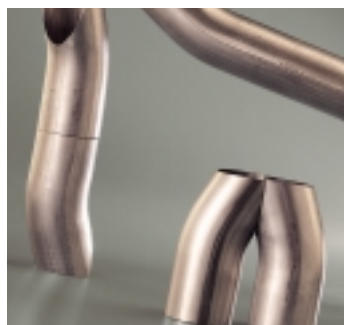


3D Laser cutting wins in the competitive sector
of motorcycle exhaust pipes

The **perfect** machine



The mechanical engineering company Giuseppe Lafranconi Spa from Mandello del Lario (LC) has celebrated 75 years as a exhaust pipe manufacturer for motorcycles and tractors. They began by supplying tubular frames, selling special units for the Moto Guzzi GT500.

Today, Lafranconi stainless steel exhausts can be found on various BMW motorcycle models thanks to their ability to provide a complete service to their customers: from concept to design, from prototype to test, ending with the production program.

All this comes from following a precise and simple philosophy: to be a leader in research and development, in quality and reliability, innovation and, above all, in complete customer satisfaction.

To compete at the lowest unit cost

The sector that Lafranconi works in is extremely competitive and past successes are no guarantee for the future unless each new model satisfies every new European regulation and manufacturing standard in terms of emission levels, noise and the required technical performance

of the engine.

The opportunity to innovate is reduced. All suppliers use the same theoretical concepts and, essentially, the same materials to combat noise and reduce emissions. Therefore, production times, the quality of manufacture and, above all, unit cost, are important considerations. Operating under these critical considerations, Lafranconi has been successful in beating most of their competitors and obtaining new work.

The first buyers

Lafranconi, who already owned an ADIGE automatic tube laser cutting system, were the first purchaser of the new LT905D system from BLM GROUP: a production cell for laser cutting for bent or formed tube.

This is a solution close to Lafranconi's heart as they were involved in the development of this unit for a very specific requirement.

A piece finished in 34 seconds

Product benefits from using the new 3D laser cutting system are evident, above all creating new work methods such as the typical case of a 45 mm diameter stainless steel tube previ-

ously bent to an "L" with a small further twist at one end, a 10mm hole close to it and a rectangular slot of around 15mm x20mm on the curved area.

There were four separate operations on the component before lasers could be used; an end cut with a saw, hole drilling, milling of the slot and subsequent deburring of the area; this normally takes 4-5 minutes between loading and unloading, not including the time for transportation between the various machines in operation.

The total time for the new LT905D system to per-

form all these operations and produce the finished item is 34 seconds.

This component is only one example of the numerous shapes and forms that go to produce motorcycle exhausts. Another attractive aspect of the LT905D system is its ability to perform efficiently with small batches.

Lafranconi are able to produce batches from as little as 30 pieces to 20,000 and all of them with the same quality of product and economy of production.

"We don't have any doubt," maintains the Head of the company, "for our production, this is the ideal machine".

