatively recent and rapidly expanding development.

In standard grease, the thickener or soap holds the oil like a sponge, whilst the oil performs the lubrication. The calcium Sulphonate used in Robotic-00 is a part of the grease, and plays an important role in the lubrication process, enhancing the load carrying, water resistance, and anti-corrosion properties.

Calcium Sulphonate outperforms other grease soaps in key performance areas.

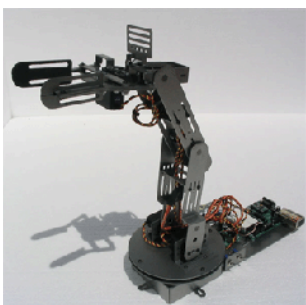


Comparison of Soap Properties		Al Complex	Ca Complex	Li Complex	Ca Sulphonate
Dropping Point	The temperature at which grease becomes soft enough to form a drop and fall.	+260°C	+260°C	+260°C	+300°C
Rust Protection		Good to Excellent	Fair to Good	Fair to Good	Excellent
Water Resistance (Water Washout)	The resistance of a lubricating grease to adverse effects due to the addition of water to the lubricating system.	Good to Excellent	Fair to Good	Good to Excellent	Good to Excellent
Oxidation Stability	Resistance of a petroleum product to oxidation and, therefore, a measure of its potential service of storage life.	Fair to Excellent	Poor to Good	Fair to Excellent	Excellent
Other	EP: That property of a grease that, under high applied loads, reduces scuffing, scoring and seizures of contacting surfaces. AW: Additives which form thin, tenacious films on highly loaded parts to prevent metal-to-metal contact.	EP grades available	EP & AW inherent	EP grades available	EP & AW Inherent



P.T.F.E. belongs to the fluoropolymer family. Fluorine has very low surface energy, giving P.T.F.E. its low coefficient of friction, Fluorine is chemically inert. This provides P.T.F.E. with:

- A low coefficient of friction.
- Powerful bonds which provide resistance to fracture and high thermal stability, effective at extremes of high and low temperatures.
- P.T.F.E. Fluorine atoms are larger than its carbon atoms and spiral around the carbon back bone. This prevents other atoms penetrating the shield and brings rigid stability.
- As Fluorine is chemically inert, other chemicals cannot attack the carbon backbone and weaken the molecular structure.
- High dielectric strength.



Property	ASTM Standard	PTFE
Coefficient of Friction	ASTMD1894	
• Static		• 0.12-0.15
• Dynamic		• 0.05-0.10
Melting Point, °C [°F]	ASTMD3418	• 327 • [621]
Chemical/Solvent Resistance,	ASTMD543	Excellent
Dielectric Strength, V/μm	ASTMD570	18
Water Absorption, 24h, %	ASTMD149	<0.01

Proudly manufactured by **anglonol** Superior Lubricants