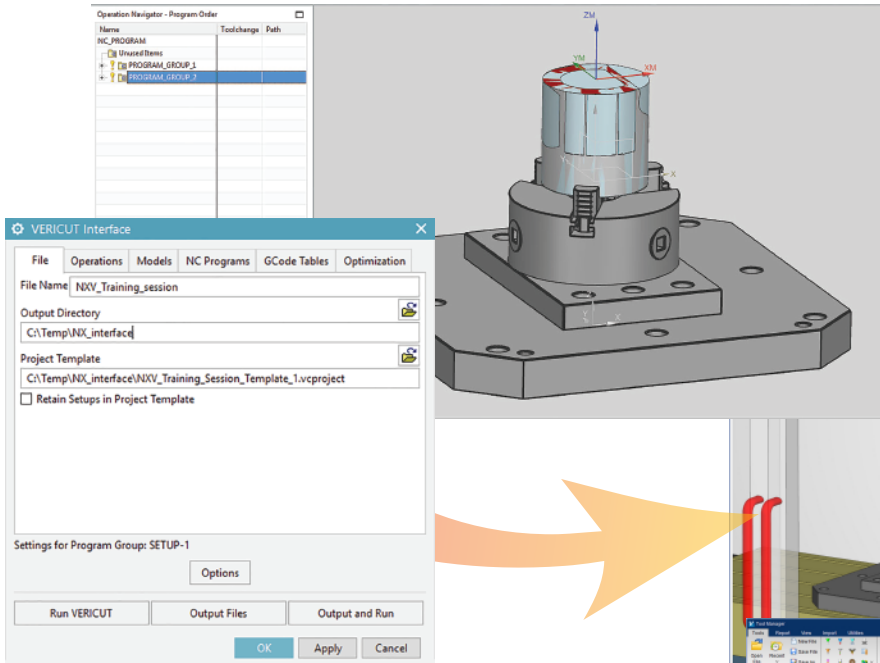# VERICUT®
CNC Machine Simulation Software

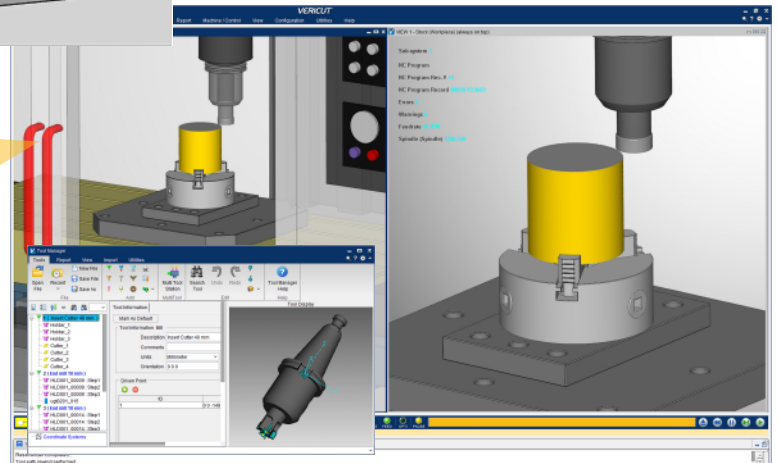## Seamless Integration with
SIEMENS PLM

VERICUT is the world's leading independent CNC simulation software – used in nearly every industry by users of all leading PLM and CAM systems!

The NX-to-VERICUT Interface from CGTech provides an easy & convenient way to verify, optimize, and analyze:

- individual NC programs
- a series of selected tool paths
- a complete sequence of operations

...directly from within Siemens NX!

To launch VERICUT and verify NC programs within Siemens NX, simply select the desired operations from a list and select the VERICUT option. Settings from the Operations Navigator will be automatically transferred to VERICUT's Project Tree.

Fast and Easy Setup

With the NX Interface, NC programs are linked to manufacturing operations, enabling easy selection of tool path motion from the desired operation. All tool path and tooling information is automatically transferred to VERICUT. Design, Stock, and Fixture models are also automatically transferred to VERICUT in their proper orientation. The interface supports VERICUT's multiple setup functionality, and by using coordinate systems, models are properly positioned on the machine for each setup. The VERICUT process runs independent from the CAM system so you can continue working in NX while verifying the NC program.

Extra Features

- Take NX machining operations to the next level of performance by optimizing CAM cuts with VERICUT optimization. This unique approach updates NX operations with ideal feed rates that maximize machining potential and tool use, so highly optimized NC programs can be created directly through post-processing.

- With the NX-Connect parameter enabled in the NX-to-VERICUT interface, users can select a VERICUT simulation error message to highlight the related NX toolpath operation. This allows users to quickly and easily identify the NX toolpath operation that produced a VERICUT error.
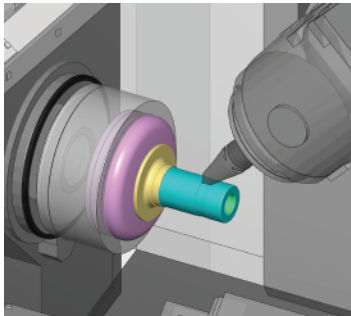
Right the first time. Every time.

9000 Research Dr, Irvine, California 92618
(949) 753-1050 • info@cgtech.com

CGTECH.com

Go ahead...

CRASH YOUR MACHINE

...as long as it's in VERICUT

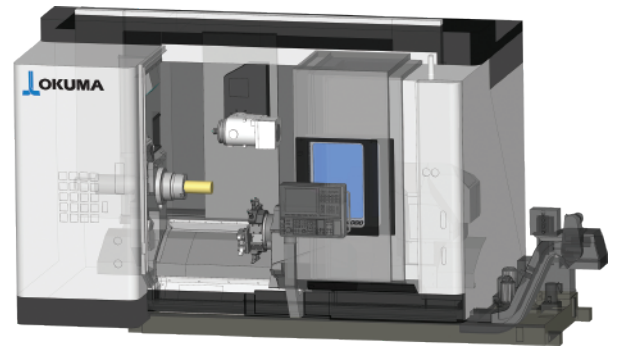## NC Program Verification, Inspection & Analysis, CAD Export

VERICUT simulates milling, drilling, turning, multi-tasking mill/turn, and EDM operations. Errors that could ruin the part, damage the fixture, or break the cutting tool are easily identified. VERICUT supports G-codes and native CAM files and includes analysis tools to measure and compare the cut part with the design model. You can model any cutter, fixture, or holder shape. During simulation you create in-process inspection instructions and export a CAD model of the "as-machined" part.

- Eliminate program errors
- Reduce scrap and rework
- Train without using a machine
- Improve documentation and presentations
- Consistently produce perfect first-time programs without manual prove-outs
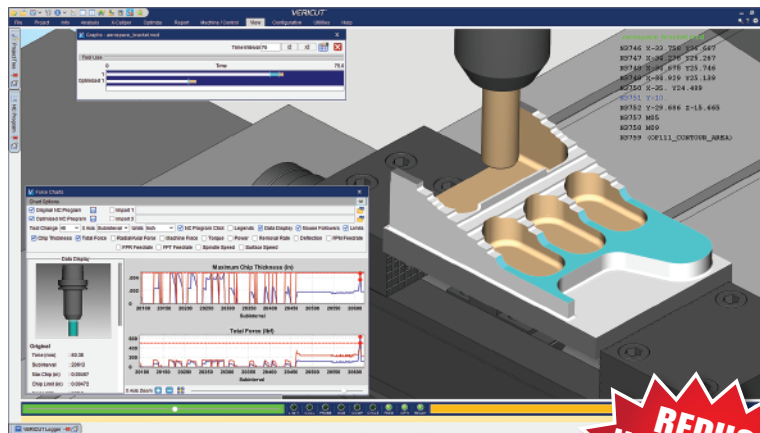
CNC Machine Simulation

A single crash can be extremely expensive, ruin the machine, and delay the entire production schedule! VERICUT enables you to simulate your CNC machines so you can detect collisions between portions of the machine, the part, fixtures and holders, etc. before any actual cutting occurs. And, because the simulation is driven by the same logic as the machine's control, it behaves exactly like the physical machine and is the most accurate collision-checking available.

- Eliminate crashes & close calls
- Check machine capabilities
- Improve process efficiency
- Speed up machine implementation time
- Enhance documentation
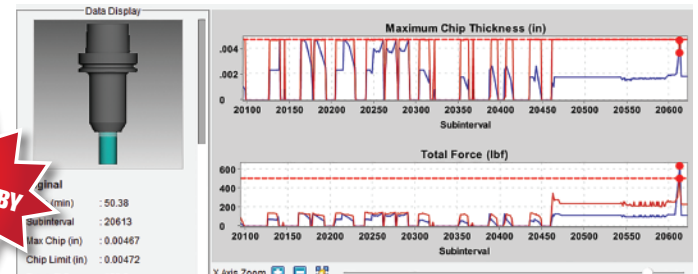- Increase safety and improve training

Feed Rate Optimization

VERICUT is equipped with NC program optimization capabilities. Based on the cutting tool geometry, part material, and programmed cutting conditions, VERICUT automatically determines the optimum safe feed rate for each cut. The VERICUT optimized NC program will greatly improve cutter performance resulting in significant cycle time savings, reduced tool wear, improved tool life, and better finished parts.

REDUCES MACHINING TIME BY 15-25%

- Improve cutting tool performance
- Prevent undesirable cutting conditions
- Eliminate manual feed adjustments at the machine
- Utilize cutting tool technologies to their full potential
- Maximized and consistent chip thickness throughout the machining process

Right the first time. Every time.

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