



Unique Technologies Associates



PRODUCT COMPARISON

Cobra Solid Lubricants™	MicroPoly, SKF Solid Oil (W-64/PolyOil), Volution, JSH, MPL Concepts, NTN	High Temp Greases
Dry, Graphite Based, Oil Free Lubricant	Microporous polymers consists of polymers (typically UHMW), additives and free oil at 65%/weight	May use PFPE base oils and PTFE thickeners
Consistent, permanent lubrication over the life of the bearing - low or no maintenance	Permanent lubrication	Requires Preventative Maintenance Process
Resistant to water, steam, and chemicals; no seals are required	Limited chemical resistance	Limited chemical resistance and often properly sealing is required.
Low torque, free spinning	High torque (not free spinning)	High torque (not free spinning)
Effectively seals against dust, dirt, and debris	The free oil may attract contaminants to the surface	Even with seals may attract contaminants
Continuous temperature range of -150° to 660°+ F	Limited tempearture range base on the lubricant specifications	Temperature range may be from -105° to 750° F. Oil viscosity and film thickness can be affected by temperature.
NO outgassing in a vacuum	May not be suitable in a vacuum environment	May outgas in a vacuum
Excellent resistance to radiation	Conventional lubricants can be problematic in a radiation environment	May not be suitable in a radiation environment
Certified NSF H-1 Food Grade	Utilizes food grade lubricants to meet NSF H-1 certification	May be NSF H-1 certified with the proper base oil
Will not wash out, even in solvents	Solvents and wash down can remove the lubricant within the polymers	Most greases will be effected by solvents and chemicals
Meets the definition of an environmentally "green" product	Lubricant leakage may require clean up	Requires proper disposal methods
Maintenance free; static film does not require motion to provide a lube film	Maintenance free; dynamic lube film dependent on operating temp., speed, and lube viscosity	Grease compatibility often requires system purging. Dynamic lube film dependent on operating temp., speed, and viscosity
CSLs are dry and oil free - no leakage	Oil may leak from the polymer	Greases may leak leading to environmental and safety issues. Leakage can contribute to end product contamination.