

DID YOU KNOW?

ABOUT ATF REQUIREMENTS

Twenty years ago the automotive industry only had three very common automatic transmission fluids, but since then, technology has rapidly changed. No evolution in the automotive world is bigger than what we have seen in automatic transmission fluids (ATF) both in terms of performance and the increase in unique fluid specifications.

Because of ENEOS' many decades of research and development with Asian car manufacturers, we are in a unique position to adapt and respond to the changes that have come about in oil and fluid technology. Let's review how advancements to automatic transmissions have affected the fluid requirements.

VISCOSITY AND TRANSMISSION FLUID

First and foremost has been the ongoing change to viscosity. Just like engine oil, ATF viscosity continues to decrease. In the push for better performance and fuel economy, Original Equipment Manufacturers (OEMs) have required transmission builders to supply more efficient gearboxes, which require higher performance fluids.

Although transmission builders use different materials and technological elements requiring unique additives, one factor OEMs had in common was to require transmission fluids with less viscosity. Lowering the viscosity while protecting components was a challenge for the lubricant industry, but also a necessity. This issue was also helped by improvements in base oil technology, which is one factor that allows ENEOS to meet evolving specifications without sacrificing protection.



TRANSMISSION VISCOSITY STANDARDS

Unlike OEM-required engine oil viscosity, which is standardized through the Automotive Petroleum Institute (API), ATFs have no such standardization. However, OEMs do have transmission fluid specifications, especially when it comes to viscosity.

Essentially, ATF is a hydraulic fluid, and when used in a hydraulic automatic transmission, even a high viscosity fluid will allow it to function. However, using a higher viscosity fluid will negatively impact performance and fuel economy.

USING APPROPRIATE TRANSMISSION FLUID

Most vehicle operators and technicians would never use an improper viscosity oil in an engine, but unknowingly use an ATF with improper viscosity in their transmission on a regular basis.

One could research the OEM's viscosity information for a vehicle, which is available online, and then inquire about the viscosity from the fluid manufacturer. With Asian vehicles, it is more difficult to learn whether other transmission specifications are met because they are provided only to OE manufacturing partners.

Another option is to purchase transmission fluid from an OE provider who has the correct specs from the OEM and has jointly researched the optimal technologies with vehicle and transmission manufacturers.

DID YOU KNOW?

ENEOS OEM PARTNERSHIPS

With our approach tailored to each manufacturer, ENEOS partnerships begin with an invitation from an automotive manufacturer to develop vehicle-specific lubricants.

ENEOS provides:

- In-house testing facilities that follow strategies developed with each OEM partner to meet its ideal oil specifications
- Factory fill and/or service fill lubricants are supplied to the majority of vehicle manufacturers throughout Asia

ENEOS transmission oils are designed to anticipate future requirements beyond current domestic standards. The result of our development helps to ensure vehicles leave the factory with the highest possible specification in terms of fuel economy, emissions, performance and durability. And ENEOS can provide the same standard of lubrication to help ensure peak performance throughout the vehicle's life.

ADDRESSING SPECIFICATIONS AND VISCOSITY

ENEOS' unique position as a research, development, and factory fill partner with OEMs has allowed us to address the ATF aftermarket in two separate ways.

First, ENEOS developed a true low viscosity broad-matching ATF which covers roughly 86% of vehicles in the marketplace, **ENEOS ECO ATF PLUS**. Few, if any, other multi-vehicle fluids meet the OE specifications of today's vehicles. ENEOS is the only product that meets or exceeds the OEM specifications, including the viscosity requirements.

Second, ENEOS offers the **ENEOS IMPORT ATF** line for vehicle owners, technicians or service professionals who prefer exact match fluid for a given vehicle, or who specialize in maintenance of specific vehicles and would like to stock ahead for those vehicles' fluid changes.



**ECO ATF PLUS
3111-300**

ENEOS ECO ATF PLUS	ENEOS IMPORT ATF	ENEOS IMPORT ATF	ENEOS IMPORT ATF	ENEOS IMPORT ATF
3111-300	MODEL H (Honda ATF DW-1, Z1) 3105-300	MODEL N (Nissan ATF Matic S, K, J, or D) 3106-300	MODEL SP Plus (Hyundai and Kia ATF SP-IV) 3109-300	MODEL T-W (Toyota ATF WS) 3107-300

Whichever fluid you choose, vehicle operators and technicians can use ENEOS fluids with the trust and knowledge that it is the best choice for maintaining the vehicle's designed performance.