VERICUT® *CNC Machine Simulation Software*

Simulate both additive and traditional machining capabilities
ADDITIVE MANUFACTURING

Verify Laser Activity
VERICUT's Additive module simulates added material via directed energy deposition (DED), laser sintering, 3D printer and powder bed layups from their build files, wire-fed additives, thermo-plastic composite additives, welding, and other layup processes that add material. These additive processes are used to create a "near net shape" part.

Additive Functions
Additive tools have an "Additive Functions" group with options to validate laser, material, and gas usage (sometimes referred to as "recipes") during the simulation. Errors are issued when checked additive functions are improperly used, or set out of the expected range.

Droplet Technology
Realistic Appearance: Added material in VERICUT is easy to distinguish from machined stock. Programmers clearly see when part features that require finishing have been machined.

History: Each bead (or "droplet") stores "built-in" intelligence that NC Programmers use to quickly find the

Image Courtesy of CCAT
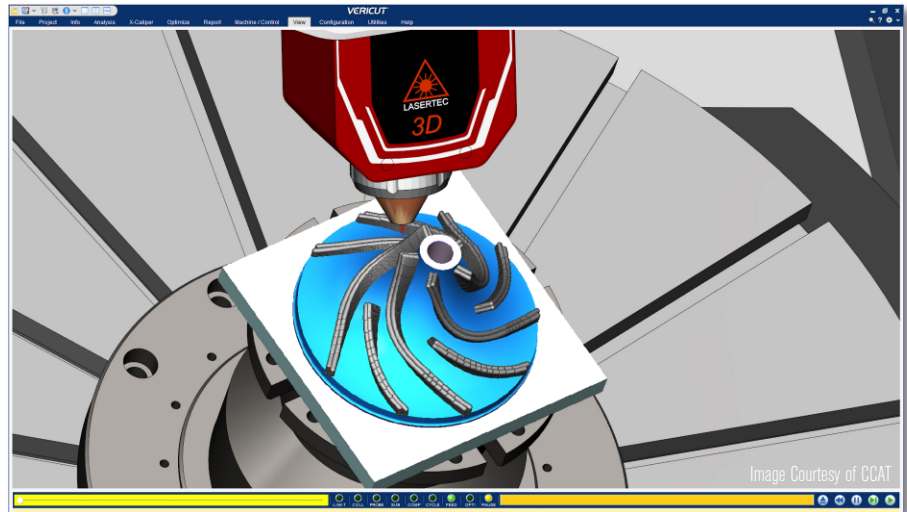
source of errors, voids in material layers, problem cuts in added material, and where misplaced material came from, with a single click.

5-Axis Machining
The verification process of VERICUT accurately checks for errors on all 5-axis milling, turning, and additive laser sintering processes no matter how complex the operation.

Hybrid Manufacturing
In VERICUT, additive operations are combined in any order with traditional "subtractive" machining, such as

Key Benefits & Features
Identify errors, voids, and misplaced material

Simulate G-code programs for hybrid machines

Detect collisions between the hybrid machine and additive part

Verify laser activity, power, material feed, and gas glow

Visualize realistic appearance of material deposition & machine features

Right the first time. Every time.

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

CGTECH.com

milling, drilling, turning, etc. The realistic appearance of added material allows NC Programmers to tell that all necessary machining has been performed.

Detect Collisions

VERICUT detects collisions between the machine and additive part with its collision checking extended to cover additive parts as they are being built, and expensive super multitasking machine laser equipment.

CRASH DETECTED!
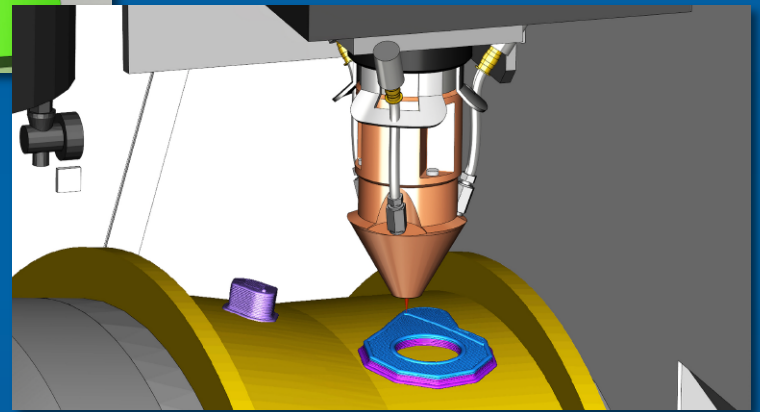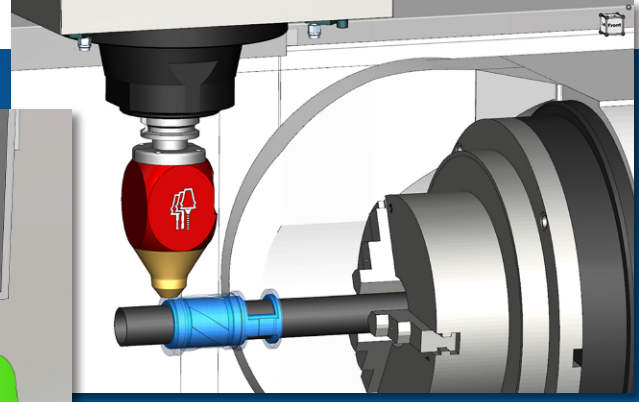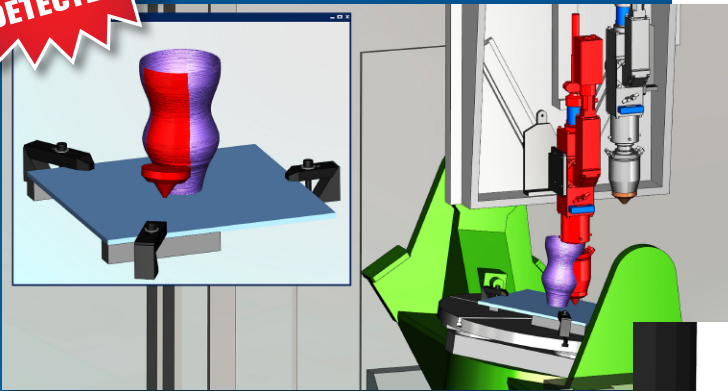
ADDITIVE
Manufacturing

"We looked at all of the major manufacturing software providers for their simulation capabilities and VERICUT was the only one that met our needs out of the box."

- Austin Kron, Managing Director, BeAM Machines

Additive Partners

HYBRID MANUFACTURING TECHNOLOGIES

Mazak

CCAT Connecticut Center for Advanced Technology, Inc.

BeAM BE ADDITIVE MANUFACTURING

The University Of Sheffield.
Advanced Manufacturing Research Centre
BOEING

OKUMA

DMG MORI

3D-HYBRID SOLUTIONS INC.

THERMWOOD