AMSOIL®

The First in Synthetics®

Motor Oil and Filtration Guide

What Is a Motor Oil?

Motor oil is the primary determinant in the durability of an engine. It contains two basic components: **base stocks** and **additives**.

Base Stocks

The base stock is the bulk of the oil. The base stock lubricates internal moving parts, removes heat and seals piston rings.

Motor oil base stocks can be made from: 1) petroleum, 2) chemically synthesized materials, 3) a combination of synthetics and petroleum (called para-synthetic, semi-synthetic or synthetic blend.)

A petroleum base stock consists of many different oil fractions that form the final product. Generally, molecules of a petroleum base stock are long carbon chains that can be sensitive to the stress of heat and "boil off" at relatively low temperatures. Engine temperatures break down these molecular chains, changing the physical properties (such as viscosity) of the motor oil.

The difference with synthetic base stocks is that molecules are uniformly shaped, which makes them more resistant to the stress of heat. Because AMSOIL synthetic motor oils possess these uniformly-shaped molecules, they have a low "boil off" rate. Thus, their physical properties (such as viscosity) do not change.

Additives

The various chemicals that comprise the additive system in motor oils function to provide anti-wear, anti-foam, corrosion protection, acid neutralization, maintenance of viscosity, detergency and dispersancy. These are the chemicals that help modern motor oils meet the increasing demands of today's high-tech engines. Their quality varies widely throughout the lubrication industry, ranging from a bare minimum in some oils (to comply with certain requirements) to exceptionally high quality, as in all AMSOIL motor oils.

What a Motor Oil Must Do

Modern motor oil is a highly specialized product carefully developed by engineers and chemists to perform many essential functions. A motor oil must:

- Permit easy starting
- Lubricate engine parts and prevent wear
- Reduce friction
- Protect against rust and corrosion
- Keep engine parts clean
- Minimize combustion chamber deposits
- Cool engine parts
- Seal combustion pressures
- Be nonfoaming
- Aid fuel economy.

Improvements in Oil

The quality of motor oil has changed dramatically in the past 30 years, and new demands on lubricants in modern engine design call for oils that meet stringent requirements. Variations in an oil's ability to meet the requirements determine which service classification rating and viscosity grade it receives.

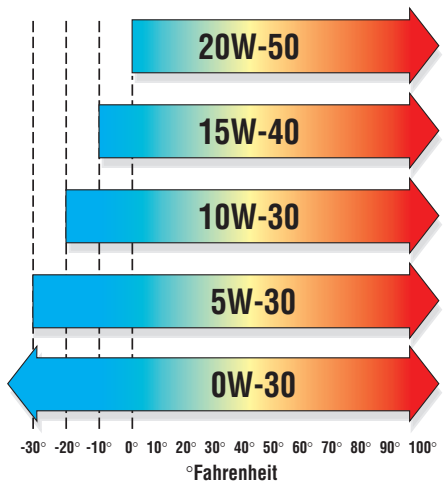
Service classifications are determined by the American Petroleum Institute. Viscosity grades of oils are determined by the Society of Automotive Engineers. These two organizations have set industry standards for motor oils for more than 75 years.

Viscosity

Viscosity, the most important property of an oil, refers to the oil's resistance to flow. The viscosity of oil varies with changes in temperature – thinner when hot, thicker when cold. An oil must be able to flow at cold temperatures to lubricate internal moving parts upon starting the engine. It must also remain viscous or "thick" enough to protect an engine at high operating temperatures. When an oil is used at a variety of temperatures, as it is in most engines, the change of viscosity with temperature variation should be as small as possible.

The measure of an oil's viscosity change is called the **Viscosity Index number (VI)**; the higher the number, the smaller the viscosity change which means the better the oil protects the engine. The number does not indicate the actual viscosity in high and low temperature extremes of the oil. It represents the rate of viscosity change with temperature change.

SAE Viscosity Grade and Outdoor Temperature



Viscosity improvers are viscous chemical compounds called polymers or polymeric compounds that decrease the rate at which oils change viscosity with temperature. These viscosity modifiers extend a motor oil's operating temperature range and make multi-grade or all-season oils possible. However, low-quality viscosity improvers lend themselves to shearing.

The VI is measured by comparing the viscosity of the oil at 40°C (104°F) with its viscosity at 100°C (212°F). VI can provide insight into an oil's ability to perform at high and low temperatures.

Petroleum-based motor oils require the use of viscosity improvers to meet the low-temperature requirements of SAE 0W, 5W or 10W and the high-temperature requirements of SAE 30 or heavier oil.

Synthetic-based motor oils have a naturally-high viscosity index and require less viscosity improver additive than petroleum oils.

Cold-Temperature Protection

Motor oil must begin to circulate as soon as the engine is started. If oil gets cold enough and begins to solidify, it fails to flow through the oil screen to the pump at engine start and causes bearings and other critical parts to fail almost immediately.

Pour point is an indicator of the ability of an oil to flow at cold operating temperatures. It is the lowest temperature at which the fluid will flow.

Modern refining techniques remove most of the wax from petroleum oil, but some wax-like molecules remain. These wax-like molecules are soluble at ambient temperatures above freezing, but crystallize into a honeycomb-like structure at lower temperatures and cause oil circulation problems.

Pour point depressants keep wax crystals in the oil microscopically small and prevent them from joining together to form the honeycomb-like structure. They lower the temperature at which oil will pour or flow and are found in most motor oils designed for cold-weather use. As synthetic motor oils do not contain those wax crystals, they do not require pour point depressant additives.

Wear Protection

Since one of an oil's main functions is to prevent friction and wear, **anti-wear additives** are part of the chemical composition of an oil. These additives protect engines by bonding to metal surfaces and forming a protective film layer between moving parts that are vulnerable to friction and wear when an engine is first started and before the oil begins to circulate completely. While this protective film doesn't entirely eliminate metal-to-metal contact of moving parts at start-up, it minimizes the effects of contact.

Oxidation

Because excessive engine heat causes chemical breakdown of oil, which in turn results in permanent thickening of the oil, **oxidation inhibitors** work to limit the impact of oxidation. Oil oxidation produces acidic gases and sludge in the crankcase. These gases combine with water in the crankcase to corrode and rust the engine. Corrosion prevention is especially critical in diesel engines.

TBN

An oil's ability to neutralize acids is expressed by its **Total Base Number (TBN)**. The greater the number, the greater the amount of acidic by-products the oil can neutralize. A high TBN is particularly important in extended drain interval oils, such as AMSOIL motor oils, because they neutralize acids, and more of them, for a longer period of time.

Most oils for diesel engines in North America have a TBN between 8 and 12. AMSOIL manufactures several diesel oils with a TBN of 12.

Detergents

In the same way that some chemical compounds are used to prevent engine rust and corrosion, other chemicals are added to motor oil to help prevent combustion by-products from forming harmful sludge or varnish deposits. **Detergents** are added to motor oil because combustion causes carbon build-up and deposit formation on the pistons, rings, valves and cylinder walls. Carbon and deposits affect engine temperature, oil circulation, engine performance and fuel efficiency. Detergent additives clean these by-products from the oil. Some combustion by-products slip past the piston rings and end up in the motor oil, which can clog the engine's oil channels.

Dispersants

While detergents help minimize the amount of combustion by-products, **dispersant** additives keep those by-products suspended in a form so fine they minimize deposits. They keep the oil in the engine clean while they prevent the build-up of carbon or deposits from burned and unburned fuel and even from the oil itself. Eventually, these suspended particles are removed by the oil filter.

Anti-Foam

The addition of **silicone** or other compounds in very small amounts makes most oils adequately foam-resistant. It's important to minimize foaming in motor oil because tiny air bubbles are whipped into motor oil by the action of many rapidly moving parts, resulting in a mass of oily froth that has very little ability to lubricate or aid in the cooling of the engine. These compounds weaken the air bubbles, causing them to collapse almost immediately upon forming, allowing the oil to continue to protect the engine.

Seal Swell

All motor oils must be compatible with the various seal materials used in engines. Oil must not cause seals to shrink, crack, degrade or dissolve. Ideally, oils should cause seals to expand or "swell" slightly to ensure continued proper sealing.

Heat Dispersal

Another function of motor oil is to cool the engine. The radiator/antifreeze system is responsible for about 60 percent of the engine cooling that takes place. This cools only the upper portion of the engine, including the cylinder heads, cylinder walls and valves.

The other 40 percent is cooled by the oil. The oil is directed onto hot surfaces, such as the crankshaft, main and connecting rod bearings, the camshaft and its bearings, the timing gears, the pistons and many other components in the lower portion of the engine that directly depend on the motor oil for cooling.

Engine heat is created from friction of moving parts and the ignition of fuel inside the cylinder. Oil carries heat away from these hot surfaces as it flows downward and dissipates heat to the surrounding air when it reaches the crankcase.

Lubricating an engine actually requires a very small amount of motor oil compared to the amount needed to ensure proper cooling of these internal parts.

The oil pump constantly circulates the oil to all vital areas of the engine.

Classification Systems

Oil is classified by two systems. One system determines the oil's viscosity (the SAE grade), and one determines its performance level, which oil to use in what type of engine (the API class).

SAE Grade

The Society of Automotive Engineers (SAE) Viscosity Grade is a system based on viscosity measures taken from a variety of tests. It developed 11 distinct motor oil viscosity classifications or grades: SAE 0W, SAE 5W, SAE 10W, SAE 15W, SAE 20W, SAE 25W, SAE 20, SAE 30, SAE 40, SAE 50 and SAE 60. These are single-grade or single-viscosity oils.

These grades designate the specific ranges that the particular oil falls into. The "W" indicates the grade is suitable for use in cold temperatures. (Think of the "W" as meaning "Winter".) The classifications increase numerically, readily indicating the difference between them and what the difference means. Simply put, the lower the number, the lower the temperature at which the oil can be used for safe and effective protection. The higher numbers reflect better protection for high-heat and high-load situations.

Think of the "W" in a motor oil's classification as meaning "Winter."

Single-grade oils have a limited range of protection and, therefore, a limited number of uses.

With today's well-refined, high viscosity index oils, however, an SAE 20 oil usually will meet the viscosity requirements of SAE 20W and vice versa. Those that do are classified SAE 20W-20.

This multi-grade or multi-viscosity ability increases an oil's usefulness, because it meets the requirements of two or more classifications.

Examples of multi-viscosity oils are SAE 5W-30, SAE 10W-30, SAE 15W-40 and SAE 20W-50. The number with the "W" designates the oil's properties at low temperatures. The other number characterizes properties at high temperatures. For instance, a multi-viscosity or multi-grade oil such as 10W-30 meets the 10W criteria when cold and the 30 criteria once hot. SAE 10W-30 and SAE 5W-30 are widely used because under all but extremely hot or cold conditions, they are light enough for easy engine cranking at low temperatures and heavy enough to protect at high temperatures.

API Class

The American Petroleum Institute (API) developed a classification system to identify oils formulated to meet the operating requirements of various engines. The API system has two general categories: S-series and C-series.

The **S-series service classification** emphasizes oil properties critical to gasoline- or propane-fueled engines. If an oil passes a series of tests in specific engines (API Sequence tests), the oil can be sold bearing the applicable API service classification. The classifications progress alphabetically as the level of lubricant performance increases. Each classification replaces those before it. SM oil may be used in any engine, unless the engine manufacturer specifies a "non-detergent" oil.

SA and SB are non-detergent oils and are not recommended for use unless specified.

Cars from model-years 1980 to 1989 require SF oils, while cars from model-years 1990 to 1993 require SG oils.

New cars beginning with the 1994 model year require oils with an API SH performance rating. Beginning with model-year 1997, new cars require an API SJ oil. The year 2001 brought the introduction of SL oils. SM category is the most recent classification. It was introduced Nov. 30, 2004. SM oils are designed to provide improved oxidation resistance, improved deposit protection, better wear protection and better low-temperature performance over the life of the oil.

SJ, SL and SM are the current API classes. SJ, SL and SM oils are widely available and ensure the best engine protection available.

C-series classifications pertain to diesel engines. They are: CA, CB, CC, CD, CD-II, CE, CF, CF-2, CF-4, CG-4, CH-4, CI-4, CI-4 Plus and CJ-4. All are obsolete except CF, CF-2, CG-4, CH-4, CI-4, CI-4 Plus and CJ-4 performance rated oils.

Not all C-series classifications supersede one another. The current classifications, CF and CF-2 are specified for different applications.

CF for Indirect-Injected Diesel Engine Service. Service category CF denotes service typical of indirect-injected diesel engines and other diesel engines that use a broad range of diesel fuels in off-road applications, including diesel fuel with greater than 0.5 percent sulfur by weight. CF oils may be used in place of CD oils.

CF-2 for Two-Stroke Diesel Engine Service. This service category is typical of two-stroke engines requiring highly effective control over cylinder and ring-face scuffing and deposits. CF-2 oils may be used in engines for which CD-II oils are recommended.

CG-4 for Heavy-Duty Four-Stroke Diesel Engine Service. Service category CG-4 is required for severe-duty, high-speed, four-stroke engines using fuel with less than 0.5% weight sulfur. CG-4 oils are required for engines meeting 1994 emission standards. Can be used in place of DC, DE and CF-4 oils.

CH-4 for Four-Stroke Diesel Engine Service. CH-4 is required for high-speed, four-stroke engines designed to meet 1998 exhaust emission standards. CH-4 oils are specifically compounded for use with diesel fuels ranging in sulfur content up to 0.5% weight. Can be used in place of CD, CE, CF-4 and CG-4 oils.

CI-4 Plus for Severe-Duty Diesel Engine Service. CI-4 Plus typically is required in high-speed four-stroke diesel engines used in heavy-duty on- and off-highway applications. CI-4 Plus oils are especially effective in engines designed to meet 2002 exhaust emission standards. CI-4 Plus oils may be used in place of CD, CE, CF, CF-4, CG-4, CH-4 and CI-4 oils.

CJ-4 for 2007 and newer diesel Engines. CJ-4 was developed to address special concerns about emission control engines and their operation on ultra-low sulfur diesel fuel (ULSD).

These classification systems aim to help motorists choose the right oil for their needs. The choice depends on the engine, the outdoor temperature and the type of driving the engine must withstand.

AMSOIL provides top-quality filters for every application.

How Motor Oil Becomes Contaminated

Motor oil becomes unfit for service after a period of use. Two main reasons for this are the accumulation of contaminants in the oil and chemical changes (additive depletion and oxidation) in the oil itself.

These factors cause deterioration of the oil and prevent it from doing the job of lubricating and cooling engine parts.

Abrasives

Road Dust and Dirt

Design limitations of air cleaners, some oil fill caps, and crankcase ventilation systems allow some dust and dirt to enter the engine. Leaks in the intake system also permit unfiltered air to enter the engine. However, proper maintenance of the engine and its accessories can minimize the amount of contaminants entering the lubrication system and extend engine life.

Metal Particles

Normal wear of parts in an engine produces very small metal particles that are picked up and circulated by the oil. Particles of road dust and dirt increase the rate of wear and generate larger metal particles, that in turn are quite abrasive. These, too, are circulated through the engine by the oil.

While oil filters help keep these particles at a minimum, they can't remove them entirely.

Combustion By-Products

Water

Combustion produces water vapor, or steam. When engine temperatures are high, most of the water remains in vapor form and goes out through the exhaust. However, when engine temperatures are low, such as at start-up, warm-up and short-trip operation in low ambient temperatures, the water vapor condenses (turns into a liquid) on cylinder walls and is picked up in the crankcase oil. Here it leads to the formation of sludge, rust and corrosion.

EaO filter family

Donaldson filter family

WIX filter family

MANN filter family

Acids

The combustion process produces acidic gases which, like water vapor, condense on cylinder walls at cold engine temperatures and also find their way into the crankcase oil. These combine with water to cause rust and corrosion.

Soot and Carbon

Incomplete combustion produces soot, carbon and other deposit-forming materials. An engine running too "rich," or with too much fuel, increases the amount of contaminants. In gasoline engines, light-load and low-speed operations increase these combustion by-products more than high-load, high-speed operations. Diesel engines produce more of these by-products with low-speed, high-load operations.

Dilution

When an engine is started or running abnormally, some unburned fuel in liquid form is deposited on cylinder walls. That means raw fuel leaks past the rings into the crankcase, where it reduces the viscosity of the oil. Dilution lowers the film strength of the oil and increases oil consumption. Usually this is a minor problem when engine operation is at high-speed or high-temperatures, but it can be a problem in vehicles consistently used for short-trip driving.

While all of the processes by which a motor oil is contaminated are not fully defined, the use of high-quality motor oils such as AMSOIL synthetic motor oils allows motorists continued protection of their engines along with extended drain intervals, all while limiting the contaminants in the oil and prolonging engine life.

Engine Filtration and Maintenance

Engine Wear

Automotive experts agree dirt is the number-one cause of engine wear. Analysis by Federal-Mogul Corporation reports that 43.4 percent of all engine bearing distress is caused by dirt.

Engine dirt particles are so small – mere dust specks – and an engine is a highly sophisticated piece of machinery, crafted from the most durable metal alloys. How, then, can these minute particles bring down such a high-tech giant?

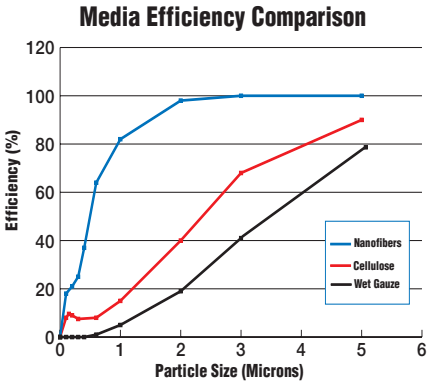
The answer lies in the fact that dirt particles are extremely abrasive. They consist of razor-like flakes of road dust and airborne grit drawn into the engine through the intake manifold, as well as manufacturing scarf and wear-metal particles generated inside the engine. These particles are carried by the oil into the precision clearances between bearings and other moving parts. Once they work in between these parts, they grind and gouge surfaces, altering clearances and generating more abrasive debris. This wear cycle continues, making precision components sloppy and fatigued until they fail altogether.

Filtration is the key to preventing costly engine repairs caused by dirt. Filtration removes contaminants by trapping and holding them outside the system of oil circulation. In order for a filter to be truly effective, it must be able to capture contaminants of all types and sizes. AMSOIL has developed a complete line of sophisticated filtration products designed to offer the best protection available against virtually all harmful engine contaminants.

Air Filtration

An engine "breathes" air to mix with fuel for combustion – about 9,000 gallons of air for every gallon of gas. All that air contains more than 400 tons of suspended dirt in one cubic mile over a typical city, and the concentration is much higher in rural areas where travel frequently is over unpaved roads.

The air filter is the first line of defense against the abrasive airborne



grit that gets into an engine. In order to do the job right, the air filter must effectively filter the dangerous particles without obstructing the vital flow of air that sustains the engine.

Conventional air filters quickly become obstructed with dirt, reducing vital engine air intake, leading to poor engine performance and low fuel efficiency. They require frequent replacement.

AMSOIL Filters Last Longer

When properly cleaned at 25,000-mile intervals, **AMSOIL Ea Air Filters** are guaranteed for 100,000 miles or four years, whichever comes first. The use of exclusive nanofiber synthetic media allows AMSOIL Ea Air Filters to provide unsurpassed filtration protection for 25,000 miles or one year between cleanings.

AMSOIL Ea Air Filters are the most efficient filters available to the auto/light truck market. Ea Air Filters' synthetic nanofiber media removes five times more dust than traditional cellulose filter media alone and 50 times more dust than wet gauze filter media. AMSOIL Ea Air Filters have a much higher capacity and lower restriction than competing filters.

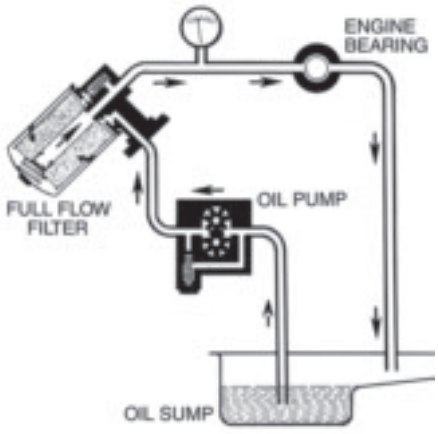
Oil Filtration

Full-flow oil filters install directly into the line of oil circulation. The "full-flow" of oil passes through the filter as the oil journeys between the oil pump and the engine.

A full-flow filter must be able to remove and hold contaminants without obstructing oil flow to the engine.

Most filters on the market compromise the filtration of finer particles by using a thin layer of porous filter paper. These filters have almost no extended cleaning ability since they have a low capacity for storing dirt.

These "surface-type" paper filters quickly become restricted as



Normal oil circulation in an internal combustion engine.

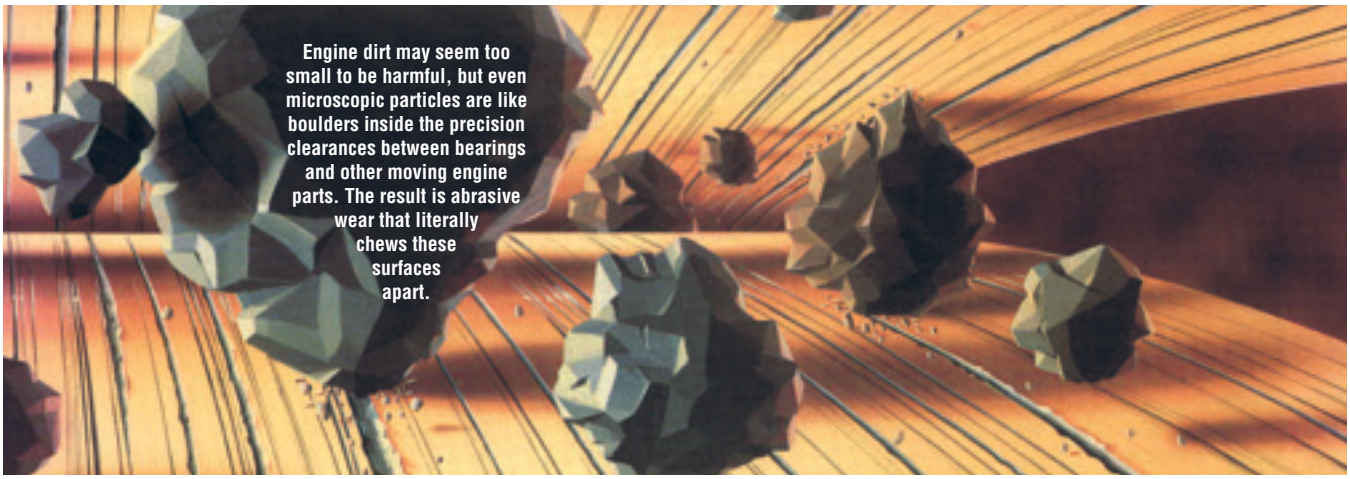
debris builds up on the paper surface. When this happens, the filter by-pass valve opens and allows unfiltered oil into the engine.

AMSOIL Ea Oil Filters are made with premium-grade full-synthetic media. The strictly controlled processing of this media ensures accurate filter construction, and is what allows Ea Oil Filters to deliver higher capacity and efficiency along with better durability.

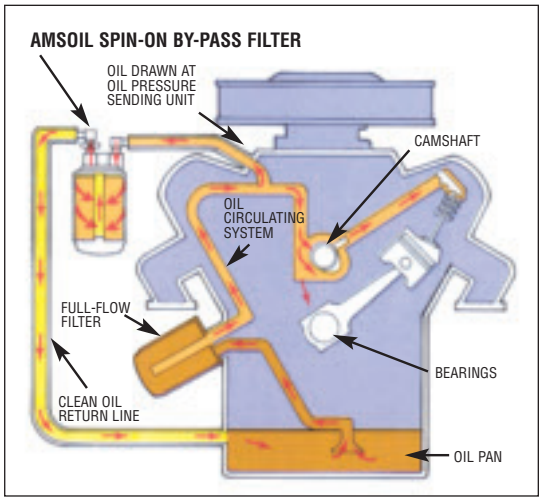
AMSOIL Ea Oil Filters have significantly lower restriction than conventional cellulose media filters. Their small synthetic nanofibers trap smaller particles and hold more contaminants, resulting in lower restriction. During the engine warm-up period, an Ea Oil Filter allows the oil to flow through the filter at a colder temperature than a typical cellulose filter. The additional filtering time decreases engine wear.

By-Pass Oil Filtration

An average full-flow filter traps particles as small as 20 microns. The filter can't remove finer particles because the oil must be filtered quickly while removing most of the particles in the oil.



Engine dirt may seem too small to be harmful, but even microscopic particles are like boulders inside the precision clearances between bearings and other moving engine parts. The result is abrasive wear that literally chews these surfaces apart.



Oil circulation system using an AMSOIL Spin-On By-Pass Oil Filter.

By-pass oil filtration uses a secondary filter with the purpose of eliminating nearly all contaminants in engine oil. By-pass filters have high capacities and eliminate much smaller particles than full-flow filters, including those in the two to 20 micron range, soot and sludge.

By-pass filters operate by filtering oil on a "partial-flow" basis. They draw approximately 10 percent of the oil pump's capacity at any one time and trap the extremely small, wear-causing contaminants that full-flow filters can't remove. By-pass filters have a high pressure differential, causing the oil to flow through them very slowly and allowing for the removal of smaller contaminants. It is called by-pass filtration because the oil flows from the by-pass filter back to the sump and by-passes the engine. This continual process will eventually make all of the oil analytically clean, reducing long-term wear and can extend drain intervals.

AMSOIL Ea By-Pass Filters use a two-stage pleated and layered cellulose/full-synthetic media to provide an efficiency rating of 98.7 percent at two microns.

Reduces Oil Changes

By cleaning the oil so completely, the AMSOIL Ea By-Pass Filter not only prolongs engine life but also the life of the oil itself. With the AMSOIL Ea By-Pass Filter, oil changes can be extended well beyond normal, in many cases virtually indefinitely, depending upon the conditions and severity of use.

Dual Remote: Patented Protection

Available only from AMSOIL, the **Dual Remote Oil Filtration System** replaces conventional full-flow filters, mounting in any convenient location in the engine, and gives full-flow and by-pass oil filtration protection. With Dual Remote, filter changes are quick, clean and easy. It also increases an engine's oil capacity, helping oil work better, not harder.

Oil Analysis

By analyzing used engine oil, a qualified lab can determine the degree of protection the oil is delivering and make certain the oil has not been contaminated. Oil analysis also can detect impending engine failure.

OIL ANALYZERS INC. provides state-of-the-art oil analysis testing and is a perfect complement to AMSOIL synthetic motor oils. The combination of superior lubrication and reliable oil analysis provides peace of mind over extended drain intervals.

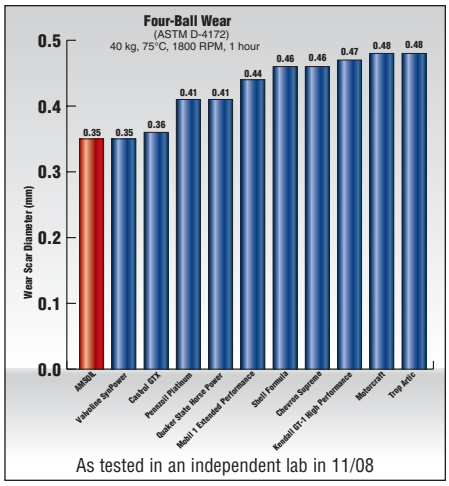
OIL ANALYZERS testing kits (OAI01, OAI02, OAI03) are available from AMSOIL. Oil analysis helps motorists derive the longest life from AMSOIL synthetic motor oil and from their engines.

For more information on oil analysis and OIL ANALYZERS INC. go to www.oaitesting.com or call (715) 392-0222.

Synthetic Motor Oils Outperform Conventional Lubricants

1. Superior Wear Protection . . . Engines Last Longer

In the Four-Ball Wear Test (ASTM D 4172) AMSOIL Synthetic 10W-30 Motor Oil (ATM) outperforms the leading synthetic and petroleum motor oils.



As tested in an independent lab in 11/08

2. Improves Fuel Economy

AMSOIL synthetic lubricants have been credited with significant fuel economy improvement. In a fuel economy test with Class 8 trucks, AMSOIL synthetic diesel oil and drivetrain fluids combined to produce up to an 8.2 percent improvement.*

*SAE J1321 Joint TMC/SAE Fuel Consumption Test Procedure - Type II.

3. Easier Cold Starts

AMSOIL synthetic motor oils stay fluid at remarkably low temperatures.

60 percent of engine wear occurs during initial start-ups. AMSOIL motor oils flow freely for fast delivery to critical engine parts.

4. Superior High-Temperature Performance

Reduced friction means cooler operating temperatures. Excessive oil temperatures can be reduced by 20 to 50 degrees when using AMSOIL motor oils.

5. Reduces Deposits on Critical Engine Parts

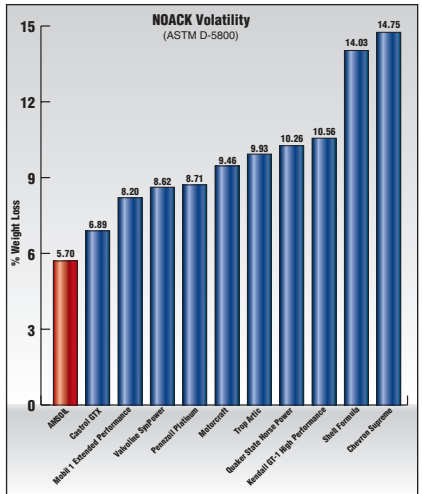
Engines run cleaner, perform better.

Results of high-temperature test. AMSOIL, on the right, was the only oil that did not show formation of sludge or deposits.

6. Reduces Oil Consumption

Tests show the superior thermal stability of AMSOIL Synthetic 10W-30 (ATM) Motor Oil withstands the higher operating temperatures of today's engines better than conventional products.

With AMSOIL, only 5.70% vaporizes, compared to much higher percentages with competing motor oils. The result: better fuel economy and wear protection with AMSOIL 10W-30 Motor Oil.



As tested in an independent lab in 11/08

7. Lower Cost, More Convenience

Motorists value savings. With AMSOIL Synthetic Motor Oils, 25,000-mile/one-year oil changes save time and money. With all the added performance benefits of AMSOIL synthetics, fuel economy, reduced oil consumption and better wear protection, your savings add up every mile you are on the road.

8. Jet-Age Technology

Only synthetics can stand up to the extreme performance demands of a jet engine. Every jet engine in the world uses synthetic engine oil.

9. The First in Synthetics

In 1972, AMSOIL formulated the world's first American Petroleum Institute certified synthetic motor oil. With more than 36 years' experience manufacturing and marketing synthetic motor oils, AMSOIL has been a consistent leader on the forefront of lubricant technology.

10. Environmental Benefits, Too!

Fewer oil changes means less waste oil, fewer filters, less packaging to dispose of, and a better future for our children.

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

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