Additives are chemicals used to improve performance characteristics of base oils. There are many types of additives depending on the oil application. In industrial oils, additives are typically less than 1% of the blend whereas engine oils typically contain around 10% to 20% of the blend as additives.
Below are examples of common additives:

- ***Anti-oxidant*** – Prolongs the lubricant life by preventing rapid breakdown due to extreme variations in temperatures, over usage, water contamination, and dirt contamination and oxidization. Oxidization can cause various problems such as varnish and sludge buildup, leading to scarring of internal equipment components.
- ***Anti-wear*** – Chemicals attach to the metal creating a slippery surface thatus help in preventing wear. This is especially important during engine start up.
- ***VI improver*** – These are polymers that help increase the protection by allowing the oil to flow easier in cold temperatures and protect from excessive thinning during temperature high operation. VI -improvers allow for a wider operating temperature range.
- ***Dispersants*** – This additive helps suspend small contaminant particles and prevents them from forming into larger particles. Larger particles could lead to sludge, varnish and wear.