

## **FREUDENBERG'S INNOVATIVE SEALING SOLUTIONS SUPPORT THE NEW ENVIRONMENTAL-FRIENDLY GENERATION OF CARS**

### **CORTECO OFFERS THESE TOP TECHNOLOGY PRODUCTS TO THE INDEPENDENT AUTOMOTIVE AFTERMARKET**

In the global automotive industry, reducing CO<sub>2</sub> emissions is the most important development target. All vehicle components are being examined and adapted in order to meet this challenge. With its complete sealing package called "Low Emission Sealing Solutions" (LESS for short), Freudenberg offers its partners in the OE industry a comprehensive range of solutions to help them in significantly decreasing CO<sub>2</sub> emissions.

Another important trend in the automotive industry is engine downsizing which is only possible with new sealing technology. The new Mercedes E-Class demonstrates how much performance you can get out of a four-cylinder engine.

Seals and gaskets play a key role in downsizing. With its comprehensive LESS portfolio, Freudenberg has made an important contribution e.g. to the new VW Polo. In Germany, this car has been awarded "Car of the Year", "Golden Steering Wheel" and "Car of Reason 2010" - all these awards honour the outstanding implementation of an innovative downsizing concept. The LESS products like cylinder head and exhaust manifold gaskets and Simmerring® radial shaft seals for engine and transmission made it possible to save space and weight as well as treating exhaust gas more effectively.

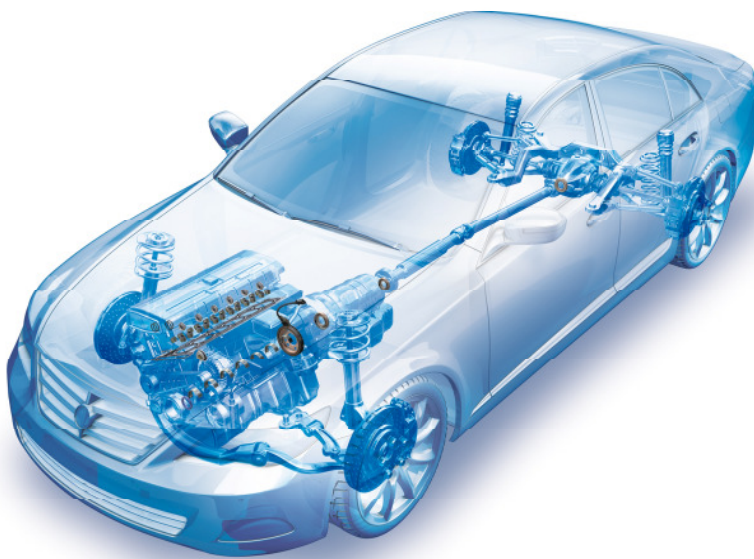
The number of Freudenberg products in automobiles steadily increases due to the outstanding partnership with the automotive industry: a single car can be equipped with more than 300 Freudenberg parts. Thanks to Freudenberg's innovative solutions the high-technology products are very resistant to media, increasing pressures and both high and low temperatures, e.g. in the new BMW 5 series.

These competences have established the family-owned Freudenberg Group as a global development partner of the automotive industry. With posted revenues in 2008 of 5 billion €, thereof 2.3 billion € with the automotive industry, and 32,000 employees worldwide, Freudenberg operates in a wide variety of sectors and markets offering an outstanding range of seals, vibration control components (e.g. engine mounts), filters, release agents, special lubricants and mechatronic products.

In order to provide the Independent Automotive Aftermarket (IAM) access to the high-tech Freudenberg products, CORTECO has been established as Freudenberg's Aftermarket division. The company offers under renowned brands Freudenberg's innovative vehicle spare parts: micronAir® cabin air filters, Simmerring® radial shaft seals, meillor® gaskets and interesting service parts. More than 18,000 references underline CORTECO's position as one of the leading suppliers in the IAM. Close cooperations with car driver associations as well as associations for allergics show CORTECO's strong competence.

With micronAir® cabin air filters, CORTECO offers its customers only OEM quality products. With the highest filter performance, micronAir® cabin air filters protect drivers and passengers against fine dust, pollens and smell and thereby reduce allergic reactions. More than 50% of all new cars worldwide are fitted with a micronAir® cabin air filter which protects through a multilayer filter medium effectively against pollutants and smells inside the car.

CORTECO provides its customers with an extensive engine gasket range: MLS technology, gasket sets, carbon or graphite head gaskets, intake and exhaust gaskets and soft gaskets as well as interesting service products like silicone sealing paste and sealing washers. CORTECO's customers trust in the wide range of gasket materials which have been developed with the engineering expertise of Freudenberg's innovative R&D.



### Illustration 1

Freudenberg's trendsetting sealing range (in grey) for emissions reduction in modern cars

Freudenberg's innovative sealing solutions support the new environmental-friendly generation of cars  
p. 2



### Illustration 2

High innovative elastomer encoder technology has already proven how valuable it is for optimized engine management. The compact shape of the encoder radial shaft seal helps keep size, weight and emissions to a minimum.



### Illustration 3

CORTECO engine sealing solutions

Freudenberg's innovative sealing solutions support the new environmental-friendly generation of cars  
p. 3