

Automotive Thermal Management Systems

Electrification of vehicles for ICE and hybrid drive trains continue to replace mechanical and hydraulic systems that power ancillaries for thermal management of cars with electric solutions. Further tightening of emission targets will support this trend. Thermal management can contribute on the order of 2% to 7.5% reductions in fuel consumption over the next 10 years depending on a vehicle powertrain's base thermal management features.

Automotive electric pumps are not a recent introduction and have been in use for several years. However, with the increase in the number of high-powered components which require thermal management, vehicles start to use many electrical pumps. Typically, an electric-driven automotive pump allows greater control (with higher precision) on the amount of coolant that is pumped into the system, making it more efficient.

Future is Bonded Neo Magnets

Application engineers across the automotive industry have started to develop cost-optimized magnetic solutions using bonded neo MQ1™ magnets. Introducing MQ1™ magnets to cooling fans, automotive pumps, grill shutter actuators and sensors have made bonded neo magnets a key partner for Automotive thermal management solution.

Furthermore, bonded neo offers unique advantages for the auxiliary water pump application. Such as reduced size, weight and flexibility in assembly compared to sintered IPM design pumps. These are some of the reasons why more customers are moving towards bonded neo based solutions for auxiliary automotive pumps.

Magnequench engineers and scientist work with customers to offer solutions that are suitable for their specific needs. To find out more connect with our experts sales@magnequench.com

About Us: Magnequench is the industry leader in bonded neo magnetic powders, magnets and their application.

Please visit our website: www.magnequench.com

If you have technical questions on the products, please contact us:
sales@magnequench.com