



Case Study

ModuleWorks confirm partnership with Southwestern Industries



ModuleWorks, the leading supplier of CAD/CAM components for 3-5-Axis toolpath generation and simulation, has confirmed its partnership with Southwestern Industries and will provide stock removal verification technology to run on their entire range of TRAK CNC machine tools and controls.

Founded in 1951, Southwestern Industries' headquarters and production facilities are based in California, USA. Their popular TRAK and ProtoTRAK products, targeting the small lot machining market, serve a wide range of industries.

ModuleWorks have been providing software components for simulation and verification to the CAD/CAM industry for almost a decade and provide this technology to many leading CAD/CAM vendors.

ModuleWorks and Southwestern Industries have worked together to develop fully featured stock removal verification to run on the ProtoTRAK CNC control which powers the TRAK range of mill and lathe machine tools, and is also available as a popular retrofit for small knee milling machines. Verification is now a standard feature on all ProtoTRAK CNC controls, with more than 1000 units expected to ship annually.

Deploying verification on the CNC control presented a number of challenges to overcome, in particular handling an environment with less memory and slower CPU

technology than usual CAD/CAM workstations.

ModuleWorks developers worked with Southwestern to fine tune the verification component for optimum performance on the ProtoTRAK control in what turned out to be a very smooth integration process. Verification on the ProtoTRAK control made its US and European debuts at the major metalworking show, IMTS 2012 last September and the Woodworking trade show, LIGNA in May 2013 respectively. It was very well received by everyone who saw it. The solution allows G-Code programs to be verified on the control prior to running on the machine tool for real. Full real-time verification of the G-Code is provided, resulting in a right first time and much safer machining environment. Sales are expected to receive a welcome boost as a result of the new capability.

David Plater, Technical Director for ModuleWorks, comments "This was a very interesting and rewarding project. Southwestern Industries were very helpful in helping us solve the technical challenges and we are very pleased with the solution that is now deployed on the ProtoTRAK control. It has shown us that verification technology can be scaled to work within the memory and processor constraints of the CNC control and this has opened our eyes to the potential of other controls, tablets and other mobile technology".

Tom Copeland, Vice President Southwestern adds "Real-



Richard W. Leonhard, CEO and Chairman Southwestern Industries, Inc. and Jens Beissel, Marketing Manager ModuleWorks confirming partnership

time Verification was a common request from our customers. We looked at different solutions and ModuleWorks was the clear winner. Their development team was enthusiastic and happy to work with us to ensure a smooth and easy to use user experience for the verification workflow. We're delighted with the results, as our customers, and are now looking at other future opportunities for added value software applications on the control".

A video interview with Southwestern's CEO and Chairman Richard W. Leonhard is available on the ModuleWorks Youtube channel

<https://www.youtube.com/watch?v=UgDApamf0uw>

About ModuleWorks

ModuleWorks is a software component provider for the CAD/CAM industry. ModuleWorks' expertise in 5-Axis simultaneous machining and Simulation is recognized throughout the CAM industry and its software components and development services are used by the majority of the leading CAM vendors. ModuleWorks 5-Axis and Simulation software has been used in the manufacture of complex parts for over a decade and they have many users in the global CAD/CAM industry.

About Southwestern Industries

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