

Federal-Mogul Corporation's Powertrain Energy business utilizes its engineering and materials expertise, manufacturing excellence, distribution flexibility and marketing power to supply our customers with valued technology in a wide range of powertrain products. Federal-Mogul is recognized as a market leader in materials technology, application engineering and advanced testing capabilities for pistons in high-performance engines, especially in the light vehicle diesel, heavy-duty and high-end gasoline engine segments. We design and produce nearly all known types of pistons, piston rings, pins, cylinder liners, ignition components and valvetrain components using the latest technology in coatings and treatments. Federal-Mogul provides leading-edge technologies and competitive solutions to powertrain customers worldwide.



Pistons

- State-of-the-art technologies, coatings and engineered surfaces for superior performance in light vehicle diesel, gasoline and heavy-duty engines
- Continuous advancement of new technologies enhance latest alloy developments for increased strength and durability
- Optimized gallery locations for maximum cooling potential
- Leading welding technology for lightweight steel pistons in the mid-range diesel market
- Innovative Monosteel™ diesel piston technology addresses the increasing thermal, mechanical, abrasive and corrosive challenges placed on heavy-duty diesel engines resulting from emissions regulations
- Aluminum gasoline pistons are created with low friction, low mass and low NVH architectures
- Federal-Mogul's aluminum light vehicle diesel pistons are the market leader in Europe for the highest rated light vehicle diesel and mid-range engines



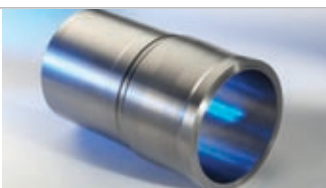
Piston Rings

- World leader in material and coatings solutions for extended ring life
- Unique next-generation plasma and Physical Vapor Deposition ring coatings for maximum scuff resistance
- Blitzchrome ring side face protection provides more than 50% wear reduction
- Goetze Diamond Coating (GDC™) for piston rings offers 30% wear improvement



Ignition

- Federal-Mogul spark plugs feature fuel economy enhancing, high performance platinum and iridium (MLR) electrodes
- Best-in-class SureFire™ innovative ceramic technology enables high energy and smaller plug designs for spark plugs
- Ignition coils configured in plug top, multi-outlet, individual or multi-coil rail geometries
- Glow plugs with self-regulating and low voltage configurations of 4 and 5 mm tips provide excellent heating and post-heating performance



Cylinder Liners

- Extensive liner product range offers grey and alloyed, lamellar and vermicular graphite iron, optional surface hardening and solutions for strength, performance and extended life
- Aluminum-coated automotive liners provide superior bonding, reduced distortion and improved oil economy
- Advanced analysis techniques for distortion reduction and improved piston ring sealing for extreme diesel cylinder pressures



Valvetrain Components

- Global market leader for valve seat inserts and valve guides with worldwide manufacturing capabilities
- Copper-infiltrated and dual-layer design ensures protection in the most arduous applications
- Valve guides that outperform copper alloy and cast materials in the dry environments required for reduced emissions
- High-temperature resistant turbo, EGR and exhaust brake components closely matching housing expansion rates