



BLUM-systems that both check workpiece position including dimensions and monitor the tools. These instruments soon facilitated the achievement of the desired quality level while observing the envisaged times.

Today all operations of the company use LaserControl systems of BLUM for contactless measuring and monitoring of the cutting tools. In many machine tools of the Bergamo-based company, Type Z-MT tool setting probes ensure the high level of production quality.

BLUM TC50 touch probes are used for workpiece measurement. The robust measuring systems ensure exact acquisition of the workpiece position. They automatically correct the thermal expansion of the machine, and that at an impressive probing speed of three metres per minute. As all BLUM probes, the systems work with no-wear optoelectronic measuring mechanism that facilitates the precise acquisition of all measured data even under strong coolant influence.

The MicroCompact NT and Mini NT laser measuring instruments allow reliable, contactless tool checking and measurement despite coolant and chips. This is warranted by the combination of patented NT technology, the protection system for the laser optics and the blowing nozzles for tool cleaning. Thanks to a focussed laser beam, the system additionally impresses with its

particularly high measuring accuracy even below nominal speed. And this 24 / 7.

The compact, hardwired Z-MT probe equipped with the revolutionary **shark360** measuring mechanism is ideally suitable for use in horizontal machining and turning centres. It is used for contact tool measurement, breakage detection, measurement of length and radius as well as axis compensation. Due to its integrated face gear, the **shark360** measuring mechanism guarantees highest precision.

On account of the successful application at Alumat, these measuring systems were also introduced at the Almax company located in the Trentino region, which has been part of the group since 2004. Also the Greek Matrex company of Saloniki, which has been part of the group since 2013, works with BLUM measuring technology today.

#### Blum-Novotest is the new No. 1

"The Blum-Novotest products have definitely proven themselves in recent years. This is why we decided to gradually replace the systems of other manufactures that are still used in some of our machining centres by BLUM-products. For BLUM measuring technology facilitates precise, reliable and competitive production," adds Astolfi. "The customer service provided to us by the Italian branch of the German metrology specialist also played a decisive part. The reaction time of the experts employed there is extremely short and ranges within half a day."

ITALY

## Faster and more precise



Emanuele Astolfi,  
Manager of Alumat

*The production of high-quality aluminium extrusion tools is an art unto itself. Only few companies match the precision and quality with which the Italian Alumat-Almax-Matrex company masters this process. Through the use of laser measurement and touch probes in the company's machining centres, the manufacturing time could be reduced significantly and the accuracy of the products was increased.*

Competence, passion and know-how – these attributes account for the international success of the Alumat-Almax-Matrex group. Thanks to continuous investment in research, development and cutting-edge facilities, as well as the selection of the right partners, the enterprise has become a pioneering manufacturer of aluminium extrusion tools in the market.

The Alumat company was founded in Ciserano near Bergamo in 1994 and employs about fifty associates today in the design and manufacture of steel dies for aluminium extrusion. The continuous growth led to an expansion of the business operations already in 1998 resulting in an enhancement of production capacity and a tripling of sales within 4 years.

#### Time and quality are decisive

"The special thing about our activities is the fact that our tools essentially are individual items created very specifically for our customers. Not only do we supply individual dies,

but also provide the entire planning and validation of the product," says Emanuele Astolfi, Manager of Alumat. "Reducing lead times has become a fundamental component of our strategy. It is what differentiates us from our competitors. From planning to completion, a tool will undergo approx. 15 production steps which we currently realise in about six days, while it took us as many as 12-15 days ten years ago."

This improvement required the deliberate use of machining centres and the attempt to optimise all processes. One looked for systems which would avoid any down times and facilitate machine-integrated quality control. In addition, they were to allow direct access during each production phase in order to correct any deviations immediately.

Then, six years ago, Alumat decided to confide in the technology and professionalism of Blum-Novotest. Since then, the machining centres have been equipped with



Roberto Pagani (left), Head of Service of Blum-Novotest Italy  
in the production of dies at Alumat

