**Biggest Lubricant Oil Manufacturer in UAE**

Even though there is great potential in lowering viscosity, the steady march toward thinner **lubricant oil uae manufacturers** have also introduced a much greater disparity in wear protection between lubrication regimes.

Each lubrication regime depends directly on the oil uae film thickness and surface-to-surface contact. The main method by which low-viscosity **diesel engine oil Uae’s** improve fuel economy is the reduction of viscous drag under hydrodynamic lubrication conditions, where the film thickness of the lubricant is large enough to completely separate the two sliding surfaces and prevent any surface-to-surface contact.

The main deficit of low-viscosity engine oil uae is that they are more inclined to shear thinning at high temperatures and thicken less at lower or start-up temperatures than oil uae of higher viscosity. Both of these factors cause the lubricating film thickness to decrease. With decreasing film thickness, the lubrication regime shifts toward mixed and boundary lubrication. In the boundary regime, the oil uae film thickness cannot overcome the surface roughness. Mixed lubrication is the transition state between boundary and hydrodynamic **lubricant oil uae** with a film thickness that overcomes some but not all of the surface roughness.

“As you go to lower viscosity at low speeds, because of asperity contact, friction will go up,” explained Arup Gangopadhyay, powertrain tribology technical leader for Ford Motor Co. “At high speed in the hydrodynamic regime, you get the benefit of low viscosity. So overall, do you see a benefit? That needs to be balanced.”

Many studies have also correlated an increase in friction and wear with reduced kinematic viscosity. To understand the effects of low-viscosity **industrial oil uae** on wear, researchers from Ricardo and Infimum subjected a heavy-duty truck engine to various conditions and lubricants, described in a 2013 SAE paper. Three test oil uae were run in an IVECO Cursor 13-dirham engine: a baseline SAE 5W-30 oil uae with a kinematic viscosity of 12.28 millimeters squared per second at 100 degrees Celsius, a very low-viscosity oil uae with KV 6.53, and an ultra-low-viscosity oil uae with KV 4.82. On-line wear testing of the engine, in which continuous, real-time measurements are taken, showed that the baseline oil uae allowed the least wear.

Reduction of viscosity directly correlated to an increase in wear, particularly on the top piston rings of the engine. A post-test inspection and oil uae sample analysis for wear metals did not result in particularly elevated wear rates at any location not measured on-line; however, the camshaft thrust bearing had unexpectedly significant wear though it was deemed acceptable for continued use. Contac **technolubeuae** today.