



## Gear Lubricants Product Data

Joy gear lubes are a family of high quality synthetic lubricants based on polyalphaolefin (PAO) base stocks, some containing extreme pressure (EP) additive technology. These lubricants provide outstanding thermal stability and high load carrying capacity in underground mining environments.

### Advantages

- Maximum protection of gears and bearings against wear and shock loading
- Good thermal and oxidation stability
- Corrosion protection for all internal components
- High viscosity index for consistent performance over a wide range of operating temperatures
- Tested compatibility with seal materials used inside all Joy gear cases

Komatsu offers four different gear lubricants for a variety of product applications. See the chart below for each product and its recommended applications.

	SEP320J	S150J	S460J	SEP680J
<b>Gear Reducer</b>				
<b>Shearers</b>				
Ranging Arms	X			
Haulage Drives	X			
Lumpbreakers	X			
<b>AFC</b>				
EP, BP & Stageloader Cases	X			
Tail Transfer Drive				X
<b>Continuous Miners</b>				
Cutter Case	X			
Gathering Head Cases	X			
Gathering Head Pots	X			
Traction Cases	X			
Traction Planetaries	X			
Rear Conveyor Drive Cases	X			
<b>Shuttle Cars</b>				
Traction Primary Cases	X			
Wheel Units	X			
Conveyor Cases (worm gears)			X	
<b>Battery Haulers</b>				
Traction Cases		X		
<b>Fct</b>				
Belt Drives	X			
Traction Primary Cases	X			
Traction Secondary Cases	X			
Lumpbreakers	X			
Cooling Pump*				
<b>Chain Haulage Systems</b>				
Conveyor Drives	X			
Breaker Drives	X			
Traction Cases	X			
<b>Feeder-Breakers</b>				
Conveyor & Breaker Cases (with helical gears only)	X			
Conveyor & Breaker Cases (with worm gears)			X	
Traction Planetaries	X			

\*Contact your Komatsu Mining customer service representative for more information

Property	Test Method	S150J	SEP320J	S460J	SEP680J
ISO Grade	ASTM D2422	150	320	460	680
AGMA Grade	AGMA 9005-E02	4	6EP	7	8EP
EP Additives	-----	no	yes	no	yes
Viscosity, 40°C, cSt	ASTM D-445	152	328	486	694
Viscosity, 100°C, cSt	ASTM D-445	20	36	49	65
Viscosity Index	ASTM D-2270	152	154	160	166
Flash Point, °C (°F)	ASTM D-92	249 (480)	266 (511)	291 (555)	262 (504)
Pour Point, °C (°F)	ASTM D-97	-43 (-45)	-39 (-39)	-39 (-39)	-39 (-39)
4-Ball Weld Load, kg	ASTM D-2783	160	250	160	250
FZG Scuffing, Pass (A/8.3/90)	ASTM D-5182 (DIN 51354)	11	>14	---	>14
Foam Tendency, ml Seq I, II, and III	ASTM D-892	0/0/0	0/0 10/0 0/0	0/0/0	20/0 20/0 20/0
Rust Protection	ASTM D-665 A/B	pass	pass	pass	pass
Copper Corrosion, max (3 hr 100°C)	ASTM D-130	1a	1b	1b	1b
Oxidation Stability Viscosity Increase	ASTM D2893 (312 hr @ 121°C)	2.3%	2.8%	---	1.7%
Density, lb/gal @ 60°F kg/l @ 15.6°C		7.353 0.881	7.197 0.863	7.147 0.857	7.172 0.860
Micropitting FLS	FVA 54	---	High	---	High

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