# PARTS FOR START-STOP SYSTEMS.

VIBRATION CONTROL COMPONENTS IN OEM QUALITY.











#### **MAKING A CHANGE**

Environmental considerations and a reduction in the combustion of precious fuels are crucial factors in the development of new eco-friendly technologies for the automotive sector.

Automatic start-stop systems are good examples, providing a 5 to 7% improvement in fuel economy and a similar reduction of carbon dioxide emissions.

More than half of the cars currently produced are equipped with start-stop systems that reduce CO2 emissions and save fuel. The OE trend points upwards. By 2022, it is expected that start-stop systems will be fitted as standard on more than 82% of the vehicles sold in Western Europe.

The vehicle comes to a standstill, the engine is stopped and then restarted after a brief period of time. It is a process that increases the vibrations and the strain throughout the accessory drive, via the crankshaft pulley and engine mount.

On average, an ordinary pulley and engine mount will have to withstand up to 50,000 to 70,000 starts. A start-stop pulley and engine mount, on the other hand, will have to endure 500,000 to 700,000 starts.

Developing engine mounts or pulleys that can withstand ten times as many starts without breaking or failing, poses enormous challenges. Extensive research, development and testing makes it possible to deliver the solutions.

Counterfeit parts are exposed to none of these and therefore cannot match OE requirements.









#### THE CORTECO START-STOP RANGE

There are over 20,000 Vibration Control, Sealing and Filtration products and more than 1,410 of these are specifically for start-stop applications.

The Corteco range already includes:

- 112 Corteco start-stop ENGINE MOUNTS covering over 41 million vehicles
- 50 Corteco start-stop PULLEYS covering over 4.5 million vehicles
- 11 Corteco start-stop PULLEY KITS including Pulleys and matching bolts

#### STRONGER PARTS FOR A HIGHER DURABILITY

As the aftermarket distribution arm of the Freudenberg Group, Corteco is able to draw on the wealth of design and development resources available from a company renowned as one of the world's largest manufacturers of components for OE.

Transforming an ordinary pulley (TVD) or hydro mount into the perfect start-stop component is a complicated process. Some of the stages include:

- Optimising construction by changing the inner diameter or developing a stronger geometry between components
- Developing new materials such as high temperature and performance elastomers (Nano-EPDM Technology)
  - Conceiving new mounting and bonding processes specifically designed for metal and rubber parts
- Enhancing the bonding characteristics through enlargement of the holding surfaces to improve isolation and extend durability





### **CORTECO**

## CHAIN OF EXCELLENCE

As the aftermarket distribution arm of the Freudenberg Group – one of the world's largest manufacturers of automotive parts to OE systems manufacturers - Corteco is able to deliver over 20,000 products that match OE quality standards.

The ability to supply automotive solutions in Sealing, Vibration Control and Cabin Air Filtration from a manufacturer with such an OE pedigree has helped to establish Corteco as a leading supplier of components to the Independent Automotive Aftermarket.



Specific designs to match OE specifications



Raw materials for the highest level of performance



Production processes that are second to none



A global aftermarket supply chain

## **16 LOCATIONS WORLDWIDE**





