

A Strong History, A Strong Future

Early Synthetic Lubrication History

Experimentation with synthetic lubrication dates back as far as 1877, when the prominent chemist team of Charles Friedel and James Mason Crafts successfully used aluminum trichloride as a catalyst, creating the first known synthesized hydrocarbons. It wasn't until 1929 that Standard Oil Company of Indiana commercialized the process, but the endeavor was unsuccessful due to lack of demand.

The Zurich Aviation Congress became interested in the development of ester-based lubricants in 1937. The Germans, frustrated by the failure of petroleum lubricants during the cold weather of the Battle of Stalingrad, prepared and evaluated more than 3,500 esters between 1938 and 1944. Meanwhile, in the United States, the first diester base stocks (a compound using two ester groupings) were in development at the Naval Research Laboratory.

By 1947, Great Britain had discovered the benefits of using diesters as lubricants in turboprop aircraft. Later, with the advent of highly sophisticated jet engines, research and development in the area of synthetic lubricants really took off, and various synthetic formulations were developed to meet the demands of the new engines.

Synthetic Oil for Internal Combustion Engines

The clear benefits of synthetic-based lubricants in jet engines impressed lieutenant colonel and jet fighter squadron commander Al Amatuzio, and in the early 1960s, he became interested in developing a synthetic motor oil for use in internal combustion engines. Given the significant differences between a jet engine and an internal combustion engine, it was a massive task, but Amatuzio was up to the challenge. By 1972, after several years of intense research and development, AMSOIL Synthetic Motor Oil was born, and it became the first 100 percent synthetic-based motor oil to pass American Petroleum Institute (API) service requirements.

When it first hit the market, AMSOIL was far ahead of its time, and Amatuzio found it difficult to market such a revolutionary product. But with the complexity of engines increasing, forcing smaller engine designs and ever-increasing engine operating temperatures, engines demanded a superior lubricant. With the aid of the AMSOIL Dealer network,

people began to discover it in AMSOIL. Competitors were forced to take notice, and soon industry giants Mobil, Quaker State, Castrol, Valvoline and Pennzoil were marketing their own synthetic variations.

Strong Future for Synthetics

Today, synthetic lubricants have become mainstream. Modern vehicles and equipment demand the protection and performance that only a synthetic can deliver. Synthetic lubricant sales are especially strong in Europe, where they account for approximately one third of lubricant sales and are used as factory-fill lubricants in one third of new vehicles sold there. Interest in the U.S. has also spiked in recent years.

The vehicles of the future will continue to have smaller engines, stricter emissions requirements, higher performance characteristics and better fuel economy. According to R. David Whitby of Pathmaster Marketing, synthetic lubricants will show continued growth in the years ahead as the market continues to demand higher-performing lubricants. "I'm not just talking about trucks and cars on the road, but also gearboxes, industrial hydraulics and other equipment," says Whitby.

A new study from the Freedonia Group also forecasts strong growth for synthetic lubricants in the coming years, with demand for synthetic engine oils rising 7.3 percent per year to 2013.

"Engine oils and hydraulic and transmission fluids will experience the fastest gains as synthetics finally begin to penetrate the conservative medium and heavy duty truck market, and as increasing new vehicle lubricant performance requirements and growing consumer acceptance further expand synthetics' share of the light vehicle market," stated the research firm.

AMSOIL offers a full line of top-performing synthetic lubricants and is poised to capture ever-increasing market share as customers demand higher-quality lubrication protection for their vehicle and equipment investments.

