

**LUBRICATION**

**Proper lubrication is essential for adequate bearing life! A bearing cannot survive without it.**

**AMI Standard Lubricants:**

AMI Bearings have an initial fill of lubricant when we manufacture them, therefore it is not necessary to lubricate prior to their initial operation. Below is a list of our standard used lubricants and their basic physical properties.

**Table 10**

APPLICATION	General Purpose	High Temperature		Cold Temperature	Free Spinning		Food Grade
PRODUCT NAME	Shell Alvania #3	Yuken Super-Lube #3	Kluber Noxlub BF4026	Shell AeroShell #7	Mobil Velocite 10	Amsoil AM-1	Citgo Clarion HTEP 2
<b>PHYSICAL PROPERTY</b>							
Lubricant Type	Grease	Grease	Grease	Grease	Oil	Grease	Grease
Color	Amber	-	White	Amber	-	Red	Off-White
NLGI Grade	3	3	2	2	N/A	1	2
Thickener Type	Lithium	Calcium Complex	PTFE	Microgel	N/A	Lithium Complex	Aluminum Complex
Base Oil Type	Mineral Oil	Silicone	PFPE	Synthetic Diester	Mineral Oil	PAO + Ester	Mineral Oil
Base Oil Viscosity @ 40°C	98 cSt	-	390 cSt	10.3 cSt	22 cSt	130 cSt	954 cSt
Base Oil Viscosity @ 100°C	9.4 cSt	-	39 cSt	3.1 cSt	4 cSt	16.5 cSt	101 cSt
Operating Temperature Range	-13°F ~ 265°F (-25°C ~ 130°C)	-4°F ~ 400°F (-20°C ~ 200°C)	-20°F ~ 500°F (-30°C ~ 260°C)	-100°F ~ 300°F (-70°C ~ 150°C)	-20°F ~ 250°F (-30°C ~ 120°C)	-40°F ~ 425°F (-70°C ~ 150°C)	-10°F ~ 325°F (-12°C ~ 160°C)

We have many other lubricants available as well, including several solid lubricant choices. Additionally, we can change the grease in most of our bearings to anything you specify. Consult with AMI for recommendations.

**Relubrication Intervals:**

**Table 11**

Bearing Operating Temperature	Environmental Condition		
	Clean	Dirty	Washdown or Extremely Dirty
°F			
Up to 122	12 months	6 months	3 months
Up to 158	6 months	2 months	1 month
Up to 212	3 months	2 weeks	1 week
Up to 248	6 weeks	1 week	3 days
Up to 302	2 weeks	3 days	daily

**LUBRICATION (continued)**

**Compatibility:**

Beware of Mixing Greases!

When two incompatible greases are mixed, either one of two things can happen. Either the mixture hardens and will not release any of the oil or the opposite effect; the mixture softens and releases all of the oil.

In either case, the end result is basically the same; there is no means to effectively lubricate the bearing.

Two good greases, when mixed together can make one very bad grease!

It is recommended to use the same type of grease that was originally supplied with the bearing. When changes in grease type are necessary, please consult your lubricant supplier or AMI engineering staff to determine the compatibility of the mixture

**Table 12**

C = Compatible B = Borderline I = Incompatible	Aluminum Complex	Barium	Bentonite Clay	Calcium	Calcium 12-Hydroxy	Calcium Complex	Calcium Sulfonate	Lithium	Lithium 12-Hydroxy	Lithium Complex	Polyurea	Sodium
	Aluminum Complex	C	I	I	I	C	I	B	I	I	C	I
Barium	I	C	I	I	C	I	B	I	I	I	I	I
Bentonite Clay	I	I	C	C	C	I	B	I	I	I	I	I
Calcium	I	I	C	C	C	B	I	C	B	B	I	I
Calcium 12-Hydroxy	C	C	C	C	C	B	B	C	C	C	I	I
Calcium Complex	I	I	I	B	B	C	C	I	I	C	C	I
Calcium Sulfonate	B	B	B	I	B	C	C	C	C	C	B	I
Lithium	I	I	I	C	C	I	C	C	C	C	I	B
Lithium 12-Hydroxy	I	I	I	B	C	I	C	C	C	C	I	I
Lithium Complex	C	I	I	B	C	C	C	C	C	C	I	B
Polyurea	I	I	I	I	I	C	B	I	I	I	C	I
Sodium	I	I	I	I	I	I	I	B	I	B	I	C