

# THE MACHINE THAT PRODUCES

**F**iat and *Ferrari*, as seen through the eyes of the *Vaccai & Bosi Group*, are two of the great names in the Italian automotive industry. They are also linked through their use of the same metal cutting machinery. In fact, the supplier and subcontractor for both of these important “Made in Italy” companies is **Prima Industrie S.p.A.**, located in Collegno (province of Turin).

The structural parts that provide stability and rigidity to the chassis in modern cars, and which protect passengers in collisions, are increasingly constructed of hot-formed, high-resistance steel. Similar in certain respects to the “blue steel” traditionally used in springs and shocks, this material combines strong mechanical properties with ease of machining, which is made possible through the use of specialized laser cutters. With this in mind, **Prima Industrie** designed the trim cutting for the new *Fiat 500*’s “B-pillar” which includes support for the roof and the framing system to strengthen the doors. It also serves as a passive element of added safety in the case of side collisions. In order to manufacture the pillar, **Prima Industrie** uses its newest three-dimensional laser cutting system, the *Rapido Evoluzione*, which

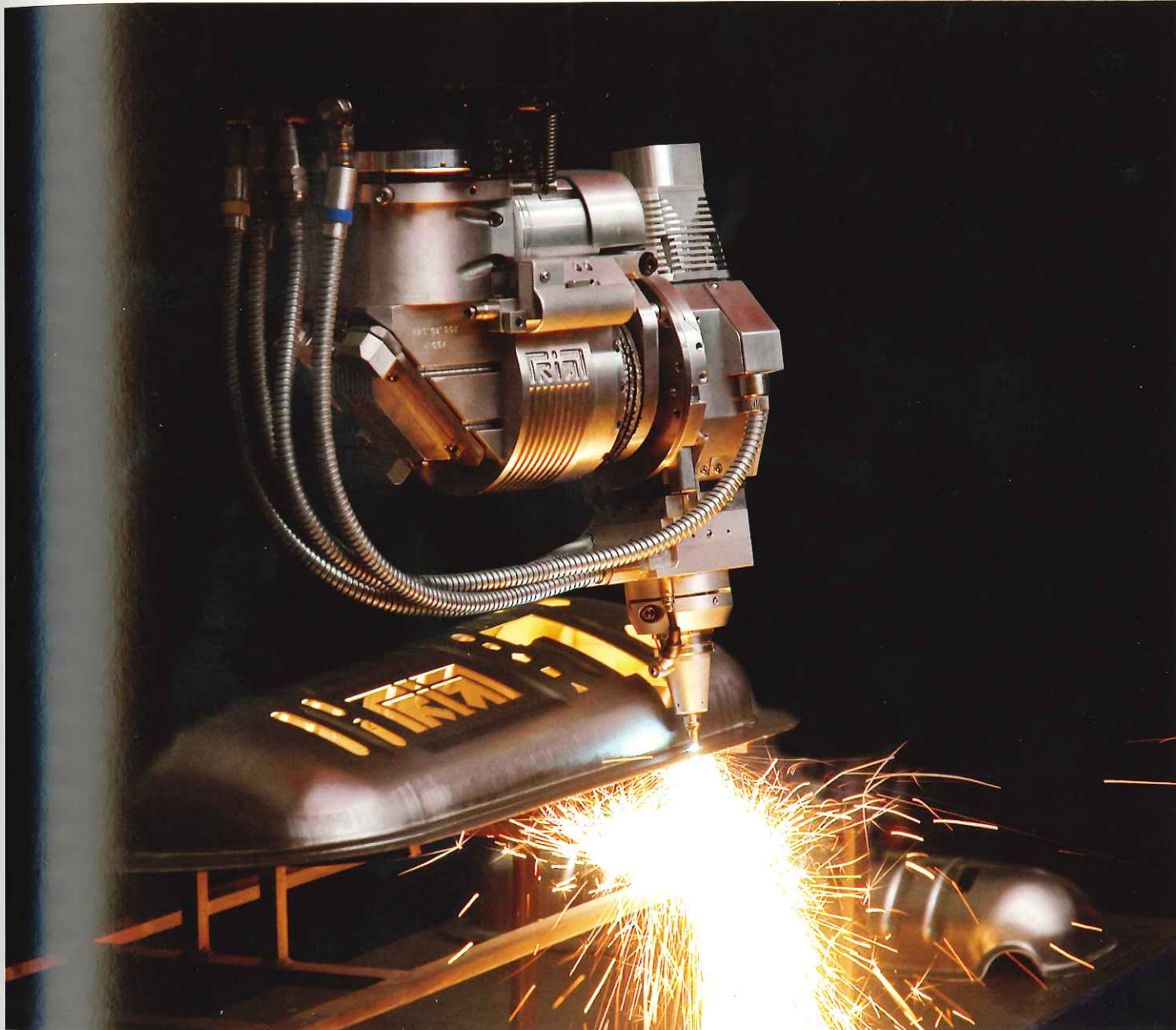
boasts faster cuts along linear axes, allowing for a drastic reduction of production time and costs.

The continuing force behind the creative process of research and development by **Prima Industrie** is the industrial environment in which the business operates. It is located in the Turin area, Italy’s automobile manufacturing capital, where designers like Pininfarina, Giugiaro, Bertone, and many more got started. “In creating new prototypes, company leaders focus constantly on innovation,” explains Domenico Appendino, **Prima Industrie**’s marketing director.

Working with materials that are increasingly lighter and more resistant requires the development of new technologies. This is the starting principle for the **Prima Industrie** team: it uses machines that allow it to model thinner plates through the use of three-dimensional laser cutting.

“We invented a robot to perform this type of cutting, which guarantees a greater degree of flexibility. Initially, it was used only in the aerospace industry,” says the marketing director, “Today, however, our machines are used not only in the automotive field, but even by artists who want to work materials in a way that involves personalizing the specifications of the incisions without using dies. Hence, a part of a lamp or of a table might come out of one of our machines.”

# THE PARTS FOR THE FIAT 500



*Prima's Optimo Cutting Machine. The newest three-dimensional laser cutting system allows for faster cuts which slash production times and lower costs*