

SolidCAM expands machining software to Siemens NX

SolidCAM's (www.bit.ly/2Z1YEgq) iMachining technology is now available for Siemens NX the firm reports, as CAM users simply insert iMachining 2D and 3D operations directly inside NX CAM, using all NX functionality.

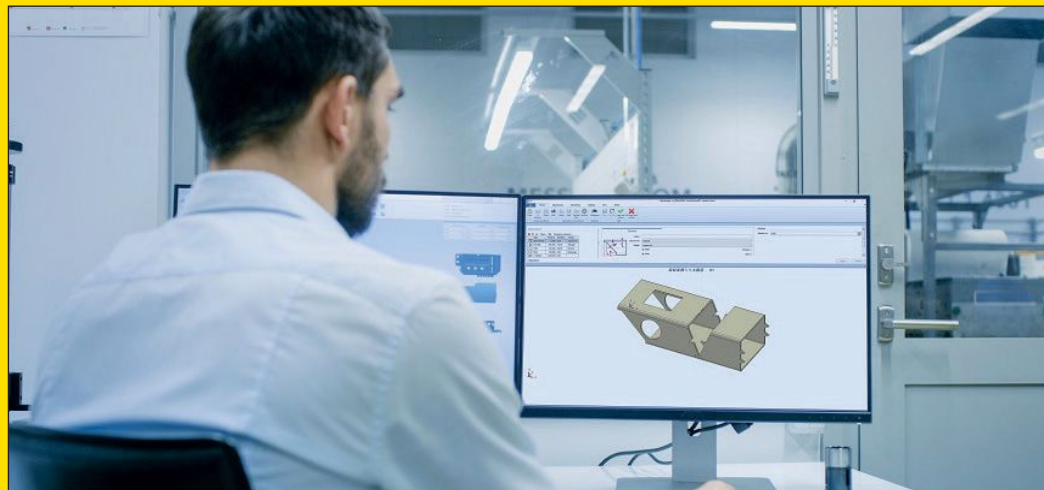
The company explains iMachining achieves short cycle times regardless of industry, material or machine. The iMachining toolpath is designed to keep the cutter at maximum efficiency and ensure the highest material removal rate. Exact stock rest material machining and finish cuts reportedly eliminate air cutting and unnecessary tool retracts.

It also enables users to choose from eight levels to automatically adjust for fixture, tool holding and CNC conditions, which SolidCAM says makes it easier to "overcome common challenges with spindle and fixture rigidity and excessive tool deflection".

SolidCAM notes iMachining increases average tool life by over five times and designed for machining at full depth-of-cut, using the entire tool rather than only the bottom part. Optimum cutting conditions reduce tool wear and increase process stability to avoid uncontrolled tool breakage, while iMachining's Technology Wizard automatically produces optimised feeds, speeds, depths and widths of cuts for CNC machines, materials and tools.



Lantek improves its Flex3d software



In an aim to respond to the complexity and growing demand in the sheet metal sector for increasingly heterogeneous tube designs and different formats, Lantek (www.bit.ly/3E2spwW) has improved its Flex3d software.

The company has designed new applications which it says, "provide easy solutions when designing and machining complete or partial bevels anywhere in the tube". The new version also makes it possible to include perforations of various types (round, rectangular, triangular), and deal with the multiple possibilities that require a library of connections and intersections for the assembly of complete tube sets.

"One of the most highly technologically-developed fields in the sheet metal sector is the manufacturing of tubes, both in terms of the development of machine operations and in software solutions that address the variety of demands raised by customers", explains Francisco Pérez, Lantek OEM channel director.

Lantek says the ability to address and resolve the variety of possible scenarios, especially considering the series of fundamental variables in this field, is key when it comes to responding to the growing demand in this market.

Each type of profile can be cut in different ways. It depends on the structure of the machine (dimensions of the head/nozzle, axis, etc.) and the client's preferences. In the past, tube-cutting machines revolved mainly around cutting circular and rectangular tubes.

These machines were extremely expensive and still are today. However, with the introduction of fibre laser manufacturing costs, as well as those of the machines themselves decreased, allowing more companies to invest in the technology. The machines have evolved to meet the needs of this new client/market which has, in turn, triggered the emergence of new needs for cutting "complex" profiles.

The usual solution provided by the machine manufacturer was based on predefined machining for each type of profile/format, but when a new type appears, adding it to the standard library is very time consuming, especially now that the number of possible formats is exponentially multiplying. The result is that the client must accept whatever predefined machining method the machine supplier offers, which may not be ideal.

Aware of this situation and the need to offer solutions for a wide range of machines, with its tube-cutting product Lantek Flex3d,

Lantek has developed a new machining concept. This new solution is a tool able to define a tailor-made cutting trajectory for any profile. This includes a customised cutting sequence defined by both the OEM and the machine user to meet their production requirements. The result is the creation of a "knowledge database" where the OEM's machine experience is combined with the end user's cutting experience.

Lantek says this new development has allowed it to get ahead of the market, anticipating the future and adapting to manufacturers' needs. This new Lantek Flex3d tool will be available in version V41 of the Global Release 2021.

With highly variable manufacturing requirements Lantek Flex3d must consider type of tube to be manufactured and the type of cutting machine used. For example, large tubes for structural applications, with sizeable thickness and dimensions, are usually cut with plasma and oxycut machines, whereas narrower tubes with reduced dimensions are generally cut with laser cutting technology.

Lantek Flex3d has been designed to resolve these complexities and is fully integrated with the rest of Lantek's planning (MES), management (ERP), analytics and monitoring solutions.