



↑ performance[®]
ultra UP

THE FREEDOM ONLY QUALITY PRODUCTS CAN OFFER . . .

SD STUDIO[®]

100% ITALIAN
EFFICIENCY AND
EFFECTIVENESS

The future of tools themselves!

Our philosophy is that of continuous Research and Development in order to break down barriers and provide High-Performing products

➤ 3D Studio Engineering, with its Ultra-Performance brand are the result of the twenty-five years of experience of Gianluigi Cattalini as a miller and expert with machine tools, as well as a CAM programming technician and a manager in the field of mould construction. The company was founded in 1999 in Lumezzane, a historical town of Brescia which has always been a key player in the industrial activities of our country, and was started initially as a technical study of industrial design with CAD-CAM software,

A close-up photograph of a machine tool, likely a lathe or mill, showing a cutting tool in operation. The image is partially obscured by a large yellow arrow graphic pointing towards the right.

but was followed shortly thereafter by the establishment of a specific company for the commercialisation of special designed carbide tools. In the early years in business with a constantly growing customers, and thanks to daily interactions with them, the founder realised that with certain types of tools there was a constant battle with the big names in the industry; therefore it was decided to change the carbide powders, based on the real needs of the end users, thereby developing a set of tools for working with steel and non-ferrous metals. In 2005, with the purchase of the first sharpeners, the company reached its goal of being able to build tools internally without the support of external collaborations.

This choice was fundamental for the growth of the company, allowing it to ensure an elevated standard

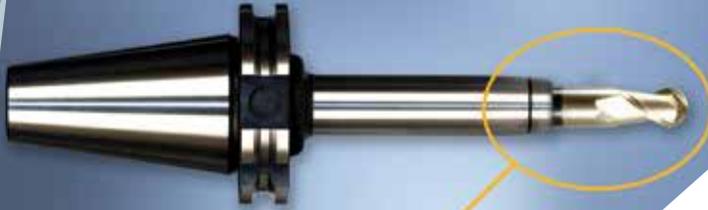


“3D Studio Engineering doesn't only produce carbide cutters, but is also equipped to produce a wide range of spindles and heads. The spindles are manufactured according to DIN69893 and DIN69871”



in the quality of its products; this, in turn, lead to a further increase in the number of our customers. It was then decided to purchase an additional 3 sharpeners to allow for greater productivity and to offer the client maximum flexibility so as to meet their different needs and specifications. Currently the company has 7 sharpeners which guarantees the precision of our tools with a tolerance of 2 microns.

THERMAL SHRINK SPINDLES



HEAD HOLDER SPINDLES

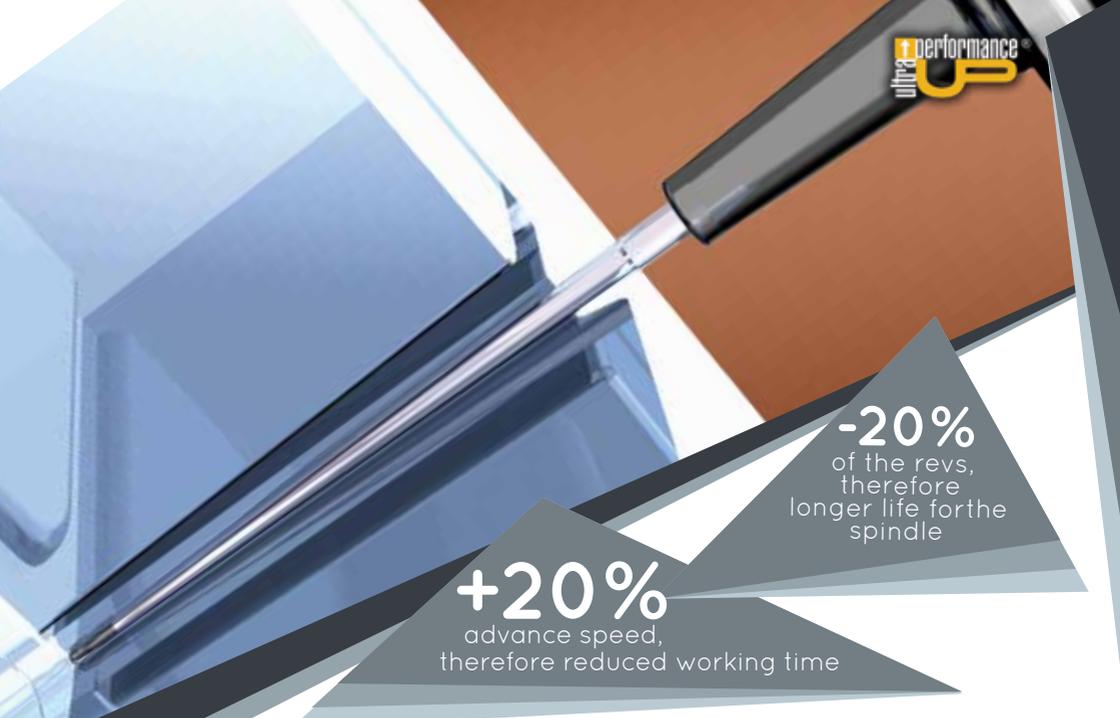


In 2008, given the increased level of production, the company decided to acquire a MORI SEIKI 4-axis CNC lathe and a Lizzini grinding and polishing unit, thus benefiting from the important result of being able to internally produce shrink fit tool-holders, head inserts, and extensions. Subsequently, the decision was made to purchase a MAZAK 5-axis continuous action lathe for the production of products with a more complex geometry.

After ten years of working on Ultra-Performance products, we are satisfied with the results obtained so far, though we still strive to continue down the innovative path we have chosen.

Aware that it's not enough to just keep up, but rather we must promote innovations from the field of moulding, which shouldn't be seen as simply as a possible market for tools, but more generally as a market in which to offer our global services.

“We are fully willing to demonstrate our technical expertise with facts, so please do not hesitate to send us the mathematical elements, materials to be processed, and the name/model of the machine and we will arrange a visit as soon as possible at your premises in order to discuss said matters and to perform some testing along with a specialised technician.”

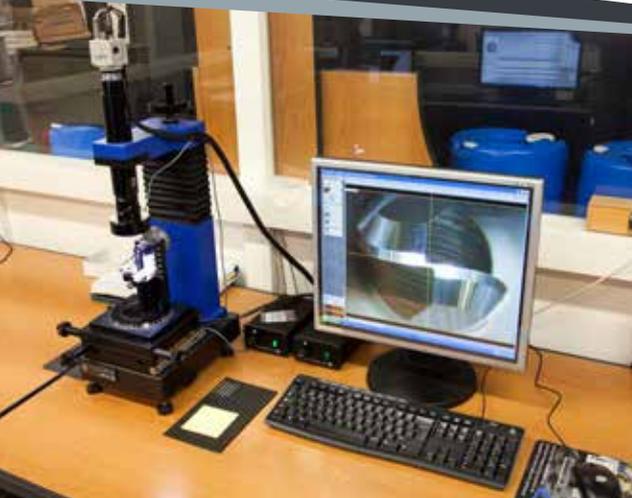


-20%
of the revs,
therefore
longer life for the
spindle

+20%
advance speed,
therefore reduced working time

A good tool is conceived on the basis of complete knowledge and preparation into the materials being processed, machine tools, CAM processing technology and much more besides. Our aim is to achieve constantly higher performance levels, formed by the perfect mix of the type of hard metal used, the rake angle, the number of cutters and the coating, which are all variable parameters according to

the type of material being machined. Working tests on complex geometries have demonstrated how these tools enable contact times that are beyond compare, avoiding timewasting machining repeats which wear the tool, and are therefore strategic for machines with increasingly higher acceleration time and cutting speed. At the same time, our products also produce excellent results on traditional numeric control cutters. Their performance guarantees the best result-usage cost ratio.





For this reason, we have been involved in these areas in recent years, and will continue to be so in the years to come, so as to provide products which are always at the top, as well as a service which is all-around different.

This was how a relationship of trust and advice was created which isn't exhausted with the purchase, but continues profitably over time.

Over the years, 3D Studio has consistently sought to study all of the various problems which may occur with carbide, such as the harmful internal tension created during the construction of the tool. The winning strategy of our company is a particular approach towards the construction of tools.

Thanks to our knowledge of the geometry of moulding, tools are developed based on the material to be processed, the characteristics of the machine tool, and the CAD / CAM system used.

Each of these elements mentioned above contributes significantly to the final result of a machining operation and consequently the choice of tool must be made in accordance with these characteristics.





Extremely reduced working times and the difficult economic situation in recent years more and more often prevent users of the tools from effectively planning their materials needs. This is why 3D Studio Engineering has imposed a counter-current warehouse policy during a period in which manufacturers prefer supplying to order. Our tools are always available and our flexible schedules allow the customer to obtain what they need in a short time. The strong point of 3D

Studio, thanks all of its experience, is the ability to provide tools while fully understanding the needs of users and working with them step by step through each phase of production, roughing, semi-finishing, and finishing.





RESEARCH AND DEVELOPMENT

The human element is crucial for the growth of 3D Studio Engineering. The company focuses on its experience in the field, and to this end we employ trained and knowledgeable technicians able to propose new ideas and understand any problem. A passion for their work is our first requirement for our employees.

Ours is a team effort, which is essential for relying on various personal experiences to come up with the best solution for every new challenge that presents itself. A young, efficient, and motivated team with the desire to grow and get involved each day has allowed 3D Studio to firmly establish itself. Addressing and resolving processing issues together with the user consolidates the business relationship and enriches the know-how of our technicians.





Each request is seen by 3D Studio Engineering as a new opportunity to grow, and not just as business. 3D Studio Engineering has invested significant resources and years in research and development, collaborating with suppliers of raw materials and contributing their experience towards their development, even going so far as customising the software used for the creation of the tools themselves. In fact, 3D Studio Engineering, in collaboration with a leading engineer from the Polytechnic University of Milan, has developed specific software to determine the processing parameters for each type of application. The programme manages the tools while taking into account the material to be processed, overhang, and other parameters as well. The last line of tools developed was that of the micro-cutters with conical end mills.

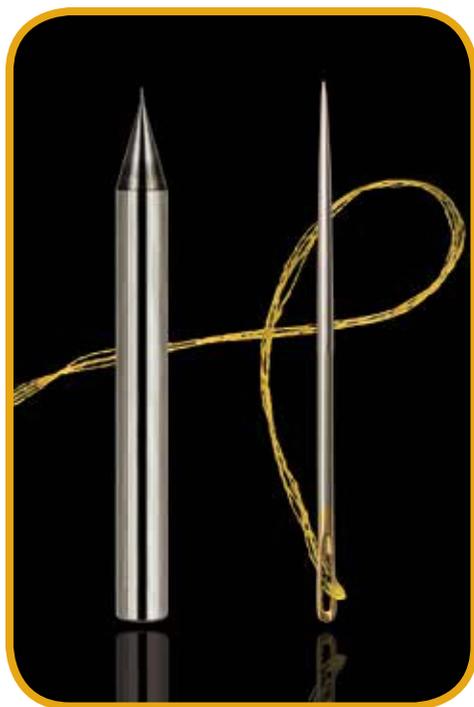




Micro-Cutters conical end mills

Diameters from 0.1 to 0.4 mm

- Already available in a wide range of lengths, radii, and angles, they enjoy further qualitative evolution in the geometry, materials used, and production phase.
- Another unique feature is the surface coating treatment which further enhances the usage performance.





The Client comes first . . .

Our strong points: Product Range - Quality - Delivery - Assistance

- > **PRODUCT RANGE:** Each process has its own ideal tool; we have a wide range of materials, geometries, and surface treatments for each individual application.
- > **QUALITY:** The goal throughout the production cycle; using quality materials, precision workmanship, and the latest generation of coatings.
- > **DELIVERIES:** Responding to customers' needs in real time; all products are always in stock and it is possible to immediately fulfil orders.
- > **ASSISTANCE:** Skilled and effective technical team; staff with many years of experience using tools and CAD/CAM in the production phase.

Range

With more than 10,000 items available for order, we can satisfy every requirement

- > Solid carbide cutters from Ø0.1 mm to Ø16 mm DIN69871
- > Carbide reamers > Stems and extensions
- > Carbide tips > Various lines of inserts for machining hardened/
- > Modular heads and holders from Ø15 mm to Ø80 mm reclaimed steel, aluminium/copper, and high feed
- > Shrink fit spindles and head-holder, DIN69893/ machining.



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