

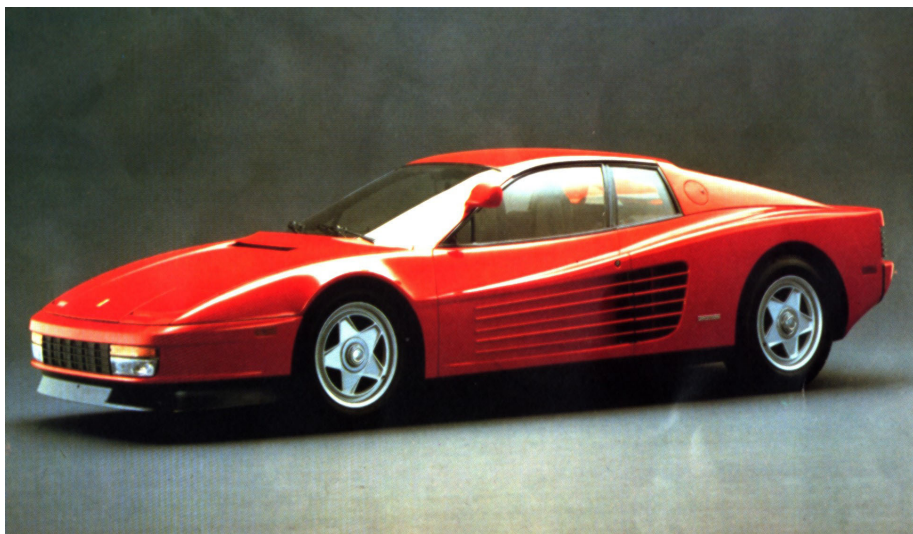


ENGINEERING PLASTICS

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**'VICTREX' PEEK
ROTOR ARM
MEETS TOUGH
DEMANDS**



THE rotor arm in a new distributor developed by Magneti Marelli for high performance cars such as the Ferrari Testarosa is being moulded from 'Victrex' PEEK.

The material met all the physical demands of the application and gave a significant weight saving.

Magneti Marelli was looking for a material that was strong, dimensionally stable and had good electrical resistance.

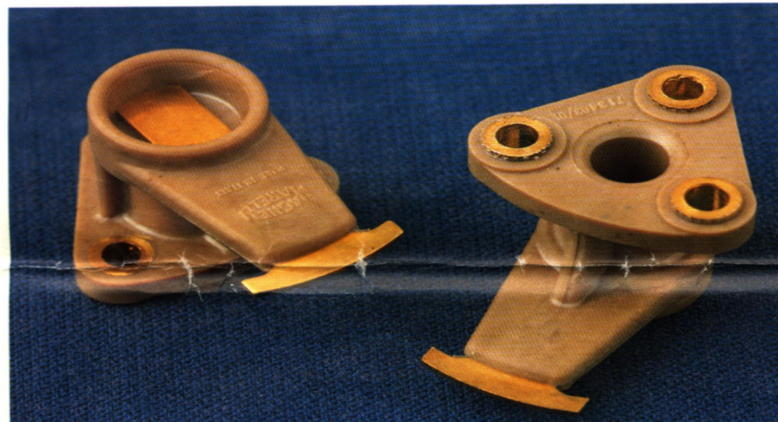
They approached ICI Italia, who had been reminding Magneti for some time that ICI has some impressive engineering plastics and as a result, 'Victrex' PEEK was recommended and trials were initiated. The worth of 'Victrex' PEEK was rapidly proved

providing a severe test for any material.

Dimensional accuracy is crucial to the efficient functioning of the rotor arm to maintain the gap of a fraction of a millimetre between the conducting insert and its contacts. In order to achieve and maintain this accuracy, the part has been designed with a large rib to support the arm holding the contact insert.

When Magneti Marelli first began working with 'Victrex' PEEK, technical experts from ICI spent some time with the company and its moulder to help develop optimum processing techniques.

The distributors, fitted with the new 'Victrex' PEEK rotor arm, went into commercial production and the



The rotor arm of the Ferrari Testarosa is moulded from 'Victrex' PEEK.

and an unfilled grade selected as giving the best performance.

The rotor arm is now in commercial production. Four metal inserts are incorporated—three for attachment, with the fourth carrying the current. The eccentrically-shaped rotor arm revolves irregularly at rates up to 3500 rpm and temperatures are consistently around 120°C whilst it is working. Added to these stresses is the vibration, inevitable even in a twelve-cylinder engine and the 12 charge/discharge cycles in each revolution,

company was so impressed with the performance of 'Victrex' PEEK that it is now being evaluated for a number of other engineering components.

Magneti Marelli was founded in 1917 in Milan to produce magnetic ignition systems. It has since become an associate of the Fiat group of companies, and supplies complete ignition systems, batteries, starter systems, wiper systems, alternators and a wide range of other electrical products to many automotive manufacturers.