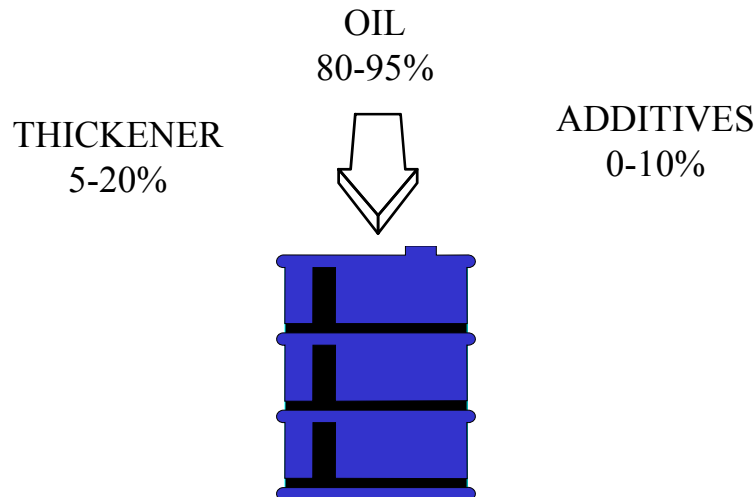


Grease- How do they work? Tip of Week

To understand how greases work you must first understand what components make up a grease. The three primary components of grease are:



With oil being the largest component in a grease, the viscosity and type of oil is very important. Just as you pick an oil for an application you should also understand the oil component for a grease application because **it is the oil that provides the lubrication needed in an application.**

It has been said that a grease acts much like a sponge that has been saturated with a liquid. In this analogy, the thickener is the sponge and the liquid is the oil and additive mixture. When pressure or temperature is applied to a sponge, the liquid will be released. Conversely, when pressure is taken away from a sponge, some of the liquid will soak back into the sponge but usually not all. It is the releasing of the oil in a grease that provides lubrication to prevent metal to metal contact. Over time after prolonged service, a grease will release all of the oil and only the thickener will remain. The thickener alone will not provide adequate equipment protection.

Before a grease releases all of the oil from the “sponge” or thickener it is critical to replenish the grease in service or “regrease” the component. There are calculations to determine regreasing frequencies and the amount to use when regreasing. Lard Oil Company can help you determine the amount and frequency of regreasing intervals for optimum equipment performance.

