Recommended procedure when changing from mineral oils, synthetic PAO based or oil-soluble PAG based oils to Mobil Glygoyle™ Series (PAG based) oils.

Why is a flushing procedure needed?

Although the base oils in the Mobil Glygoyle Series do not chemically react with mineral oils, PAO oils, or oil-soluble PAG lubricants, they are not miscible (are not soluble in each other and will not form a clear mixture), which can create an emulsion upon mixing. As a rule of thumb for most industrial equipment, about 15% of an oil remains after it is drained. Refilling with different oil without performing a proper flush procedure can create an emulsion which will prevent optimal performance of the new lubricant. In the case of mixing synthetic PAO based oil with a PAG based oil such as Mobil Glygoyle™ 460 (used in all SE Encore Series products), the emulsion will ineffectively lubricate the gear set and result in overheating of the speed reducer.

General Flushing Procedure

1. Drain old oil from the reservoir while the oil is still warm. If standing oil remains in the reservoir or equipment, remove as much as possible with a vacuum hose.

2. Refill the reservoir with flushing oil of viscosity grade as similar as possible to the eventual fill oil. A linear diester oil such as Mobil Rarus 800 series is the preferred flushing oil as it is soluble in the original oil and Mobil Glygoyle. If this type of oil is not available, then alkyl benzene-based Mobil Zerice™ S Series can be used. If neither of these products are available, then the Mobil Glygoyle fill oil can be used as a flushing oil. Operate the speed reducer for approximately 1 hour.

3. Drain the first flush oil from the reservoir while the oil is still warm. If standing oil remains in the reservoir, remove as much as possible with a vacuum hose.

4. Refill the system with the desired viscosity of Mobil Glygoyle Series oil chosen for the application. At this time, as much as 2-3% of the initial oil may still remain in the system. Operate the speed reducer again for approximately 1 hour.

5. Drain the second flush (the Mobil Glygoyle) oil from the reservoir while it is still warm.

6. Refill the system with the desired viscosity of Mobil Glygoyle Series oil and operate the speed reducer for approximately 1 hour. Take an oil sample and observe for any emulsion, or debris. If the oil is clear and bright (a slight haze is acceptable) then continue normal operation and top off as needed. If significant emulsion or debris remains, then conduct one more drain and flush.

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