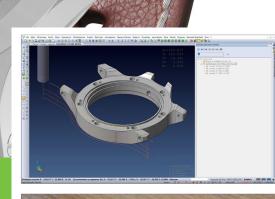


We perform virtual tests - not carried out by the real machine - and we may find that the more effective strategy is not the one we originally assumed.

> Meccanica Firenze

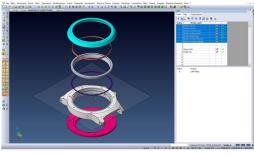
SIET



VISI is one of the world's leading CAD/CAM software solutions. It offers a unique combination of fully integrated surface and solid modelling, 3D tool design, and comprehensive 2D, 3D and 5-axis machining strategies with dedicated high speed milling routines.









SIET MECCANICA

VISI Helps SIET "Simplify Difficult Projects"

Realising that an efficient CAD/CAM system was a prerequisite to successfully compete and achieve excellent results, mechanical workshop Siet invested in VISI when they set up business in 2007.

The company, based in Montespertoli in Florence, specialises in precision machining, producing a wide range of products, using the latest generation of CNC machine tools.

Founder, Simone Nencioni, says investing in the right software helped the business to succeed. "VISI helps us create precision mechanics with added value across many industrial sectors." This includes 5-axis milling of components ranging from a diameter of 1 mm to 1200 mm.

The Tuscan company have managed to grow and consolidate their reliability, quality and versatility even though they started in difficult economic times, a decade ago. The scope of the business ranges from prototyping to small series. "We're not interested in huge production runs where the products are all the same. We focus on difficult things, which is why we often take care of the design as well: working with our customers' technical offices, we can suggest simpler approaches to developing the product. Sometimes, a simple hole in the wrong place can significantly increase the cost of the workpiece. Although we started in business just before the financial crisis, we've always recorded double-digit revenue increases. We've made remarkable progress and from the original founder, there are now 14 of us; the company is industry certified and has a design office, testing and measurement areas, and advanced software."

For 3D design and manufacturing, Siet opted for VISI CAD/CAM from Vero Software, marketed in Tuscany by Syscam Srl. Since 1993, Syscam have provided complete consulting services on VISI's product portfolio across the region, including license management, machine tool configuration, industry specific training courses, along with full post-processor customisation, and developing sub-programs and G codes to benefit from the unique features of the CNC machine.

Syscam say VISI is an efficient and reliable system, starting from data import which is a crucial step in the business path of every sub-contractor who receives CAD models from third parties. As VISI is a fully integrated solution there is no need to leave one work environment to switch between different CAD and CAM features.



About The Company:

Name: SIET Meccanica di Precisione

Business: Precision manufacturing specialist

Web: www.siet-meccanica.it

Benefits Achieved:

- Great technical support from local reseller Syscam Srl.
- Single software solution for 3D design and CNC manufacturing.
- Virtual CNC toolpath simuation to dry-run toopath data to ensure the output is collision free and all geometry processed.

Comments:

"We use the CAD environment extensively to modify the model geometry to make machining easier.

VISI provides highly advanced modelling capabilities, and allows us to modify and adjust 3D curves easily and in a straight forward way."

Simone Nencioni



In addition, working on 5-axis or multi-tasking machines, there is almost always a need to create fixturing and support surfaces, and Simone Nencioni says VISI gives their operators all the CAD tools required to carry out these operations. "We use the CAD environment extensively to modify the model geometry to make machining easier. VISI provides highly advanced modelling capabilities, and allows us to modify and adjust 3D curves easily and in a straightforward way."

Another feature highly appreciated by the Tuscan company is machining simulation, which includes not only chip removal, but also shows all the operating space of the machine onscreen, with table, clamping system, and tool holders. "The kinematic environment is important, not only to make sure collisions do not occur, but also to examine the workpiece bulk area and to immediately understand whether all surfaces are properly processed. This is all the more true for 5-axis machines, which have a higher capability than 3-axis machines... for instance, to show movements that are not always easy to foresee, leading to blind areas."

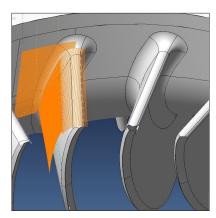
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Siet is currently using VISI to help develop the on-line supply of special tailor-made tools known as 'back facing tools,' to perform machining on the opposite side from which a hole is drilled when the area is not accessible. "This could be where the geometry doesn't allow it, or because the area is undercut, or the component is heavy and bulky, so turning it is an expensive operation that would require a gantry crane and staff. "It's a niche market, but we've have turned this tool into a cost effective 'special standard' for a few custom-made units – even for a single item. With these back facing tools, you can accomplish almost every task: it works like a hook, it may seem trivial but it's characterised by special geometries like the elliptical section rod."

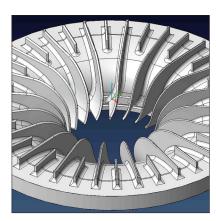
Siet works in a number of industries, including motors for electric cars, and turbine blades for the energy sector where Simone Nencioni says VISI's CAD design features are invaluable for building the complex shapes with high quality surface definition.

They have also designed their own diver's watch. The movement mechanism is Swiss made, but Siet build the rest in steel, titanium, and naval bronze with pink gold finishes, using spin-forming machining and 5-axis milling, including screws, which are also spin-formed one by one. This watch can only be purchased from us at the moment, but we aim to offer a limited series to a wider audience in the future."











VISI

