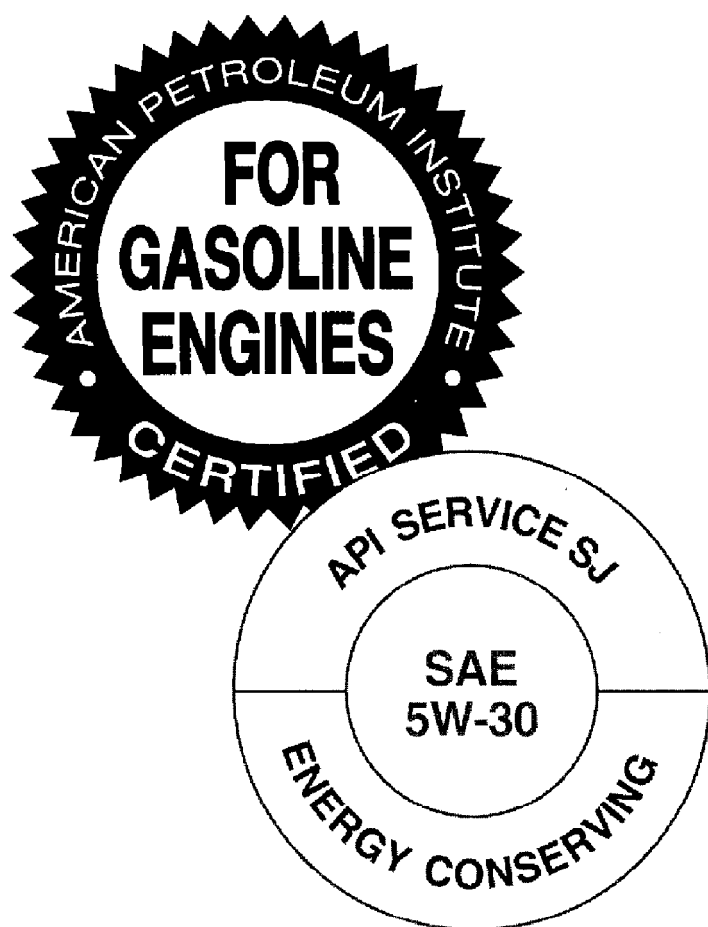


A Guide to the API Engine Oil Licensing And Certification System



API American
Petroleum
Institute

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Summary

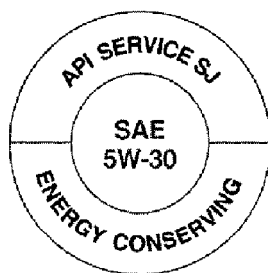
The API Engine Oil Licensing and Certification System provides a voluntary program to inform the consumer of the performance level and application of engine oils purchased. This publication describes the current API Engine Oil Licensing and Certification System. Equipment operators should refer to owners' manuals for manufacturers' recommended oil performance levels and viscosities.

API Engine Oil Licensing and Certification System

The American Petroleum Institute's (API) Engine Oil Licensing and Certification System (EOLCS) was developed through cooperative effort between the oil industry represented by API and vehicle and engine manufacturers represented by the American Automobile Manufacturers Association (AAMA), the Japan Automobile Manufacturers Association (JAMA), and the Engine Manufacturers Association (EMA). The EOLCS is a voluntary licensing and certification program designed to define, certify, and monitor engine oil performance deemed necessary for satisfactory equipment life and performance by vehicle and engine manufacturers. It includes a formal license agreement executed by the oil marketer with API. Performance requirements, test methods, and limits are cooperatively established by vehicle and/or engine manufacturers (namely, AAMA, JAMA, and EMA), technical societies, such as the American Society for Testing and Materials (ASTM) and the Society of Automotive Engineers (SAE), and API. The program's Marks are intended to help the consumer identify those products that have satisfied the requirements of licensing and certification. The system includes an audit process to verify that licensed products in the marketplace comply with the terms of the API licensing agreement.



API-licensed marketers may display two types of Marks. Each Mark conveys information that can be used by the consumer. The two Marks are:



API Service Symbol



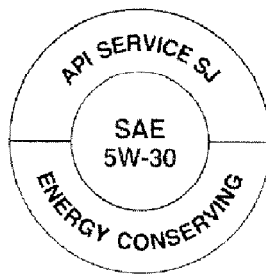
API Certification Mark

The API Service Symbol has been around for many years and is well established. The API Certification Mark was introduced in August 1993. Oils licensed to use the API Certification Mark meet the latest standard of the International Lubricant Standardization and Approval Committee (ILSAC), which is composed of representatives of U.S. and Japanese automobile manufacturers.

The API Service Symbol

The API Service Symbol “donut” is divided into three parts:

- ◆ The top half describes the oil's performance level.
- ◆ The center describes the oil's viscosity.
- ◆ The bottom half tells whether the oil has demonstrated energy-conserving properties in a standard test in comparison to a reference oil. (Note: see page 6.)



The top of the API Service Symbol shows the oil's performance level for gasoline and/or diesel engines. The letter "S" followed by another letter (for example, SJ) refers to oil suitable for **gasoline** engines. The letter "C" followed by another letter and/or number (for example, CG-4) refers to oil suitable for **diesel** engines. These letters officially stand for "Service" and "Commercial." Some have thought the "S" stands for spark-ignition, which is the form of combustion in gasoline engines, and "C" stands for compression-ignition, which is the form of combustion in diesel engines. These associations are a coincidence, but a useful one. The second letter in both the "S" and "C" categories are generally assigned alphabetically in order of development.

The service categories listed below are determined by laboratory and engine tests that measure the ability of an oil to control things that are harmful to an engine, such as, wear, sludge, varnish, oil thickening, rust, bearing corrosion, and piston deposits. Some owners' manuals call for oils that have more than one performance level. The **current** API performance categories that can be licensed to appear in the top part of the API Service Symbol are:

- ◆ SJ oils, first introduced in October 1996, are suitable for automotive **gasoline** engines.
- ◆ SH oils, first introduced in 1993, are suitable for automotive **gasoline** engines. (This service category will no longer be valid in the API Service Symbol after August 1, 1997, except when used in combination with certain C categories.)

