



The First in Synthetics®

Boost Profits With AMSOIL



Higher Profits | Full Line of Products
The First in Synthetics

What Are Synthetic Lubricants?

Engines, transmissions and other mechanical systems contain hundreds of moving parts. Though the metal surfaces of these parts look smooth, they are actually full of microscopic peaks and valleys. When the peak of one surface touches its mating surface, it causes damage. Damage may lead to component failure or wear. Failure prevention and wear reduction are the primary functions of lubrication.

Refined Oils

Conventional oils – the oils most people are familiar with – are refined from crude oil. Refining is a process of physically separating light oil components from heavy ones.

Crude oil contains a full range of different kinds of molecules. Many are similar in weight but not in structure. The refining process cannot distinguish such molecules, so a wide assortment of molecules is present in a finished lubricant made from crude oil stocks.

Some crude oil molecules are not beneficial to the lubrication process. For example, paraffin causes refined lubricants to thicken and flow poorly in cold temperatures. Molecules containing sulfur, nitrogen and other elements invite the formation of sludge and other products of lubricant breakdown, especially in high-temperature applications. Sludge and breakdown products can significantly increase wear rates.

The assorted molecules of refined lubricants also have different shapes, making lubricant surfaces irregular at the molecular level. As lubricant layers flow across one another during the lubrication process, these irregularities can create friction, which consumes power, reduces efficiency and increases heat and wear.

Synthetic Lubricants

Synthetic lubricants are chemically engineered from pure chemicals rather than refined from crude oil. That gives them significant advantages over refined oils.

Pure

The base stocks from which synthetic lubricants are made contain no sulfur, nitrogen or other elements that invite the formation of sludge and other products of lubricant breakdown. Synthetic lubricants are designed for use in higher temperatures than refined lubricants. Their resistance to breakdown also allows them to be used longer than refined lubricants. Lubricated systems stay cleaner and can last longer with synthetics.

Uniform

The base stocks from which synthetic lubricants are made feature uniform and smooth molecular structures, which ensures low friction as lubricant layers slide across one another. Reduced friction increases energy through-put for greater fuel efficiency and power, and reduces heat and wear for long equipment life.

Molecular uniformity also helps synthetics resist thinning in heat and thickening in cold, which helps them protect better than refined oils over a system's operating temperature range and helps ensure secure sealing.

Designable

Many different kinds of base stocks may be used to create synthetic lubricants, allowing a synthetic to be designed for virtually any application. Some base stocks are ideal for use in extremely cold environments, others are perfect for use in extreme heat. Refined oils simply do not offer the design flexibility synthetics offer.

The designability of synthetics also allows them to be tailored very specifically to the needs of everyday applications, such as automotive engines, commercial equipment or industrial machinery. That specificity helps ensure long life and peak power, performance and fuel economy from the lubricated system, as well as long lubricant life.



Why Are AMSOIL Synthetic Lubricants So Good?

As a jet fighter squadron commander Lieutenant Colonel Albert J. Amatuzio had ample opportunity to witness synthetic lubricants in action. These oils are used exclusively in jet engines because of three extraordinary performance characteristics: an ability to reduce friction and wear on engine components, an ability to function dependably at severe temperature extremes and an ability to withstand rigorous and lengthy engine operation without chemical breakdown.

Recognizing that these same benefits would prove invaluable in combustion engines, Amatuzio began conducting serious research in 1963. By 1966 he had formulated a synthetic motor oil and put it to use in vehicles in northern Minnesota. Throughout the late '60s Amatuzio continued his research and development and sold commercially available synthetic oils under a variety of names. In 1970 he incorporated his own name into a commercially sold product called AMMOIL. In 1971 this product name was changed to AMZOIL and it continued to be sold commercially. The true milestone came in 1972 when AMZOIL became the first synthetic motor oil in the world to meet American Petroleum Institute criteria. The new lubricant performed like no other before it. When the first can appeared on the market in 1972, it signaled the birth of an entire industry.

For nearly 40 years, AMSOIL synthetic lubricants have expanded the boundaries of lubrication science and redefined the performance possibilities of engines, equipment and machinery in automotive, commercial and industrial use. AMSOIL products deliver tangible benefits that keep consumers coming back for more.

High-Temperature Protection and Performance

AMSOIL synthetic lubricants are much more stable in high temperatures than refined oils. Their superior heat stability reduces oil consumption, lubricant breakdown and lubricant oxidation, which keeps equipment clean, protected and running right, and extends lubricant life.

Cold-Temperature Protection and Performance

AMSOIL synthetic lubricants remain fluid in temperatures far below zero, allowing dependable engine start-up, fast

lubrication, dependable protection and maximum fuel economy in severe cold operations.

Increased Efficiency

AMSOIL synthetic lubricants are superior to refined oils in reducing friction, which increases fuel efficiency. Superior friction reduction, as well as lower volatility rates, also helps keep exhaust emissions low.

Long Engine and Equipment Life

AMSOIL synthetic lubricants' heat stability and friction-reducing ability help keep wear rates low, which can increase the time to first teardown, increase the interval between teardowns and increase overall equipment life.

Extended Lubricant Drain Intervals

AMSOIL synthetic lubricants offer up to eight times the service life offered by refined lubricants, sometimes even more with oil analysis. The long life of AMSOIL synthetic lubricants reduces costs, downtime, waste and environmental impact.

Product Line

AMSOIL manufactures synthetic lubricants, advanced filtration systems, fuel additives and coolant for virtually every commercial, industrial or automotive application.

Quality Control

AMSOIL synthetic lubricants are manufactured from top-quality synthetic base stocks and performance additives according to a stringent quality control protocol in computer-controlled AMSOIL manufacturing facilities. AMSOIL synthetic lubricants may be counted on to deliver the same top-quality performance and protection every time they are used, no matter where in the world they are purchased.

Experience

AMSOIL formulated the first API-rated synthetic motor oil in the world and has extensive experience formulating synthetic lubricants. AMSOIL is an industry leader in product quality and innovation.



Quality Consumers Demand

Outperforms Industry Standards

The ILSAC GF-5 motor oil specification establishes minimum quality standards for oil performance in the areas of engine cleanliness, wear protection, fuel economy and more. In industry-standard testing, AMSOIL Signature Series 5W-30 Synthetic Motor Oil outperforms ILSAC GF-5 standards in virtually all categories, helping engines remain cleaner, last longer and achieve increased mpg.

- 44 percent improved cleanliness properties
- 3X better wear protection on cams and lifters
- 30 percent less oil consumption
- 75 percent increased oxidation resistance
- Surpassed fuel economy standard



Sequence IIG Engine Test

Performed by independent lab October 2010

Failing Example



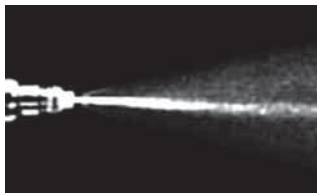
Passing Example



AMSOIL Signature Series Synthetic Motor Oil



Increased Fuel Economy



Injector pattern before P.i. treatment



Injector pattern after P.i. treatment



Intake Valve before P.i. Treatment



Intake Valve after P.i. Treatment



For optimum fuel efficiency and lower emissions, fuel must first be atomized into a fine mist prior to entering the combustion chamber. Over time, injector deposits produce irregular spray patterns with heavy streams of gasoline that reduce performance, while intake valve deposits also decrease efficiency. AMSOIL Pi.[®] Performance Improver cleans injector and intake valve deposits to improve fuel efficiency up to 5.7 percent and an average of 2.3 percent.

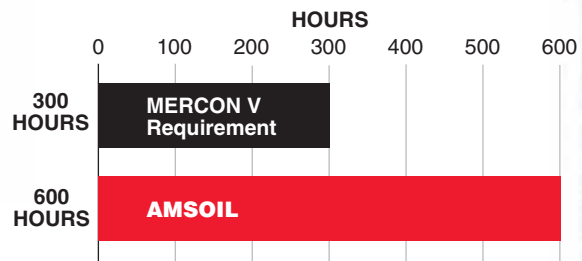
Superior Transmission Protection

Excessive lubricant oxidation leads to varnish and sludge formation, fluid thickening, poor overall shift performance and clutch glazing. AMSOIL Multi-Vehicle Synthetic Automatic Transmission Fluid withstands the challenges presented by modern, hot-running transmissions. It resists oxidation two times longer than required for MERCON V to deliver outstanding protection.



High Temperature Tests

Ford MERCON[®] V required oxidation test (ABOT)



Boost Profits With AMSOIL

AMSOIL Increases Profits

Quality Products Command a Quality Price

People are willing to pay more for premium products, and AMSOIL is widely known as the premier producer of synthetic lubricants. With markup levels at 30-35%, store owners realize higher profits with AMSOIL products.

Freight Discounts

AMSOIL offers freight bill discounts based on the order total, provided that the order is shipped to one destination. This discount is calculated on the total of the order before taxes, discounts or any miscellaneous charges are applied.

- Full freight is paid if the order totals \$11,000.00 or more.
- One half of freight is paid if the order totals \$5,500.00 to \$10,999.99

Full Line of Quality Products

A complete product line from AMSOIL ensures that customers will find what they are looking for. With everything from advanced filtration systems to premium fuel additives, AMSOIL makes products to satisfy nearly every need. In addition, AMSOIL has created strategic corporate partnerships to provide other top-quality automobile products like Mothers® polishes and waxes and TRICO® wiper blades, creating more opportunity for sales.

AMSOIL Products are in Demand

Sales of AMSOIL continue growing. Vehicles are requiring superior products, and customers are looking for the best performance available. AMSOIL products provide exceptional protection and performance, and AMSOIL is recognized worldwide as a leader in the motor oil industry.

Limited Availability

AMSOIL products are not available everywhere. AMSOIL is distributed by independent Dealers, and won't ever be found in giant retail chain stores. AMSOIL limits its sales to accounts with less than 12 outlets to protect small stores from large competitors and predatory pricing. Accounts with more than 12 outlets can carry AMSOIL only if each outlet has the authority to place and receive orders. Carrying AMSOIL can give store owners an edge over the competition.

Advertising Support

AMSOIL provides national advertising support with commercials, promotional literature and more, with ads appearing in over 150 national publications yearly. AMSOIL is best known nationwide for sponsoring high-profile racers like Kevin Windham in motocross and Scott Douglas and Chad Hord in off-road racing. AMSOIL is the official oil of several high-profile events, including Daytona Bike Week, The Sturgis Motorcycle Rally, The Traxxas Off Road Championship Series (TORC) and the AMA Amateur Nationals, as well as sponsor of the AMSOIL Dirt Track Series, the AMSOIL Championship Snocross Series and more. In all, AMSOIL is involved with more than 1,000 racing teams, series and events across North America.

AMSOIL also offers a Co-op Advertising Program for retail accounts. Co-op credits are earned according to the amount of AMSOIL products purchased each year. Co-op credits can be redeemed for print and broadcast advertising featuring AMSOIL products, or for AMSOIL literature and promotional material. For more information on the AMSOIL Co-op Program, consult the Retail Account Co-op Credit Order Form (G1071).

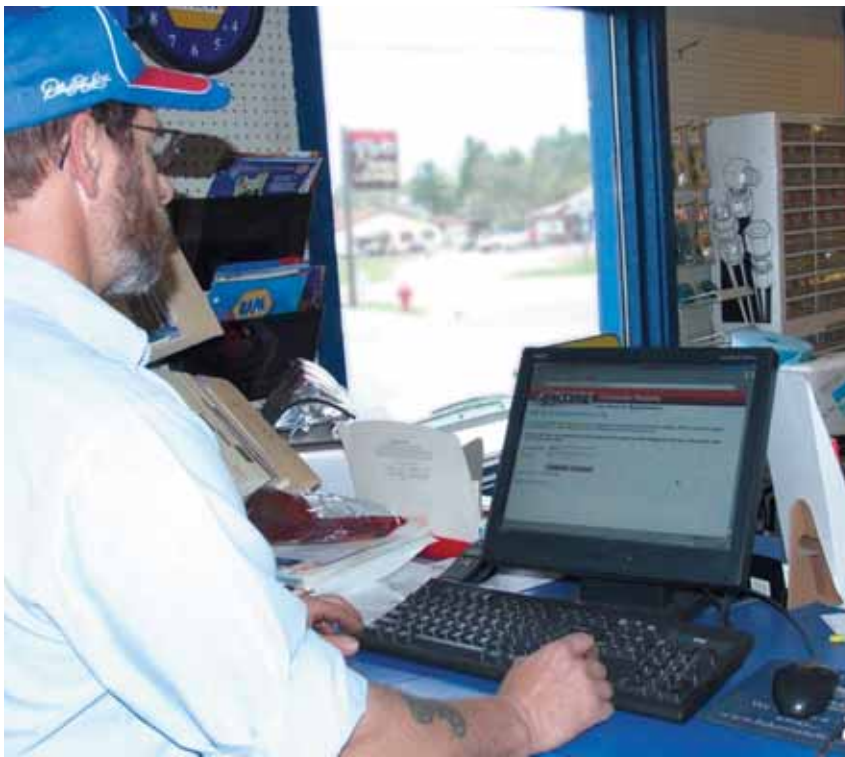
Leading Synthetic Oil

AMSOIL was the first fully synthetic oil approved by the American Petroleum Institute for use in passenger vehicles. Since then, AMSOIL has been recognized as the benchmark in synthetic motor oils.

Commitment To Excellence

Vehicle manufacturers are recommending lubricants that provide better protection and auto owners want the best for their vehicles. Stocking AMSOIL products keeps retailers ahead of the pack in a competitive industry because they are formulated to meet or surpass manufacturers' requirements and impress consumers.

AMSOIL products' sterling reputation, proven performance and storied history can help raise profit margins in any retail store.





- **First** to develop an API-rated 100 percent synthetic motor oil.
- **First** to introduce the concept of extended drain intervals with a recommended 25,000-mile/12-month drain interval.
- **First** to produce synthetic motor oils for diesel engines.
- **First** to produce synthetic motor oils for racing engines.
- **First** to produce synthetic motor oils for turbocharged engines.
- **First** to produce synthetic motor oils for marine engines.
- **First** to produce synthetic gear lube for automotive use.
- **First** to produce a 100:1 pre-mix synthetic 2-cycle oil.
- **First** to produce a synthetic automatic transmission fluid for automotive use.
- **First** to manufacture a full-synthetic cartridge-style oil filter.

*First in History
First in Quality*

The First in Synthetics®

AMSOIL products and Dealership information are available from your local AMSOIL Dealer.