

I'm not a robot

























The Original Motor Oil America's First Motor Oil Brand © {dateYear} Valvoline Global Operations™ Trademark. Valvoline Global Operations An electronic OEM (original equipment manufacturer) is a company that designs, manufactures, and markets electronic components or products under the brand of another company. These producers are important participants in sectors like medical devices, telecommunications, automotive systems, and consumer electronics. An electronic OEM might, for instance, manufacture circuit boards, microprocessors, or entire electronic devices for other companies that either sell them as completed goods or incorporate them into their own products. The more general term OEM refers to any manufacturer that produces goods or components that another business rebrands or incorporates into products. OEMs operate in a variety of industries, including software, automotive, aerospace, and manufacturing, in addition to electronics. For example, a car manufacturer may purchase transmissions or engines from an OEM that specializes in these components. The primary differences lie in their breadth and specialization. An electronic OEM focuses exclusively on electronic hardware and technology, whereas an OEM may concentrate on a variety of components or systems. Advanced skills in precision manufacturing, electronic design, and adherence to strict industry standards are necessary for this specialization. There are also differences in the manufacturing environments. Since the failure of electronic components can have serious repercussions, electronic OEMs frequently work in extremely regulated environments to guarantee low defect rates. Depending on their product category, non-electronic OEMs may face less complex manufacturing procedures or supply chains. Even though both support supply chains, electronic OEMs only concentrate on electronic advances, allowing for breakthroughs in industries that rely heavily on technology. The Crucial Role of PLM and QMS for Electronic OEMs PLM (product lifecycle management) and QMS (quality management system) solutions are essential to maintaining the effectiveness, caliber, and compliance of electronic OEM systems. Connection to PLM PLM aids in process optimization, time-to-market reduction, and maintaining design and engineering change accuracy across the electronics industry's quick innovation cycles. It guarantees that all stakeholders—from supply chain partners to design teams—operate with synced, current information. PLM systems are essential for helping electronic OEMs manage complex product information, maintain version control, and encourage cooperation among geographically dispersed teams. Connection to QMS QMS (quality management system) solution is essential for electronic OEMs to maintain high levels of quality in their devices and components. A QMS ensures that every stage of the manufacturing process meets predetermined quality criteria, which is crucial given the delicate nature of electronics and their frequent exposure to stringent regulatory regulations. It assists electronic OEMs in conducting root-cause investigations, implementing remedial measures, and continuously improving procedures to minimize errors and downtime. For electronic producers, a strong QMS also aids in guaranteeing adherence to industry standards like ISO 9001 or IPC requirements. By combining PLM and QMS, electronic OEMs can ensure innovation and customer happiness, maintain product quality, and collaborate seamlessly in their fast-paced sector. As engines become more complex and sophisticated, modern lubricants are more advanced than ever too. Lubricants have adapted significantly over the past decade to meet the demands for greater fuel economy and better protection and longevity. It's vital to choose the right lubricant, but in deciding, it's important to know the difference between those that 'meet the specification' and those that are 'OEM approved'. Meeting the specification The OEM (Original Equipment Manufacturer) works with a lubricant manufacturer to develop an oil specification for use in a specific engine. This specification is a blend of base oils and additives that are carefully selected to suit the engine's requirements. When the exact mix specified by the OEM is achieved, the lubricant is described as 'meeting the specification'. However, this is not the same as being 'OEM approved', which requires a further and important step. OEM approved lubricants To achieve full approval, lubricant manufacturers typically submit an oil sample to the OEM for testing, to ensure it complies fully with the specification. Testing is carried out by an independent laboratory or, in some cases, by the OEM. OEMs sometimes approve the specification based on other factors, such as ACEA (European Automobile Manufacturers' Association) claims. If the oil is fully compliant, the OEM issues a certificate of approval that usually lasts between one and five years. This certificate proves that the lubricant has undergone a rigorous approval and quality control process; it is a cast-iron guarantee of its pedigree. Why aren't all lubricants OEM approved? Although many OEMs require full approval of a lubricant to ensure it is fit for purpose, this is not always the case. Tests to secure OEM approval are expensive and in some cases oil manufacturers do not consider it economically viable to take this further step. What are the implications of using a lubricant that is not OEM approved? When a vehicle or machine is under warranty, it is vital to use an OEM approved lubricant. Failure to do so could risk invalidating the warranty. Out of warranty, a lubricant that meets the required specification may suffice, but it lacks the guarantee of quality and ultimate reassurance that comes with using an OEM approved lubricant. Does it matter if you don't use correct lubricant? Yes. Using the wrong oil can cause greater wear on the gears and bearings, which means higher maintenance costs and, in time, could lead to engine failure. Considering the vast investment that goes into developing technologically advanced engines, it makes sense to use an approved lubricant that maximises performance and protects it against wear. Use OEM approved lubricants for best practice Q8Oils recommends that it is best practice to use an OEM approved lubricant. All lubricants from Q8Oils are OEM approved. They undergo stringent testing and meet, or exceed, the standards set by OEMs, as well as those set by leading independent industry organisations, including ACEA and API (American Petroleum Institute). We are also a member of the Verification of Lubricant Specifications (VLS), a not-for-profit subsidiary of the UK Lubricants Association, which protects the integrity of lubricant performance standards and brings transparency to the industry. VLS can carry out independent checks to verify that oils conform with their performance and OEM specification approval claims, giving reassurance to the end user (see ). Q8Oils considers OEM approvals as part of our quality standards. Through our strong relationships with manufacturers, we develop lubricants that are at the forefront of innovation and offer the highest standards of performance. For more information, contact us below. {wpforms id="1073"} An OEM specification is a set of technical requirements provided by the equipment manufacturer that specifies the type and performance characteristics of lubricants suitable for use in their equipment. These specifications are based on the specific needs of the equipment, considering factors such as engine type, operating conditions, and expected performance. An OEM specification provides a set of guidelines that outline the minimum performance and quality standards a lubricant must meet to be suitable for use in specific equipment. It provides a baseline for oil formulators to develop products that can perform under expected conditions. For instance, Volvo's VDS (Volvo Drain Specification) is a well-known OEM specification for heavy-duty diesel engines. VDS-4.5, for example, defines the performance criteria that an oil must meet to be considered suitable for Volvo's newer engines, especially in terms of wear protection, oxidation stability, and emission control compatibility. OEM specifications like VDS-4.5 for Volvo, MB 229.51 for Mercedes-Benz, and VW 504.00/507.00 for Volkswagen serve as a benchmark for oil manufacturers to develop lubricants that meet these specific performance standards. An oil formulated to meet an OEM specification must pass a series of stringent tests to ensure it performs as required under various operating conditions.OEM approval goes a step further than an OEM specification. While specifications outline the required performance criteria, an OEM approval is a formal endorsement from the equipment manufacturer stating that a particular oil formulation has been tested and meets their specific requirements. An OEM approval is a formal recognition by the OEM that a specific lubricant formulation has been tested and meets or exceeds their specifications. Approval generally implies that the lubricant has been subjected to rigorous in-house or third-party testing and evaluation to ensure it performs as required. In essence, while a specification is a prerequisite, approval is a confirmation.For example, an oil labeled as "Volvo VDS-4.5 Approved" has not only been formulated to meet the VDS-4.5 specifications but has also undergone testing and evaluation by Volvo to confirm its performance in their engines. Similarly, an engine oil that carries the "MB 229.51 Approved" label indicates that Mercedes-Benz has reviewed the lubricant and deemed it appropriate for their engines that require MB 229.51 performance levels.OEM specifications and approvals can be broadly categorized based on the type of machinery they pertain to. The primary categories include automotive lubricants, commercial vehicles and heavy-duty trucks, construction and industrial equipment, and marine and stationary engines. For automotive lubricants, specifications and approvals are geared towards passenger vehicles and light-duty trucks. Specifications like Volvo VDS (Volvo Drain Specification), including VDS-2, VDS-3, VDS-4, and VDS-4.5, are designed for heavy-duty diesel engines, each iteration providing different levels of protection and performance requirements. Mercedes-Benz MB 229.xx series specifications cater to different levels of performance in passenger car motor oils (PCMO), while Volkswagen VW 504.00/507.00 specifications focus on gasoline and diesel engines with long-drain intervals and compatibility with exhaust after-treatment systems.In the commercial vehicle and heavy-duty truck sector, specifications are more focused on the needs of trucks, buses, and other heavy-duty applications. For example, MAN M 3275 and M 3477 specifications cover engine oils that provide high performance and extended drain intervals for MAN's commercial vehicles. Cummins CES 20081 and CES 20092 specifications offer guidelines for oils that deliver optimal performance for Cummins engines, especially under extended drain intervals and demanding conditions.For construction and industrial equipment, specifications and approvals address the requirements of heavy machinery such as excavators, loaders, cranes, and other construction equipment. Liebherr specifications, such as LH-01 and LH-02, provide guidelines for hydraulic and engine oils used in their construction and mining equipment, emphasizing anti-wear properties, oxidation stability, and thermal performance. Caterpillar's ECF (Engine Crankcase Fluid) series, which includes ECF-1, ECF-2, and ECF-3, are formulated for use in Caterpillar engines, stressing soot control, oxidation stability, and wear protection, particularly in off-road and mining applications.Marine and stationary engines, which often operate under severe conditions, require specifications that address these unique demands. Wärtsilä and MAN Diesel & Turbo, for example, have specific lubricant requirements tailored for marine engines that operate under high loads and temperatures, necessitating superior oxidation stability and wear protection. Understanding the intricacies of OEM specifications and approvals is crucial for selecting the correct lubricant. OEM specifications ensure compatibility with the equipment's materials and components, which is vital for optimal operation. For example, some modern engines equipped with Diesel Particulate Filters (DPFs) require low-SAPS (Sulfated Ash, Phosphorus, and Sulfur) oils to prevent clogging of the filter. A lubricant that meets the VW 507.00 specification would be suitable for such applications, ensuring that the equipment performs as intended and meets emission regulations.Specifications and approvals also play a crucial role in optimizing equipment performance and longevity. Lubricants that meet specific OEM approvals are designed to provide superior protection against wear, corrosion, and oxidation, enhancing the overall efficiency and lifespan of the equipment. For instance, oils approved to the Volvo VDS-4.5 specification are formulated to offer extended drain intervals, better fuel economy, and reduced oil consumption. This not only ensures optimal engine performance but also reduces the total cost of ownership over the equipment's life.Moreover, adhering to OEM specifications and approvals is essential to comply with warranty requirements. Most OEMs have strict warranty policies that mandate the use of lubricants meeting their specified standards. Using an unapproved lubricant can lead to the voiding of the warranty in case of engine failure or damage. For instance, using an oil that does not have MB 229.51 approval in a Mercedes-Benz engine designed for that specification can result in warranty issues and potential repair costs.In addition, many modern OEM specifications, particularly in the automotive sector, are developed with environmental considerations in mind, such as emissions and fuel economy. Specifications like VW 504.00/507.00 or MB 229.52 are tailored to be compatible with emission control systems, ensuring that vehicles meet regulatory requirements for emissions. This alignment with environmental standards is increasingly critical as regulatory bodies tighten emissions and environmental impact regulations.Finally, OEM specifications are tailored to the operating conditions of specific equipment. Different OEM specifications are designed to address the unique demands of different types of engines and machinery. For example, MAN's M 3477 specification is specifically developed for engines that operate in extreme conditions, requiring oils with excellent thermal stability and wear protection. Selecting an oil meeting this specification ensures the engine can withstand high temperatures and heavy loads without compromising performance.To further illustrate how OEM specifications and approvals affect oil selection, it is helpful to examine specific examples across various sectors. In the automotive industry, the Volvo VDS-4.5 specification is designed for heavy-duty diesel engines, providing enhanced oxidation stability, better shear stability, and improved wear protection. These oils are suitable for engines equipped with Exhaust Gas Recirculation (EGR) and Diesel Particulate Filters (DPFs), ensuring both engine protection and emission control compliance. Similarly, the Mercedes-Benz MB 229.52 specification is developed for modern diesel engines with after-treatment systems like Selective Catalytic Reduction (SCR) and DPFs, requiring oils that provide low-SAPS content, high fuel efficiency, and long-drain capabilities while ensuring compatibility with sensitive exhaust systems. Volkswagens's VW 504.00/507.00 specifications cater to modern gasoline and diesel engines, particularly in vehicles with DPFs and turbochargers, focusing on low SAPS content and formulating oils for extended service intervals, fuel efficiency, and reduced emissions.In the heavy-duty truck and commercial vehicle sector, Cummins CES 20092 oils are formulated to offer better wear protection against wear, deposits, and oxidation for Cummins engines, focusing on extended drain intervals and improved fuel economy. MAN M 3477, on the other hand, demands high thermal stability and superior wear protection, making it ideal for engines operating in tough conditions, such as high-load and high-temperature environments. For construction and industrial equipment, Liebherr LH-02 specifications emphasize anti-wear properties, oxidation stability, and thermal performance, which are crucial for equipment like cranes, excavators, and loaders that operate under varying loads and temperatures. Caterpillar ECF-3 specifications cover oils for Caterpillar engines that require high performance in terms of soot control, oxidation stability, and wear resistance, particularly in off-road and mining applications.OEM specifications and approvals are critical tools in guiding the selection of the right lubricant for various types of machinery and equipment. By understanding these specifications and approvals, maintenance professionals can ensure that lubricants are compatible with equipment requirements, enhance performance, comply with environmental regulations, and protect warranties. Adhering to OEM guidelines helps optimize equipment performance, extend service intervals, and reduce the total cost of ownership. In summary, selecting the correct lubricant based on OEM specifications and approvals is an essential aspect of effective equipment maintenance and management. This requires a deep understanding of the equipment's needs, the operating conditions, and the specific requirements laid out by the OEM. Following these guidelines ensures not only optimal performance but also longevity and cost-efficiency in maintaining various types of equipment. It used to be that there were car dealerships and independent body shops. Car owners could decide to take their vehicle to the dealership for auto body repairs or go to a local independent body shop. Dealerships are typically pricier, while independent body shops are less reputable and may offer substandard repairs. However, there's a better option. There are now OEM certified independent body shops, that offer high quality repairs that have been approved by the automaker, with the convenience and price break of using a local facility. OEM Certification requires numerous stipulations like: Having the facility and equipment necessary to complete the highest standard of work Only using OEM parts OEM stands for original equipment manufacturer. OEM certification means that a body shop has been acknowledged to only use factory-approved parts. It also means that the facility has the correct equipment to install those parts, and uses only factory-approved procedures. For example, Cline Collision Center is a Ford Recognized auto body facility. This means that Ford has authorized Cline to do work on all Ford vehicles, including the new F-150 that has an aluminum frame. Aluminum frame vehicles require different equipment than traditional steel ones; because of the corrosive nature of the metals, completely separate equipment, tools, and space is needed when working on an aluminum vehicle. Cline has the right environment to offer top-notch Ford repairs. OEM Certifications from Several of the Top Automakers Ford isn't the only automaker that has recognized Cline Collision Center's work as meeting or exceeding the stringent standards expected for top-tier auto body repair. We are also certified through Fiat Chrysler, Hyundai, Infiniti, Nissan, Kia, and Honda. In fact, our technicians carry the highest level of training, including certification through Automotive Service Excellence (ASE) and Inter-Industry Conference on Auto Collision Repair (I-CAR), the gold standard of auto body certifications. If you have any other questions about OEM Certification and how it pertains to your vehicle's repairs, call Cline Collision Center. View our OEM Compliant Equipment In today's competitive auto body repair industry, Original Equipment Manufacturer (OEM) certification plays a crucial role in setting your shop apart from others. It verifies that your facility meets the stringent standards set by vehicle manufacturers, ensuring that repairs are performed with the proper methods, parts and tools. With over fifty years of expertise in the automotive repair field, Car-O-Liner® is a trusted partner to many auto body shops, providing the necessary equipment and training to help businesses meet OEM certification requirements. Our team is both ASE/CASE and I-CAR certified, further showcasing our commitment to excellence in auto collision repair. This guide will explain the importance of OEM certification, its benefits for your business and the steps to achieving it. OEM certification is a recognition granted by manufacturers in the automotive industry to auto body repair shops that adhere to their specific standards for repair quality. This certification assures that your shop can carry out repairs according to the manufacturer's practices, using original parts and equipment. By maintaining these standards, OEM certified shops help preserve the safety, performance and structural integrity of vehicles. This not only ensures that repairs meet the manufacturer's specifications but also upholds the vehicle's original design and safety features. For auto body repair shops, advancing through an OEM certification programme enhances your reputation, positioning your shop as a reliable service provider that customers can trust. In a competitive market, being certified can set you apart from non-certified competitors and attract customers who value quality and precision. OEM certification significantly enhances your shop's reputation and competitiveness. Customers know they can trust you to get the job done right because you're following the exact repair procedures set by the manufacturer. When their car comes back to them, they'll know it's just like it was before the accident, built to last. Additionally, many insurance companies and dealerships prefer working with OEM-certified shops due to the assurance of high-quality repairs. They prefer working with shops that are certified because they know the job will be done to a high standard. The resulting steady influx of work can significantly impact your shop's profitability and growth. Then there's access to OEM parts. Certified shops can get original parts straight from the manufacturer, which means your repairs are spot on, no compromises. When you use the right parts, it shows in the quality of your work, which keeps customers coming back. All in all, by sticking to the approved repair methods and using the right parts, you'll reduce mistakes and cut down on time spent fixing errors. Over time, you build a reputation for being the go-to shop for high-quality repairs, and that's a huge win for business. OEM certified shops really stand apart from the non-certified ones. When you're OEM certified, you're following the exact steps that the manufacturer requires. That means the repair is done exactly as it should be, with no guesswork. You're using the right tools and parts, and you're sticking to the process, making the car as good as new. Non-certified shops? Well, they often use aftermarket parts that don't always fit perfectly or work as well. They might not have access to specific repair techniques either. This can lead to problems later, especially if the repair doesn't hold up, and in some cases, it could even void the vehicle's warranty. Customers who care about the quality of their repair are much more likely to pick a certified shop because they know the repair will be done right the first time. Certified repairs tend to result in fewer issues down the line, which means more satisfied customers and fewer headaches for you. The road to OEM certification requires both a financial commitment and considerable time investment. The application itself often carries a fee, which varies depending on the manufacturer. Many certifications also need to be renewed periodically, meaning it's not a one-time expense. This is an important factor to keep in mind as you plan your budget. Technician training is another critical area where costs add up. To ensure that repairs are done to exact specifications, manufacturers often require specialised training for your staff. These courses can range from online modules to in-person workshops, some of which may involve travel. While training represents an investment in your team's expertise, it also temporarily takes technicians off the shop floor, which can affect productivity in the short term. You'll also need to consider the cost of upgrading your tools and equipment. OEM certification typically requires specific machinery that meets the manufacturer's standards. This could involve purchasing new tools or upgrading existing ones. While these costs can be significant, they are necessary to ensure that repairs are performed with precision and according to OEM guidelines. Lastly, there's the time investment required to bring everything together. Your team may need several weeks to complete training, during which they won't be able to handle their regular workload. Additionally, preparing your facility for the OEM inspection may involve reorganising your workspace or making physical adjustments, which also takes time. Getting OEM certified doesn't have to be overwhelming if you break it down into simple steps: Research Your OEMs: First off, identify the vehicle manufacturers whose certification aligns with your shop's speciality and services. Different manufacturers have different requirements, so it's crucial to understand what each OEM expects. Set Your Goals: Determine which OEMs you want to pursue certification with. This will help you focus your efforts and investments. Invest in Training: Enroll your technicians in the necessary training programs. This could include online courses, workshops, or hands-on training at OEM facilities. Upgrade Equipment: Ensure your shop has the tools and equipment required for OEM certification. This might involve purchasing new tools or upgrading existing ones. Submit Applications: Prepare and submit applications to the OEMs. This usually involves providing details about your facility, your team, and how you'll meet the OEM's requirements. Train Your Technicians: A key part of certification is getting your staff up to speed. Most OEMs require your technicians to go through specific training so they know exactly how to perform repairs according to the manufacturer's standards. Prepare for the Inspection: The OEM will inspect your shop to make sure it meets all the necessary standards. Before the inspection, make sure everything is in order, from equipment to safety protocols. Receive Certification: If your shop meets all the criteria, you'll receive OEM certification. This is a huge step for your business, and it's something you can promote to attract more customers. Take Advantage of Resources: Many OEMs provide ongoing support to certified shops. Use the resources they offer, like training programmes and marketing materials, to keep your shop ahead of the curve. OEM certification is not just an achievement but a strategic long-term investment. Over time, it enhances your shop's reputation as a trusted provider of reliable and high-quality repairs, which fosters loyalty among customers and strengthens relationships with insurance companies and dealerships. Staying certified also means keeping up with the latest tools and techniques. Technology in the auto industry is always changing, and being OEM certified helps make sure you're staying up-to-date with the latest advances. You'll keep improving, and that's something your customers will always appreciate. Another long-term benefit is building relationships with insurance companies and dealerships. They'll know they can count on you for reliable work, and that opens up more opportunities for referral business. Achieving OEM certification is more than just meeting manufacturer standards, it's a commitment to providing top quality service and maintaining high repair standards. While it requires an investment in time, training and equipment, the long term benefits to your business make it well worth the effort. Start your journey toward becoming an OEM certified repair shop and set your business on a path to success. For more information on training and equipment, visit the Car-O-Liner OEM page and explore our product offerings. When shopping for engine oil, lubricants, or even replacement parts for your vehicle, you'll often come across something called OEM part numbers and OEM approvals. These terms are essential for ensuring the products you're using are perfectly suited to your vehicle. But what exactly do they mean, and why are they so important for maintaining your car?In this blog, we'll break down what OEM part numbers and approvals signify, why they matter, and how Ravenol products with OEM approvals can ensure optimal performance for your vehicle. Basically, what does it all mean?What Does OEM Stand For?First, let's clarify what OEM stands for: Original Equipment Manufacturer. When you see the term OEM, it means that a product has been produced either by the original manufacturer of the vehicle or meets the same standards and specifications as the parts and fluids originally installed in the vehicle.For example, if your car is a BMW, OEM parts or fluids will either be made by BMW or have received BMW's approval to be used as a direct replacement.What Is an OEM Part Number?An OEM part number is a unique identification code assigned to a specific part by the vehicle's manufacturer. These numbers help manufacturers, mechanics, and consumers easily identify the exact part or product designed for a specific make and model of vehicle.In the case of lubricants, an OEM part number helps specify the type of oil, transmission fluid, or other fluid required for your vehicle. For example, if you need engine oil for a Volkswagen, the OEM part number will direct you to a product that has been tested and approved by Volkswagen to meet the exact specifications needed for that engine.Above: This is a part number for a rear shock absorber from BMW with the MPN (Manufacturers Part Number) highlighted.OEM part numbers ensure: Compatibility: You're using the exact part or product designed for your vehicle. Reliability: The part or fluid meets the exact specifications set by the manufacturer, giving you peace of mind during maintenance or servicing.How Ravenol's OEM Approvals WorkAt Ravenol, earning OEM approvals is a critical part of the product development process. Every oil formulation undergoes stringent testing by the vehicle manufacturer to ensure it meets the exacting standards needed to protect modern engines. Whether it's ensuring the oil maintains its viscosity under extreme temperatures, preventing sludge buildup, or reducing wear and tear, Ravenol's OEM-approved oils are built to deliver exceptional performance. For example-Our best seller, Ravenol VMP 5W-30 carries approvals from BMW Longlife-04, Mercedes-Benz MB 229.51, and Volkswagen 504.00/507.00. These approvals mean that this specific oil has been tested and validated for use in those brands' vehicles, ensuring it offers the protection and performance required by these manufacturers. Each engine family is different and you'll often find that engines produced in the same year from manufacturers may have different approval numbers, so always check which one yours has.Above: Ravenol ECS 0W-20 USVO engine oil showing the Jaguar Land Rover OEM approval code.Understanding the Difference Between OEM Approvals and RecommendationsIt's important to note that there's a difference between an OEM approval and an OEM recommendation. An OEM approval means that the oil or part has been directly tested and approved by the vehicle manufacturer for use in its engines. A recommendation, on the other hand, might simply mean the oil meets industry standards (like API or ACEA) and is suitable for use in a variety of engines but hasn't undergone the manufacturer's specific testing. When in doubt, always check for OEM approvals on your oil's packaging to ensure it's been officially certified for your vehicle.The Importance of OEM Approvals for Your VehicleOEM part numbers and approvals are not just industry jargon—they are essential markers of quality, compatibility, and reliability. When you choose a Ravenol oil with OEM approval, you're choosing a product that has been specifically designed to meet the exacting standards of your vehicle's manufacturer. This means you can drive with confidence, knowing your engine is protected by a high-quality, manufacturer-approved oil.For added convenience, Ravenol's Oil Finder tool allows you to easily find the OEM-approved oil for your vehicle. Simply enter your vehicle's registration number, and the tool will provide you with a list of all the approved oils, including engine oil, steering fluid, brake fluid, gearbox oil, and differential oil. It even tells you the correct amount needed, so there's no guesswork involved.Next time you're choosing oil for your vehicle, make sure you select one with the right OEM approval—like Ravenol's premium oils—to ensure optimal performance and protection for your engine.Be the first to Leave a Reply about this item! An original equipment manufacturer (OEM) is a company whose goods are used as components in the products of another company. Put simply, an OEM creates parts and components that are used by other companies in their finished products. These other companies are typically called value-added resellers (VARs). VARs work closely with the OEM, which often customizes designs based on the VAR's needs and specifications. An original equipment manufacturer provides components for the finished products of another company, called a value-added reseller.OEMs usually focus on business-to-business sales, while VARs sell to the public—or other end users.OEM parts often compete with generic, aftermarket replacement parts.An original equipment manufacturer differs from an original design manufacturer, a company that customizes its products for resale. Original equipment manufacturers traditionally focus on business-to-business (B2B) sales, while VARs sell to consumers or end users. That's because the products that OEMs design and sell are meant for other companies to complete their goods and services. OEMs usually make parts to sell to VARs as opposed to complete, finished products. An OEM may manufacture electronic components for a VAR that makes high-definition TVs, such as Samsung. Or, an OEM may sell customized fasteners with a branded monogram to a VAR—for example, the RL monograms for the clothing company Ralph Lauren. Car parts, such as exhaust systems or brake cylinders, are also manufactured by OEMs. After the parts are manufactured, the OEM sells them to an auto manufacturer. This manufacturer assembles them into a car, and the completed car is marketed to auto dealers. Finally, the auto dealers sell the completed cars to consumers (end users). As noted above, OEMs have traditionally sold their products directly to businesses. This allows them to use their close relationships with manufacturers and sell their finished products to consumers. The OEMs have blurred the lines between OEM and VAR, making it difficult to distinguish between the two. This is because OEMs may now sell their products directly to consumers, effectively making them VARs. This is common in certain industries, including computer and auto parts. For example, an individual consumer who wants to make car repairs can buy OEM parts directly from a manufacturer or a retailer that stocks those parts. The aftermarket is the market for replacement parts, accessories, and equipment for the care of an original product. The original product may be an automobile after it has been sold to a consumer. In the previous example, although the OEM manufactured the original parts used to assemble the car, additional companies sell equipment for the aftermarket. The consumer can buy replacement equipment for the original parts from these companies. Aftermarket replacement parts are often manufactured to be close to the original specifications of the OEM's parts. Suppose the owner of a Ford car needs to replace the thermostat. The original thermostat was manufactured by ABC Thermostats, an OEM. The consumer can either buy another thermostat manufactured by ABC Thermostats, or they can buy an aftermarket part manufactured by a different company. Consumers often choose to buy replacement parts from the OEM for consistency. However, some aftermarket equipment is of higher quality than the OEM's equipment. For instance, the gear shifters manufactured by Hurst Performance became known for their superior performance, which is why car buyers preferred them to the original part. Hurst shifters were so trusted that manufacturers chose to install them in their factory designs, effectively turning Hurst into an OEM. An OEM is distinct from an original design manufacturer (ODM). An ODM is a third-party company that specializes in the design and manufacture of products based on another company's exact specifications. A company may hire an ODM when it's looking to bring a new product to market; the ODM would then produce manufactured parts to meet this company's (their client's) exact specifications. The client rebrands and labels the product afterward for sale to its consumers. A company may choose to work with an ODM to save on its own research and development costs. And, ODM products usually have a low minimum order quantity, making them attractive to smaller clients. It is more common for companies to rebrand other manufacturers' products for resale in the digital world. Dell and Hewlett-Packard have accepted branded parts from external sources in their products over time. As a result, the usage of OEM has expanded. The phrase now can be used as an adjective, as in OEM parts, or as a verb, such as when a manufacturer says it plans to OEM a new product. This created a shift in manufacturing dynamics and, as a result, changes in responsibility for warranties, customer support, and other services. As Dell incorporated Intel processors into its computers, for instance, Dell advertised that it had "Intel Inside!" and marketing materials suggested that Intel and Dell were partners in the processor and computer design. In the auto repair industry, OEM parts are those products used by a car manufacturer but made by a different manufacturer. Aftermarket parts are made by a third-party manufacturer but may be compatible with the same vehicles. In computer and electronics sales, OEM may refer to the software sold to another manufacturer for its products. It may be pre-installed on a new computer or device. An example is Windows operating systems, which Microsoft, the maker, sells to other computer makers like Dell and Lenovo to install in their hardware. OEM parts tend to be more expensive than parts made by third-party manufacturers, but they are made to a more exact set of specifications. Some third-party products are as reliable as OEM parts, and they may be significantly cheaper. When searching for replacements, consumers should research different brands to determine which manufacturer offers the best combination of price and quality. An OEM provides components for the finished products of a VAR. Typically, OEMs manufacture parts and equipment for B2B sales, while VARs sell their finished products to consumers (end users). After the final, finished product is sold to the consumer, OEM parts often compete with generic, replacement parts. Specifications are the detailed requirements that, once satisfied, can lead to an approval. With the sorts of claims currently appearing on labels—"Meets Requirements Of," "Recommended For," and "Suitable For Use"—it is easy to become confused about the value of an OEM approval. OEM approvals are the only sure-fire way to limit risks of damage and poor performance. Specifications, the Roadmap to Approval When a lubricant satisfies the requirements of a specification, an approval may be sought from the body governing the specification. An approval certifies that the lubricant, such as an engine oil, meets important criteria around its properties and the way it performs within a mechanical component. The specification typically involves the following types of criteria: Physical limits ensure that the lubricant has the correct viscosity characteristics to provide sufficient protection at temperature extremes, such as being able to flow at the extreme low temperatures and providing a lubricant film at extreme high temperatures. Chemical limits ensure that the lubricant has the correct chemical composition to prevent corrosion, neutralize acids, and protecting exhaust aftertreatment devices from SAPS-related poisoning. Engine and laboratory tests assure a lubricant can prevent damage from phenomena like deposits and LSPI and enhance performance like fuel economy. Types of Specifications Specifications fall into two of two types: Industry specifications are designed and managed by industry groups like ACEA, API, ILSAC and JASO. These groups develop specifications to ensure lubricants have right performance level to protect a wide range of engines. Performance is validated via a prescribed list of engine and laboratory tests. OEM specifications like BMW LL-04, VW 50400/50700, MAN Cat. II, and Volvo VDS-4.5 come directly from the companies that manufacture the equipment—theOriginal Equipment Manufacturer (OEM). With their specifications, OEMs can dictate exactly how the lubricant should perform within the unique lubrication environment of their engines. In many cases, OEM specifications build off industry specifications, bolstering areas important to the design and performance philosophies of the OEM. For this reason, OEM specifications can be the most stringent of all the specifications. Gaining approval is often a difficult, expensive, and time-consuming task that demands higher performing lubricants. OEM Specifications tend to build on industry specifications, prioritizing and enhancing performance in key areas. Why Have Specs? Specifications are a way of defining and controlling the performance of a lubricant in a multitude areas. For instance, as hardware evolves, specifications ensure that lubricants are also evolving so they can perform as intended. As emissions legislation becomes more stringent, specifications ensure that lubricants are doing their part by, among other things, protecting equipment that reduces emissions. As markets continue to demand better fuel efficiency, specifications dictate how a lubricant must perform despite factors such as low viscosity and decreased lubricant volume. While durability remains a top consideration, specifications allow oil marketers to prove their lubricants are up to the task of protecting and prolonging the life of components. Approaches to Engine Oil Specifications Considering passenger car, motorcycle, heavy duty, and marine diesel specifications, all rely on testing for physical and chemical limits. Beyond that base, each market has a slightly different approach for making sure a lubricant is going to work in a given application. For instance, passenger car, motorcycle, and heavy-duty specifications involve engine testing in which the lubricant is tested in a controlled test-cell environment against precise test cycles. Motorcycle specifications add clutch testing because the oil lubricates not only the engine, but also the gearbox and wet clutch simultaneously. One important aspect of clutch testing is verifying the level of friction supplied by the lubricant. If too much friction is present, energy is needlessly wasted as the clutch surfaces engage. If friction is lacking, the clutch will not engage and will spin freely, preventing power from making its way to the gearbox and the wheels. This scenario leads to clutch burn out. Heavy duty and marine specify field testing as a means of proving performance in real world conditions. One reason marine diesel lubricants are not typically tested in a test-cell environment is the sheer size of the engines and the high fuel usage, often leaving field trials as the best option for qualifying performance. Different end-use markets have different approaches to validating engine oil performance The OEM Approval Process While the details of the approval process may differ from OEM to OEM, the general flow of the process follows three distinct phases. Typically, during phase one the process begins with the technology provider developing the engine oil formulation, which includes the base oil, the additive package, and viscosity modifier. Once the technology provider finalizes a formulation, the technology provider runs the required testing as defined in the details of the OEM specification. This testing is expensive and involves a significant investment and competency in test rigs, hardware, engine components, and infrastructure. When the testing is complete, the OEM reviews the resulting data and, if successful, grants the technology provider an Original Approval against the formulation. During phase two, the oil marketer runs required validation testing on the approved formulation and consults with the OEM about the manufacturing tolerances for scaling up production. Validation testing is important because it confirms to the OEM that the formulation the oil marketer will be blending is the exact formulation that was granted Original Approval. This is typically low-cost laboratory testing. The OEM in turn reviews the validation data and grants the oil marketer a Reblend Approval for the technology provider formulation using the exact formulation components defined in the original approval. The oil marketer is now able to bring this formulation to market. Finally, phase three involves the oil marketer obtaining Rebrand Approval for any additional products or brand names they may be taking to various markets around the world. No additional testing is required in this phase, but an approval is still required to validate brand names, packaging, etc. The general flow of the OEM approval process can be organized into three distinct phases. The Value of OEM Approved OEM approval ensures all testing has been conducted as directed and that a lubricant will perform as needed. You can be sure the performance of the lubricant formulation is as required for the unique design and needs of the OEM's engine as the formulation has been validated by the OEM. Therefore, use of an OEM-approved product minimizes the risk of damage to the engine and maximizes the performance of the engine. Any other common label terminology being used poses potential problems. Common terminology like "Meets Requirements Of," "Recommended For," and "Suitable For Use" are not sufficient to guarantee that the oil marketer has made a judgment about the performance of their formulation. Using any of these claims indicates that the oil is not approved by the OEM. The data behind these claims can cover a wide spectrum. The best case among these suspect claims is a situation where all required data has been collected, but the oil marketer has not applied the OEM approval. Some claims may involve an obsolete specification wherein an OEM approval cannot be obtained. They may include data that complies with an older version of the specification. In some cases, these claims may not include the engine test data to support them. In any case, anything other than "OEM Approved" not only confuses consumers, but also puts their investment at risk. The brand and reputation of both the oil marketer and the OEM are also at risk. The only sure way to minimize risk is OEM approval, for it is the only way to guarantee that the OEM has validated the formulation's performance. Anything other than "OEM" approved confuses consumers and involves varying levels of risk. Diesel Engine Oil, Engine Oil, fleet maintenance, OEM, Sninopek What Does OEM Approved Mean in Lubricants?When sourcing lubricants for fleet, commercial, or industrial use, you've likely come across the term OEM Approved. But what does it actually mean, and why should it matter to your business? What Is OEM Approval?OEM stands for Original Equipment Manufacturer. If a lubricant is OEM approved, it means the product has undergone testing and received formal approval from a vehicle or equipment manufacturer. This confirms that the oil meets the brand's engineering and performance standards.Examples of common OEM approvals include: Mercedes-Benz MB 228.51 Volvo VDS-4.5 MAN M 3775 Why It Matters for Fleet OperatorsUsing OEM-approved engine oil ensures: Protection of manufacturer warranties Optimised performance and fuel efficiency Reduced maintenance downtime Is "Meets Specification" the Same as OEM Approval?No. An oil that meets a specification may not be officially approved. OEM approval means the lubricant has passed formal testing and validation with that brand's engineers. Sninopek OEM Approved LubricantsSninopek's Tulux T700 15W40 CK-4/E9 is a heavy-duty synthetic diesel engine oil that meets API CK-4 standards and carries multiple OEM approvals, making it ideal for trade buyers, depots, and logistics fleets.Explore our full range of OEM-approved engine oils. Final Thoughts?or B2B buyers, OEM approval is more than just a label — it's proof of quality, reliability, and long-term equipment protection. Choosing the right lubricant today can prevent costly downtime tomorrow.