

Pump and Valve Components

Morgan has a proven track record in supplying resilient, high-performance and cutting edge solutions to automotive manufacturers. We are perfectly placed to support the demanding needs and requirements in the sector with global manufacturing and supply capabilities in various volumes. We can design and manufacture custom components to meet specific requirements. Our components are up to 60% lighter than steel, this weight saving contributes to increased energy efficiency.



Bearing for Exhaust Gas Recirculation (EGR)

The ability of our radial bearings to lubricate at the high temperatures engines must run at enables them to provide an excellent solution for regulating exhaust gas recirculation resulting in more efficient engine systems. Our innovative materials also reduce nitrogen oxides by lowering combustion temperatures in the combustion chamber.



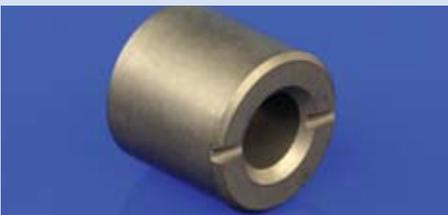
Brake booster

We provide a selection of high performance vanes and rotors manufactured from our specialist formulations of carbon / graphite materials which feature superior tribological and wear characteristics. Chemically inert and dimensionally stable they are ideally suited to automotive applications such as brake boosters.



Electric / hybrid vehicles: sealless cooling pump bearing

Advances in battery technology are leading to the need for increasing demanding thermal management solutions. The exceptional properties ceramic and carbon offer provide electric and hybrid vehicles with the pump technology needed to circulate aggressive coolant through the Lithium-Ion batteries. The reduced weight contributes to low noise whilst running and increased energy efficiency of the vehicle.



Fuel pump bearings

Radial bearings developed from our leading carbon material make the use of ethanol-containing fuel blends possible by providing improved lubricity in high pressure fuel pump environments.



Electronic leveling valves

Air suspension, and its contribution to improve driving comfort, is particularly well-established as a valuable feature in heavy vehicles. Morgan produces high purity alumina slider valves to a very high flatness tolerance enabling the creation of the air tight seal required for Electronic Leveling Modules (ELM). The exceptional hardness offered by ceramic increases reliability throughout the product life cycle.

Components for electric vacuum pumps

Morgan's products increase braking safety and operation convenience via a vacuum supply to the brake booster, exhaust gas recirculation valve and turbocharger used for diesel and gasoline engines.

Thermal management

Morgan's Engine-Driven Water Pump Seal is favoured by automotive water pump manufactures who choose an alumina ceramic/ carbon seal assembly due to the materials high wear and corrosion resistance to the circulation of aggressive anti-freeze and coolant solutions.