

1500 Paper Mill Gold

Calcium Sulfonate Complex technology has moved to the pulp and paper mill industry, developing a product that surpasses the competitive greases in the industry. Calcium Sulfonates, which have always been known for the best anti-corrosive qualities, are combined with a high viscosity base oil to produce the best in paper mill lubrication.

At the press roll, grease must withstand high E P conditions, water washout and remain mechanically stable. The table below illustrates the difference between 1500 PMG and the most common competitive product.

Mechanical Stability of Grease in Paper Mills

<u>Test</u>	<u>Lithium Complex</u>	<u>Calcium Sulfonate</u>
<u>Complex</u>		
D217 Penetration, 60 Strokes	280	280
Worked 10,000 Strokes	282	282
Worked 100,000 Strokes	289	289
Base Oil	Mineral	Mineral
D1831 Roll Stability, % Of change (4 Hr Duration)		
No Water		
25° C	+9.6	0.0
77° C	+9.6	+3.6
+50% Water		
25° C	+9.6	+3.9
77° C	+24.3	+0.0
+50% Mill Water		
25° C	+13.5	+5.0
77° C	+18.9	- 1.4

+ = Softer

At the dryer end, where temperature is 50° C and humidity is 100%, 1500 PMG offers better corrosion protection and higher dropping points than competitive products.

NLGI Grade: 2
Color: Gold

Thickener Type: Calcium Sulfonate Complex
Texture: Smooth/Tacky

Test	ASTM Method	Typical Result
US Steel Mobility Test @ 0° F		.12 grams / sec.
Roll Stability, % change	D-1831	0
Modified 100 ml water, 200° F, % change		-2.5
DI Rust Protection, 48h/52C	D-1743	PASS
Dropping Point, ° F (° C)	D-2265	550 + (288)
4-Ball Wear Scar, mm	D-2266	0.4
4-Ball Weld Point, Kgf	D-2596	500
Timken OK Load, lbs.	D-2509	65
Water Washout @ 100° F, % @ 175° F, %	D-1264	N/A 2.53
Copper Strip Corrosion Rating	D-942	1A
Oil Separation, % Loss	D-1742	0.2
Base Oil Characteristics		
Vis @ 40° C, cSt	D-445	281
Vis @ 100° C, cSt	D-445	22.1
Vis @ 100° F, SUS	D-2161	1500
Vis @ 210° F, SUS	D-2161	110
Viscosity Index	D-2270	97
Flash Point, °F (°C)	D-92	565 (296)
Pour Point, °F (°C)	D-97	25 (4)