Rings and Liners

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Federal-Mogul supplies a wide variety of advanced technologies designed to improve fuel economy reduce vehicle emissions and enhance performance.

As a leader in powertrain innovation and technology Federal-Mogul uses highly efficient casting and advanced machining manufacturing process technologies. We design and produce a wide product portfolio of rings and liners with unique advanced low friction coatings and ring designs to reduce oil consumption.

Gasoline and Diesel Engine Piston Rings

 New ring designs reduce oil use, improve combustion chamber efficiency and enable better fuel economy and lower emissions

 Unique nextgeneration plasma and Physical Vapor Disposition (PVD) ring coatings provide 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
- LKZ-Ring® piston rings decrease oil consumption 50% and in-cylinder friction 15%
- CarboGlide® coating reduces ring friction 20%
- Advanced cast iron, cast steel and steel-wire materials

Piston Rings for Large Bore Engines

- 145 mm 980 mm bore size for 4 and 2 stroke engines
- Gas tight gapsSophisticated geometries
- Use of CGI, VGI, and other advanced grey cast iron materials as well as cast steel
- Plasma, ceramic, chrome-ceramic, GDC® and other coatings

Cylinder Liners for Passenger Cars and HD-Engines

- Hybrid Liner reduces oil consumption by 40%
- GOEDEL® Cylinder Liner material compositions serve all requirements, such as intermetallic bonding for lowest distortions and optimum heat transfer in combination with advanced tribology properties



- Extensive liner product range offers grey and alloyed, lamellar and vermicular compacted graphite iron (CGI), 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
- Extensive knowledge of advanced surface textures like Plateau Honing and related manufacturing strategies



