Integrate VERICUT into your CATIA process and simplify setting up, simulating, and optimizing your NC programs.
Seamless Integration with CATIA® V5!

VERICUT offers direct integration with CATIA V5!

The CATIA V5-to-VERICUT Interface tightly integrates the two software applications to help you create the most accurate and efficient NC programs possible! It makes simulating, verifying, and optimizing your CNC machining processes faster and easier than ever before!

The interface enables you to start VERICUT directly from CATIA. All stock, fixture, and design geometry is automatically transferred to VERICUT in the correct orientation, along with NC program, tooling, machine and control data, and other simulation parameters. The interface supports VERICUT’s multiple setup functionality and, by using coordinate systems, models are properly positioned on the machine for each setup. You can choose how to apply the part operation’s machining axis in the VERICUT simulation by selecting the offset table (Program Zero, Work Offset, etc.) and relationship to the machine (tool, rotary axis pivot, etc.). CATV also allows the user to select sketch geometry used to define tool shapes in CATIA.

INDEPENDENT POWER AND FLEXIBILITY
VERICUT runs independently of the CATIA process, so you can work simultaneously in the two applications.

CGTech also offers an interface to CATIA V4 and has been a CAA partner since 1991.

Want to use native CATIA files in VERICUT?
VERICUT includes the ability to use several industry-standard model file formats: STL, IGES, VDA-FS, and DXF. Additional model file formats can be used with the following optional model interface modules: STEP, ACIS, CATIA V4, and CATIA V5.

VERICUT OVERVIEW
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 can create in-process inspection instructions and export a CAD model of the “as-machined” part.

- ELIMINATE MANUAL PROVE-OUTS
- REDUCE SCRAP AND REWORK
- TRAIN WITHOUT USING A MACHINE
- IMPROVE DOCUMENTATION AND PRESENTATIONS
Go ahead...

CRASH Your Machine!

...as long as it’s in VERICUT

VERICUT is the leading CNC simulation and optimization software for manufacturing! With VERICUT, you can: detect potential collisions and NC program mistakes without doing a prove-out, improve cutting efficiency, perform detailed part analysis, automatically generate inspection instructions, and make “in-process, as-machined” CAD models.

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 AND CLOSE CALLS
- CHECK MACHINE CAPABILITIES
- IMPROVE PROCESS EFFICIENCY
- SPEED MACHINE IMPLEMENTATION TIME
- ENHANCE DOCUMENTATION AND CREATE DEMOS
- INCREASE SAFETY AND IMPROVE TRAINING

NC PROGRAM OPTIMIZATION

Optimizing cutting speeds is an effective way to reduce cycle time, increase cutter life, and improve finish quality! Based on cutting conditions and tool capability, VERICUT automatically assigns the best feed rates for each cutting condition encountered. It works on a simple premise: feed rates increase for lighter cuts or better conditions, and decrease as more material is removed. Without changing the trajectory, the updated feeds and speeds are applied to a new NC program.

- REDUCE CNC CYCLE TIME
- IMPROVE FINISH QUALITY
- REDUCE FEED RATE ADJUSTMENT
- MINIMIZE MACHINE AND CUTTER WEAR
- BE MORE COMPETITIVE, AND MORE PROFITABLE
- INCREASE PRODUCTIVITY, SPEED TIME-TO-MARKET

How software optimization works:

As the cutting tool encounters more material, feed rates decrease; as less material is removed, the feed rates speed up accordingly. Based on the amount of material removed by each cut segment, OptiPath automatically calculates and inserts improved feed rates where necessary. Without changing the trajectory, OptiPath writes the updated feed rates to a new NC program.
CGTech® is the leader in CNC machine simulation, verification, and optimization software technology. Since 1988, our products have become the standard in manufacturing industry sectors including aerospace, automotive and ground transportation, mold and die, consumer products, power generation, and heavy industry. Today with offices throughout Europe and Asia, and a global network of resellers, CGTech software is used by companies of all sizes, universities, trade schools, and government agencies.

CGTech maintains an active Technology Partnership program. VERICUT users in this program include many of the world’s leading machine builders, CAD/CAM developers, and manufacturing software companies.

VERICUT customer support is provided by a team of dedicated technical support engineers. Full training, implementation, and contract consulting services are available.

When you invest in VERICUT, you're not just buying a software program, you're teaming up with a manufacturing partner with the best reputation in the business!