

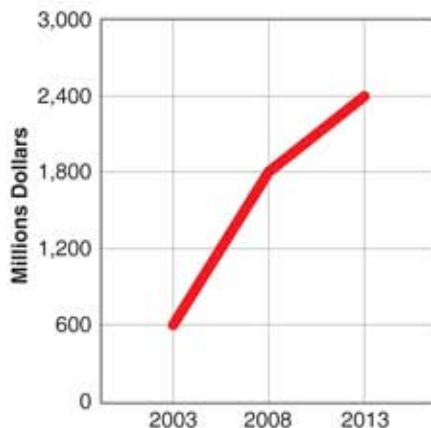
# WHAT'S DRIVING THE GROWTH OF SYNTHETICS?

Although overall U.S. lubricant consumption has declined since 2006, the demand for synthetic lubricants continues growing, even throughout a worldwide recession. For example, while synthetic motor oil represented 5 percent of the motor oil market in 2005, it now accounts for 7-9 percent. Leading industry research company The Freedonia Group Inc. projects 7.3 percent annual growth for sales of synthetic motor oil through 2013 (Fig. 1) and 6.3 percent growth for synthetic hydraulic and transmission fluids (Fig. 2). A new study by Kline & Co., meanwhile, indicates synthetics' share of the global lubricants market will hit 12.5 percent by 2019.

## Numerous Factors Behind Growth

The factors driving this growth can be traced to multiple sources, most notably the decision by original equipment manufacturers (OEMs) to install synthetic motor oil as the factory fill in mass-marketed vehicles in addition to high-performance models. Industry organizations and automakers continue introducing tougher motor oil standards best suited for synthetics, while aggressive advertising has convinced more motorists to begin using synthetics for their service fills. Due in part to the hard work of AMSOIL and its legion of Dealers over the past 40 years, synthetic lubricants have become the primary choice of an increasing number of OEMs and motorists.

**U.S. Growth of Synthetic Motor Oil (Fig. 1)**



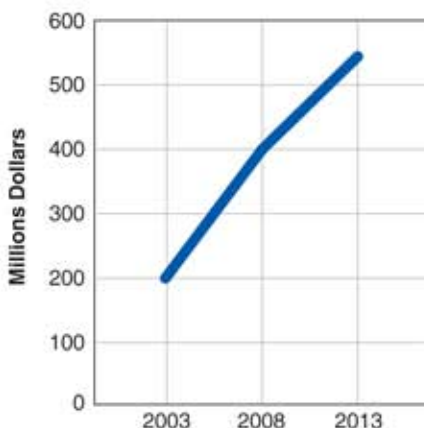
**Projected 7.3% annual growth through 2013**

Source: The Freedonia Group, Inc.

## OEMs Opting for Synthetics Straight from the Factory

Not long ago, only high-performance cars subjected to increased power and operating temperatures like Corvettes and Ferraris left the factory filled with synthetic motor oil. Their owner's manuals also recommended use of synthetics for service fills. Today, however, compact cars, family sedans and other common vehicles are experiencing driving conditions nearly as harsh. To increase fuel economy, OEMs continue equipping many vehicles with the sophisticated fuel injection technologies

**U.S. Growth of Synthetic Hydraulic & Transmission Fluids (Fig. 2)**



**Projected 6.3% annual growth through 2013**

Source: The Freedonia Group, Inc.

and turbochargers once reserved for high-end cars. Vehicles are also receiving more aerodynamic designs, often requiring smaller engine compartments and smaller oil sumps. This reduces the amount of oil available to neutralize an increased level of contaminants. Coupled with higher operating temperatures, conventional oils in these environments quickly break down, leaving engines and turbos susceptible to wear and decreased life. In addition, most recent-model trucks and SUVs come with synthetic gear lube installed.







### Drain Intervals Growing Longer

With an eye toward maximum customer convenience and reduced environmental impact, recommended oil drain intervals on newer vehicles continue extending far beyond 3,000 miles, with some up to 10,000 miles. The combination of increased engine stress and longer drain intervals creates an environment best suited for synthetic motor oils. Honda and Toyota now install 0W-20 synthetic motor oil in most of their vehicles, in part to increase fuel economy. Ford uses 5W-20 synthetic blend in most vehicles also to help increase fuel mileage. Historically, motorists who purchase these vehicles will continue to use synthetic motor oil based on the OEM factory fill, helping drive future sales.

With new technologies that increase engine stress introduced with seemingly every model year and drain intervals only becoming longer, expect the list of vehicles factory-filled with synthetic or synthetic blend motor oil to grow longer (Fig. 3).

### More Stringent Industry Specifications

Partially in response to new engine technologies, the trade associations and organizations responsible for finalizing engine oil specifications continue requiring motor oils to demonstrate increased protection and performance. To meet the ILSAC GF-5 spec unveiled last fall, for example, an oil must meet a minimum turbo cleanliness merit score nearly twice as strict as was required for GF-2, the most recent spec to evaluate turbocharger deposit formation.

Similarly, fuel economy improvement requirements continue growing more stringent. ILSAC GF-5 requires motor oils to display a minimum 0.6 - 1.2 percent fuel economy improvement (depending on viscosity) after 100 hours in use compared to a reference oil.

### Manufacturer Specs Even Tougher

Offering further complication, some automakers require oils that meet their own, even more strict, specifications. Volkswagen 504.00/507.00 requires reduced sulfated ash, phosphorus and sulfur (SAPS), while the General Motors dexos1™ spec for gasoline engines mandates better performance in specific areas compared to ILSAC GF-5 and API SN. In addition, some automakers are pushing for a worldwide motor oil specifica-

tion due in part to increased availability of high-quality base oils, likely favoring synthetics given the more strict emissions regulations in Europe. Although some conventional oils are able to achieve these desired results, the trend toward increased performance favors synthetics in the long run. With environmental concerns, increased fuel economy and reduced emissions driving development of new specifications, conventional oils are quickly being left behind.

### Increased Marketing Efforts

Major oil companies clearly understand what the immediate and future growth of synthetics means to business and have dramatically increased the marketing of their synthetic oils. Pennzoil has heavily advertised its new Ultra motor oil, while Mobil recently unveiled its Super line, which includes a synthetic oil, via a widespread ad campaign. In fact, it's now rare to encounter a motor oil ad for a product other than a synthetic.

AMSOIL also has responded by marketing three distinct lines of synthetic motor oil, each tailored to the needs of different customers. The company's presence in the powersports market and the racing world is well-known, and the number of magazines, websites and television commercials

advertising AMSOIL is at an all-time high. Tens of thousands of Dealers around North America also personally introduce new people to AMSOIL synthetic lubricants every day.

Those in the do-it-for-me market are especially responsive to advertising, and are more likely to choose synthetic motor oil as their service fill after learning of the benefits, particularly if their OEM recommends it.

### Strong Future

Market forces will continue to favor synthetic lubricants going forward. The number of applications that significantly benefit from their increased performance and protection continues growing. In addition to automotive applications, demands for increased efficiency and reduced maintenance are being placed on industrial gearboxes, hydraulic systems, compressors and more, meaning synthetics will continue their pattern of strong growth in the years ahead. ■



(Fig. 3)

### Top-Selling Vehicles Factory-Filled with Synthetic or Synthetic Blend Motor Oil

#### Buick

- Lacrosse
- Regal GT

#### Chevrolet

- TrailBlazer SS
- Cobalt SS

#### Dodge

- Callber SRT-4
- Charger SRT-8
- Challenger (6.4L)

#### Ford

- Escape
- F-150

#### • Focus

- Fusion
- Mustang

#### Honda

- Accord
- Civic Hybrid
- CRV
- Odyssey

#### Toyota

- 4Runner
- Avalon
- Camry
- Prius
- Sequoia
- Sienna