

Getting the most from CAD/CAM

CAD/CAM software, like technology in general, is evolving all the time. Systems today deliver ever-increasing levels of performance, and prices (at least in real terms) are reducing year-on-year. That should be all good news, but unfortunately there is a downside.

As computing technology moves on apace there is the expectation that people will just inherently keep up with developments. It appears all-too-often to be the case that vendors do not stop to consider how their customers will cope with the never-ending barrage of new releases, system upgrades and learning curves.

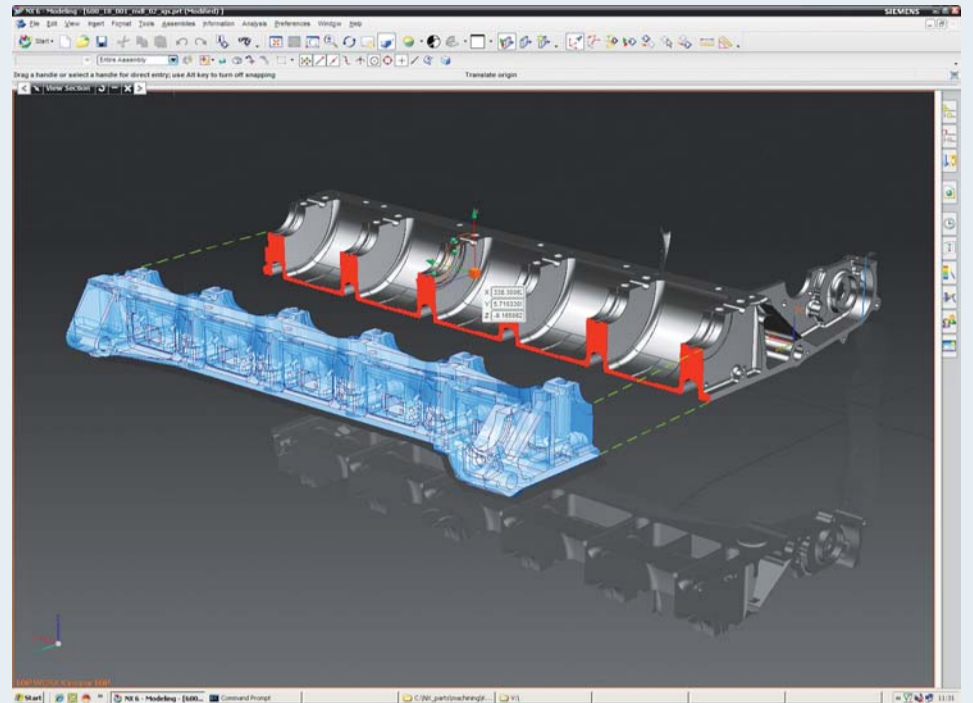
If we draw a parallel with word-processors or office software in general, many products on the market today are significantly more powerful, and as result more complicated, than people often require. The typical full-range functionality of a system may be used by the occasional "power user" but for most of us, systems often appear over-complicated, non-intuitive and difficult to learn. Too frequently, "over specified" systems have to be purchased in order to gain access to a few particular functions and with them comes a degree of over-complication leading to learning and implementation difficulties for the user.

Based in Haddenham, Bucks, TTL have been conscious of this problem for a long time. They have been closely involved with 3-Dimensional CAD/CAM since its relative infancy in 1987 and have learned the hard way, the difficulties of specifying CAD/CAM equipment and training people how to use it. Like many companies, TTL's requirements of CAD/CAM systems are varied and certainly not run-of-the-mill. On one level, the company, which specialises in complex 5-axis programming and machining,

requires feature-rich modelling and machining systems capable of meeting their diverse manufacturing requirements. On another level altogether, TTL require a flexible, powerful, open and robust software platform on which to develop their range of highly specialised Adaptive Machining solutions which are used for automating complex processes.

During their 20 year involvement in the CAD/CAM industry, TTL have developed some core beliefs and high up on that list is that, as a tool, CAD/CAM systems should be a slave to the company, not the other way around. Even in complex systems, the technology should be easy to learn, accessible, and simple to implement. But even more importantly, they have learned to recognise that the proof of the pudding is in the eating. When introducing new CAD/CAM technology, the best successes come not just from a normal "sell-buy" process, but from a process where trust and depth of understanding are gained through more focussed understanding of customers' needs and a technical "hands-on" approach, with the ability to physically demonstrate working machining processes on CNC machinery.

TTL contend that all too often, CAD/CAM software is sold without adequate exploration of its suitability to a customer's needs. The "glossy" demonstration can be very seductive, but without the ability or willingness to get into the customers' mind-set it can be superficial in helping the customer decide what's really right for him. In selling CAD/CAM systems to manufacturing organisations, TTL adopt a philosophy of trying to illustrate the software in the context of their customers' needs, backed where necessary, with on-machine demonstration of capability. In this respect, TTL are committed to helping customers avoid the very learning curve that they themselves have had to go through several times in the last 20 years and to lend customers the benefit of their personal experience.



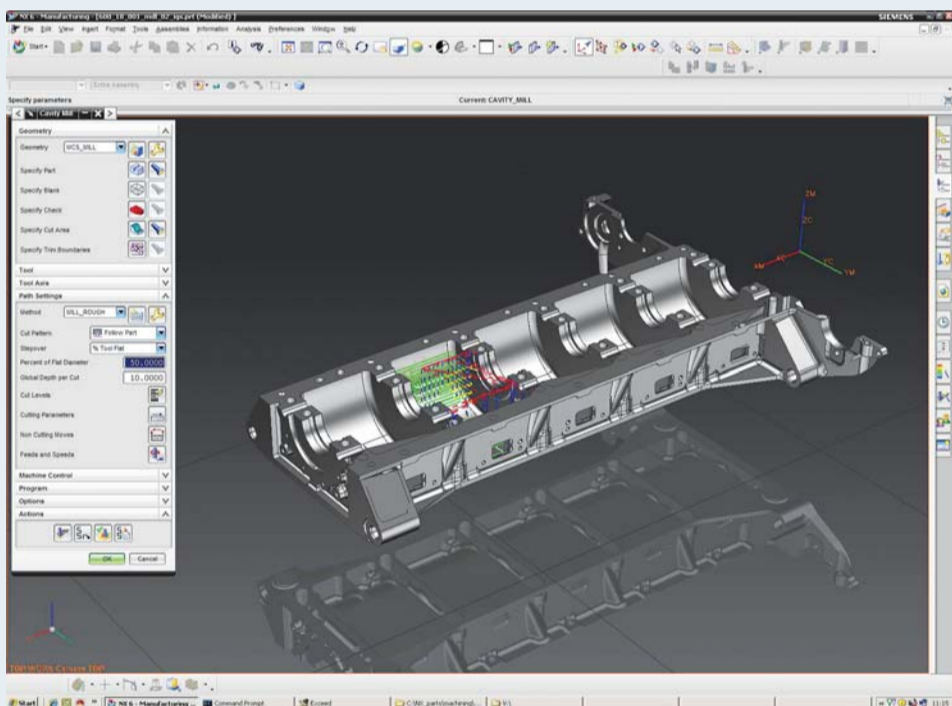
CAD/CAM systems – and CAM systems in particular – are productive tools and this is one of the key factors influencing TTL's decision to maintain their own in-house CNC machining facilities. Their 3, 4 and 5-axis CNC machine tools provide a perfect way of testing, proving and demonstrating the equipment they sell.

Today, TTL have chosen Siemens NX CAM software products as their tool of choice – both in the sales and the development arena. The system, formerly known as Unigraphics but now going under the name of "NX", has many advantages for manufacturing organisations. The system is incredibly modular, meaning that it's very easy to "start small" and let the system grow with your needs. But it's also one of the world's most capable and comprehensive systems, catering to the needs of virtually every manufacturing area – from mould & die, aerospace, automotive, and electronics.

One of NX's many advantages is that it forms part of a much larger integrated software suite – and is one of the few systems that can really cater for the all of the needs of major manufacturing organisations. As such, the system is eminently suitable as a manufacturing technology tool because it provides complete data integrity and continuity throughout the supply chain. At the corporate level, Product Lifecycle Management (PLM) is becoming very important. Major clients wish to control a whole lot more than just their machine tools. Commonality of data and geometry integrity throughout the design, testing, manufacturing and maintenance phases of a product are paramount and in association with PLM products such as Siemens' TeamCentre®, NX provides a totally integrated solution. What this means in practise is that by using NX as a CAM system, small manufacturing companies not only enjoy the benefits of a remarkably adept and powerful system, but one that is very scalable and offers high levels of compatibility with their major clients.

One of the main attractions to TTL of the NX product is its customisability. Even in diligently designed systems, the breadth and depth of the user-interface and sheer number of options available to the new user can make learning the system daunting. TTL are advocates of user-interface simplification and in the quest to reduce learning curve, offer a special customisation service in which they help a customer to analyse their specific needs, and tailor the system to provide greatest efficiency.

TTL are changing the model by which CAM systems are sold & supported, by helping customers to identify their real needs, demonstrating relevant capability & reducing implementation times.



NX CAM

TIME IS MONEY – NX CAM SAVES BOTH

Staying competitive means maximising efficiency. That's why Siemens PLM Software developed NX™ CAM – a cutting edge, specialist system for machine tool programming. Plus, our partnership with TTL means you benefit from the advice and expertise of a team highly experienced in manufacturing technology.



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