



**Fluent Conveyors**

**Lubrication Guide**

## CONVEYOR LUBRICATION GUIDE

### What Type of Oil Do I Use In My Conveyor Motor



### Nord Gear Corporation Recommendations:

**VG220-MIN-EP Mineral Oil with EP Additive, 32°F to 104°F**  
**VG220-SYN-PAO-EP Synthetic Polyalphaolefin Oil with EP Additive, -31°F to 140°F**

The oil fill volume is specific to your gearcase.

Proper gearbox lubrication is essential in order to reduce friction, heat, and component wear. Lubricants reduce heat and wear by inserting a protective “fluid boundary” between mating parts and preventing direct metal-to-metal contact. Lubricants also help prevent corrosion and oxidation, minimize foam, improve heat transfer, optimize reducer efficiency, absorb shock loads, and reduce noise.

If the gear unit is filled with mineral oil, the lubricant should be replaced at least after every 10,000 operating hours or after every two years. If the gear unit is filled with synthetic oil, the lubricant should be replaced at least after every 20,000 operating hours or after every four years. Often gear reducers are exposed to extreme ambient conditions, hostile environments, wet conditions, or dirty and dusty operating areas. Especially in these situations, it is important to establish a condition-based oil service interval.

**The 92 Series Helical Bevel gearbox sizes SK92072, SK92172 & SK92372 have no vent or drain plugs. They are filled with synthetic oil so the units are “Lubed for Life”.**

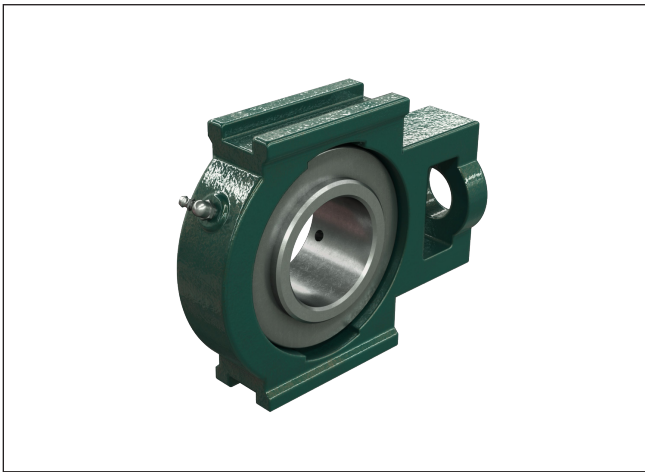
#### STANDARD OIL – ISO VG220

Ambient Temperature	Formulation
20°F to 104°F [-5°C to 40°C]	Mineral

#### TYPICAL OILS

Viscosity ISO NLGI	Formulation	Service Temperature Range	Mobil™	Shell	Castrol	KLUBER	bp
VG 460	Conventional Mineral	20°C to +50°C 68°F to +122°F	Mobilgear 634	Omala 460	7EP	Klüberoil GEM 1-460	Energol GR-XP 460
	Synthetic PAO	-30°C to +80°C -22°F to +176°F	Mobilgear SHC 634	Omala 460 H D	Isolube EP 460	Klübersynth EG 4-460	N/A
VG 320	Conventional Mineral	0°C to +30°C 32°F to +86°F	Mobilgear 632	Omala 320	6EP	Klüberoil GEM 1-320	Energol GR-XP 320
	Synthetic PAO	-35°C to +80°C -31°F to +176°F	Mobilgear SHC 632	Omala 320 HD	Isolube EP 460	Klübersynth EG 4-320	N/A
VG 220	Conventional Mineral	-5°C to +40°C +20°F to +104°F	Mobilgear 630	Omala 220	5EP	Klüberoil GEM 1-220	Energol GR-XP 220
	Synthetic PAO	-34°C to +80°C -30°F to +176°F	Mobilgear SHC 630	Omala 220 HD	Isolube EP 220	Klübersynth EG 4-220	N/A
VG 150 & VG 100	Conventional Mineral	-15°C to +25°C 5°F to +77°F	Mobilgear 629	Omala 100	4EP	Klüberoil GEM 1-150	Energol GR-XP 100
	Synthetic PAO	-37°C to +10°C -35°F to +50°F	Mobilgear SHC 629	Omala 150 HD	Isolube EP 150	Klübersynth EG 4-150	N/A
VG 68	Conventional Mineral	-15°C to +25°C 5°F to +77°F	Mobilgear 626	Omala 68	2EP	Klüberoil GEM 1-68	Energol GR-XP 68
	Synthetic PAO	-40°C to +10°C -40°F to +50°F	Mobilgear SHC 626	N/A	Isolube EP 68	N/A	N/A
VG 32	Synthetic PAO	-40°C to +10°C -40°F to +50°F	Mobilgear SHC 624	N/A	N/A	Klüber-Summit HySyn FG-32	N/A

## BEARINGS



Lubrication recommendations are intended for standard products applied in general operating conditions. For modified products, high-temperature applications, and other anomalous applications contact product engineering at [engineering@fluentconveyors.com](mailto:engineering@fluentconveyors.com)

Successful operation is dependent upon adequate lubrication. Precaution should be taken during handling and recycling grease, oil or water-glycol mixtures.

**Table 2–Lubrication Guide**  
Use a No. 2 Lithium complex base grease or equivalent\*

Hours Run Per Day	Suggested Lubrication Period in Weeks							
	1 to 250 RPM	251 to 500 RPM	501 to 750 RPM	751 to 1000 RPM	1001 to 1500 RPM	1501 to 2000 RPM	2001 to 2500 RPM	2501 to 3000 RPM
8	12	12	10	7	5	4	3	2
16	12	7	5	4	2	2	1	1
24	10	5	3	2	1	1	1	1

\*For E-Z Kleen and Ultra Kleen series bearings, use an aluminum complex base grease.

## OILERS



The importance of always having oil in your electric oiler is almost one of the most important maintenance to-do items you should be aware of. In fact, if you are keeping your chain lubricated well, you can potentially extend the life of your chain up to 30 times.

### Recommended Oil Grade Based On Environmental Conditions

SAE 10 for -20°F to +80°F

SAE 40 for +30°F to +140°F

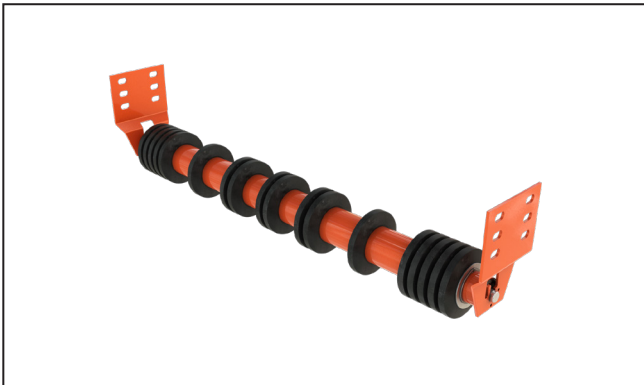
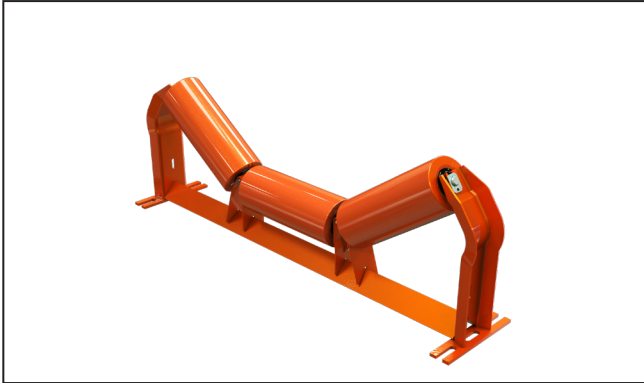
SAE 20 for +10°F to +110°F

SAE 50 for +40°F to +150°F

SAE 30 for +20°F to +130°F

Fluent recommends using a nondetergent petroleum base oil. Antifoaming, Antioxidizing, and extreme pressure additives can be helpful in prolonging the life of your chain.

## CARRYING & RETURN IDLER



## Maintenance

### Actions

1. Check
2. Clean
3. Re-grease
4. Replace

### General Maintenance Schedule

Description	Action
<b>Daily</b>	
Worn rollers	1
Seized rollers	1
Debris buildup	1

## NOTICE

- Do not over-grease idler rollers. This will result in damage to idlers/idler rollers.
- Ensure all fittings are cleaned prior to and after greasing.
- Re-lubrication should not be performed if the outside temperature is below freezing. Doing so may result in internal damage to idler rollers.
- Idlers should be greased until it is visible through grease relief.

**Note:** Idler rolls are filled with grease at the factory. Idlers that have been stored for longer periods of time need to be purged and refilled with grease.

**Note:** Recommended to use Shell Retinax HD Grease, or an equivalent heavy-duty grease when re-greasing.

Description	Action
<b>Daily</b>	
Idlers roll freely	1 2
Wear and/or damage to Idlers	1
Material buildup	2
<b>Every 800-1000 Hours (Dry Material Being Conveyed)</b>	
Idlers	3
<b>Every 100-200 Hours (Wet Material Being Conveyed)</b>	
Idlers	3
<b>Every 40 Hours (Operating In Extreme Conditions)</b>	
Idlers	3
<b>As Needed</b>	
Worn Idlers	4

## SLEWING BEARINGS



Rolling element anti-friction bearings rely on ball and raceway surface lubrication. A thin film of oil or grease should be used. Be sure not to contaminate the lubricant used in the bearings. Our standard open (unsealed) bearings are shipped with only a light oil as a corrosion inhibitor. You must lubricate these bearings with the appropriate grease or oil for your application. Sealed bearings are shipped as standard practice with 20% - 30% fill of MIL-G-81322 grease.