Federal-Mogul: The Heart of Powertrains

Federal-Mogul is a global leader in powertrain technology, helping our customers improve fuel economy, reduce emissions and enhance durability in the world's most popular form of vehicle propulsion: the internal combustion engine.

Our engineers create advanced solutions for thermal and mechanical loads; tribological (metal-on-metal) interaction, wear and friction; sealing of hot and cold joined components and rotating shafts; plus high-performance ignition; and thermal, mechanical and EMI protection for wiring and tubing.

Find out how Federal-Mogul can improve your powertrain at www.federalmogul.com.

FEDERAL MOGUL

Federal-Mogul's Leading Powertrain Technologies

Federal-Mogul develops and delivers leading technologies that directly address specific customer, regulatory and market requirements like improved fuel economy, CO_2 emissions reduction, and enhanced durability. Federal-Mogul's advanced component designs, specialized coatings, and proprietary manufacturing processes facilitate friction reduction, engine downsizing and extend the capabilities of conventional materials.

Global footprint

Federal-Mogul Powertrain is a preferred technology partner for our customers with 15 globally-networked technology centers and 73 manufacturing sites in the Americas, Europe and Asia.

Advanced engine and powertrain materials enable more efficient propulsion systems and facilitate vehicle lightweighting and engine downsizing for improved fuel economy and lower CO_2 emissions

- Federal-Mogul's Elastoval II ultra lightweight aluminum piston allows in high power gasoline engines a weight reduction of up to 15%
- DuraBowl® aluminum remelting process improves the fatigue strength of aluminum pistons to withstand mechanical and thermal loads produced by heavily boosted engines
- Advanced self-lubricating valve guide material allows valvetrains to operate at higher temperatures between 100°C (212°F) and 200°C (392°F) providing longer life in turbocharged engines
- The Nimbus® heat shield material provides efficient thermal protection and supports CO_2 reduction by enabling lightweight, highly-formable thermal management

Reducing engine friction has gained increased importance as manufacturers improve engine efficiency and reduce CO_2 emissions

- Advanced valve seat and valve guide technologies aid vehicle manufacturers in achieving CO_2 reduction strategies for new turbocharged, direct injection and ethanol capable downsized, high-output engines
- LKZ-Rings® enable low friction and reduced oil consumption due to a stepped surface and tapered contacting edge

Federal-Mogul is a global leader in the design, development and manufacture of advanced vehicle safety and protection products for gasoline, hybrid and electric vehicles

- CrushShield® durable textile sleeving absorbs and disperses energy, preventing damage to electrical cables and offering cut-through protection for fuel lines, electrical harnesses, and other critical components during crash situations
- EMI lightweight, flexible and durable shielding products reduce electromagnetic interference in vehicles
- ThermFlex® insulator is a lightweight thermal management sleeving that enables increased vehicle emissions performance and withstands temperatures beyond 900°C

Advanced coatings extend the capability of cast iron and aluminum engine technologies, ensure better lubrication and reduce component wear caused by friction

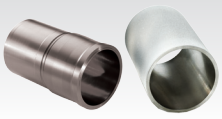
- EcoTough® low friction, wear-resistant piston skirt coating enables highly boosted engines and reduces piston friction up to 10% versus standard coatings
- Next generation coatings like CarboGlide® and DuroGlide® provide piston rings with maximum scuff resistance and reduce ring friction by up to 20%
- Innovative polymer coated IROX® bearing shells reduce fuel consumption and CO_2 emissions by withstanding mechanical and thermal loads produced by heavily boosted or start-stop engines

Portfolio

Pistons

Rings

Liners



Valve Seats & Guides

Bearings

Ignition

Dynamic Seals & Gaskets

Systems Protection