VERICUT®

Simulate Additive Manufacturing with VERICUT

VERICUT's Additive module simulates both additive and traditional machining (milling or turning) capabilities of new hybrid CNC machines.

Verify Laser Activity

The Additive module provides CNC machine simulation for accurate laser cladding and material deposition. VERICUT reads the laser parameters, controls laser wattage, flow of carrier gas, and metallic powder specific to each job/material type.
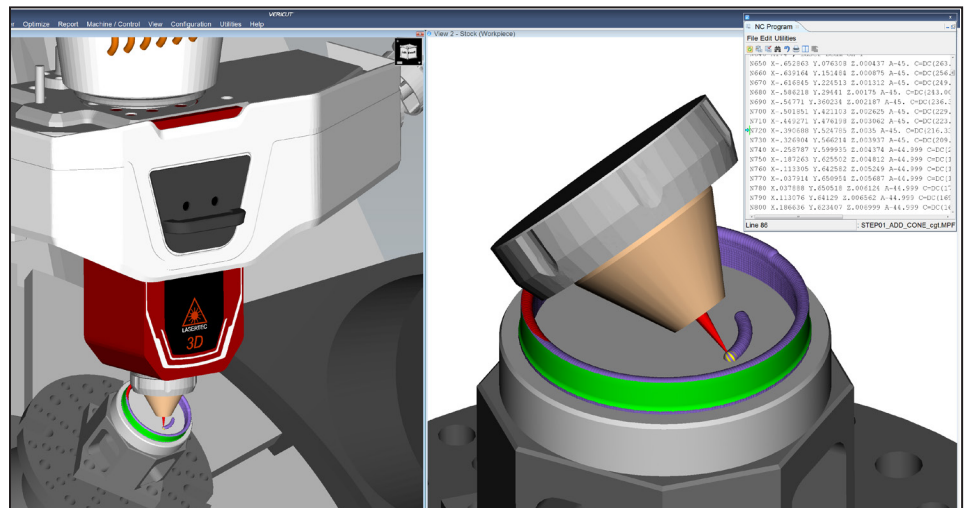
Verifies laser fuctions, detects collisions, and highlights errors in red.

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 hybrid machine laser equipment. This provides the ability to gauge potential problems beforehand.

Quick Access History

With droplet technology, VERICUT's additive model is much more than just "deposited material." Each bead contains valuable history information about how it got there. This saves time investigating errors, voids, or misplaced material, since the source of the problem is revealed with just one-click.

Realistic Appearance

The Additive module offers superior simulation of material deposition that is easily distinguished from cut stock. Therefore, having the ability to clearly see where each bead of material is placed in a step-by-step process is essential for successful AM.

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 machining operation.

G-Code - Hybrid Machines

Simulation is powered by the same post-processed NC code used to drive the CNC machine, which enables the user to ensure additive functions are within proper ranges. VERICUT makes it simple to alternate from additive, to cutting, and back to additive in any sequence.

Benefits & Features:

✓ *Verify laser activity, power, material feed, and gas flow*

✓ *Detect collisions between hybrid machine and AM part*

✓ *Identify errors, voids and misplaced material*

✓ *Visualize realistic appearance of material deposition & machine features*

✓ *Supports 5-axis milling, turning, and additive laser sintering*

✓ *Simulate G-code programs for hybrid machines*

Right the first time. Every time.

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