



September 20, 2025

Dear Optimizer® User:

Thank you for your investment in Optimizer 2 (aka VO), an important part of your NC programming and machining process!

Optimizer 2 was created to provide an optimization solution to improve most all NC Programs (G-Code or Apt/CL) from a CAM system or straight off the CNC Machine.

Simply provide VO a stock model, cutting tools and an NC Program and 'just optimize'.

VO key features will be described in the following pages. Please take a moment to review what's in this release so you and your company can take full advantage of this latest optimization technology.

Maintenance and Licensing Information

Optimizer is a Cloud licensed application

To Get a License – use the link below to submit a License Request:
http://www.cgtech.com/vericut_support/request-license/

Optimizer 2 runs on 64-bit Windows, and is supported on Windows 10 and 11 computers.

Software maintenance keeps you on the cutting edge - CGTech provides updated software to customers with current software maintenance. Your continued maintenance ensures that you have the most advanced verification technology available.

For any pricing information please contact your CGTech representative
(<http://www.cgtech.com/about/contact-us/>).

Sincerely,
Ely Wahbeh
CGTech Vericut Product Manager

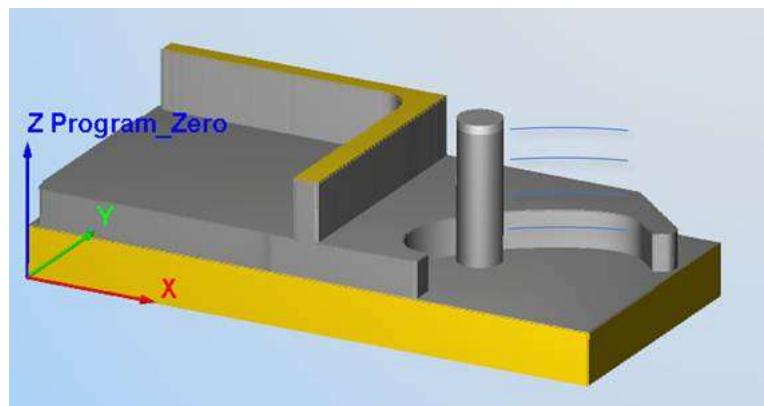
What's in Optimizer 2 (VO2)

VO is a standalone application that enhances NC program efficiency using physics-based optimization. VO optimizes APT/CL-file or post-processed "G-code" NC programs output from almost any CAM system, for use on standard 2-axis, 3-axis or 4/5-axis (multi-axis) NC machines, making it a versatile optimization tool for a wide range of NC manufacturing environments. VO focuses solely on cutting and optimizing to produce highly optimized NC programs that enable each tool to remove material under its ideal cutting conditions. This results in reduced machining times, extended tool life, and improved part quality across a wide range of NC manufacturing environments.

VO2 Release Highlights

Animation

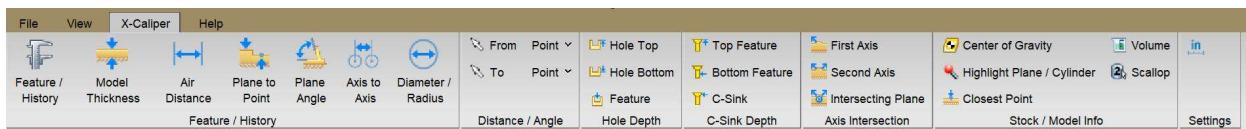
Ability to animate the cutting motion



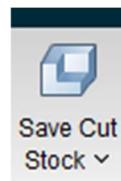
Icon on main panel to turn this off for improved optimization speed



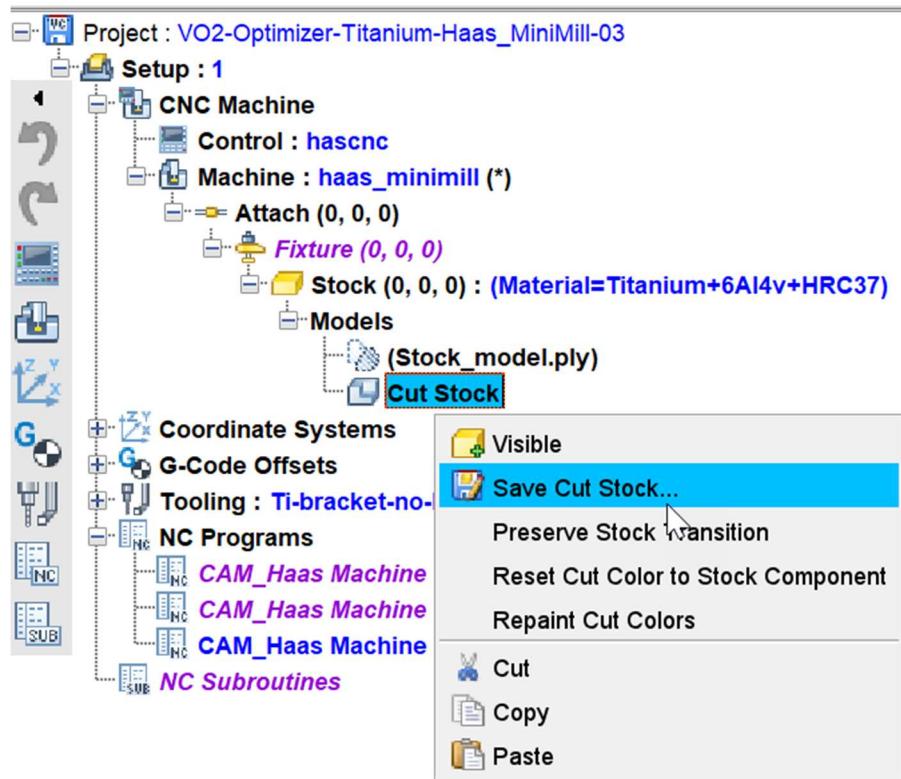
X-Caliper measurement tools



Save cut stock for second setups

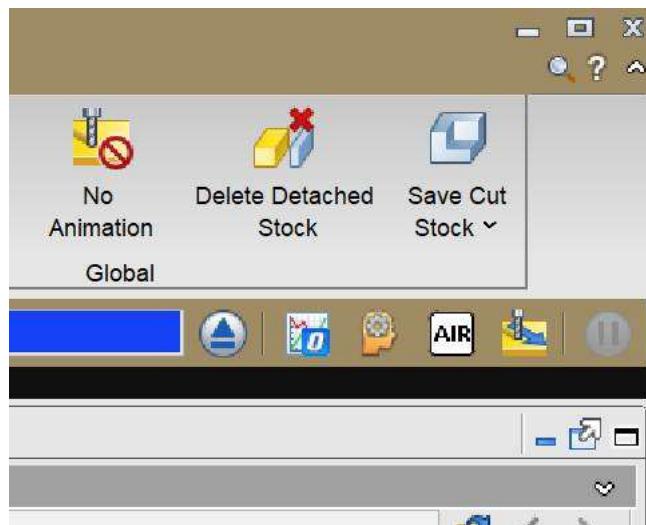


or



Delete Detached Stock

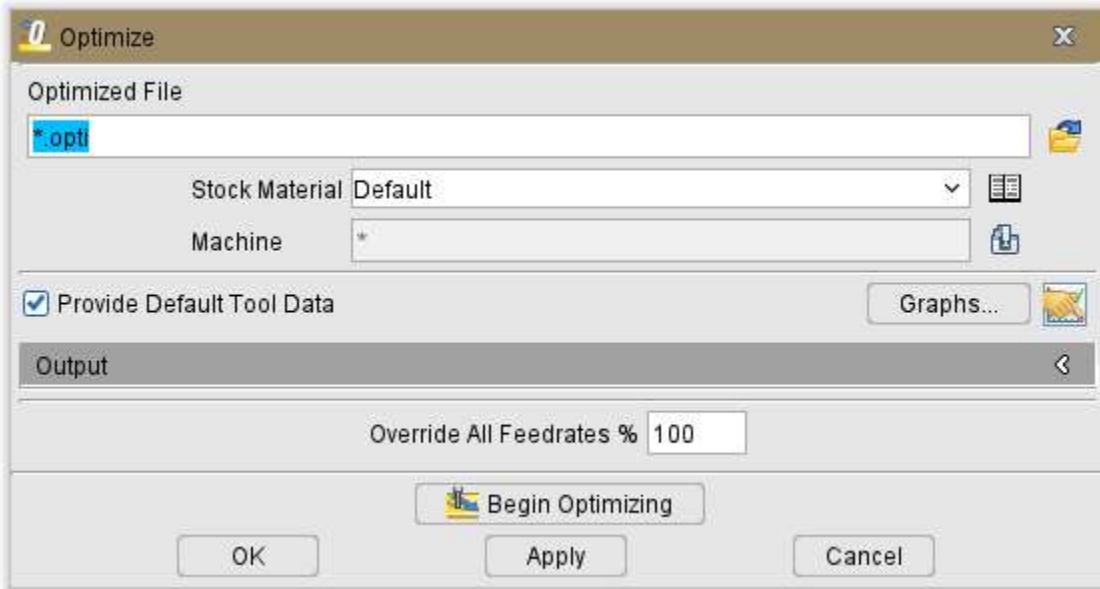
This feature can be used to remove stock from a setup.



Optimizer Release Notes

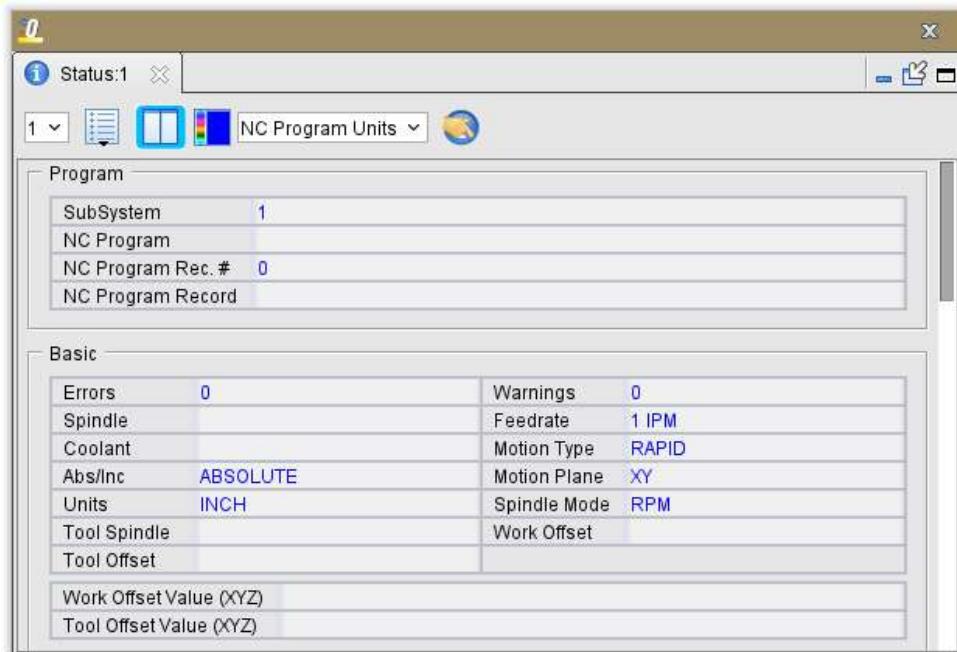
Optimize Control window

The Optimize Control window can now be used without exiting. Simply click "Begin Optimizing" to start the optimization process.



Status panel

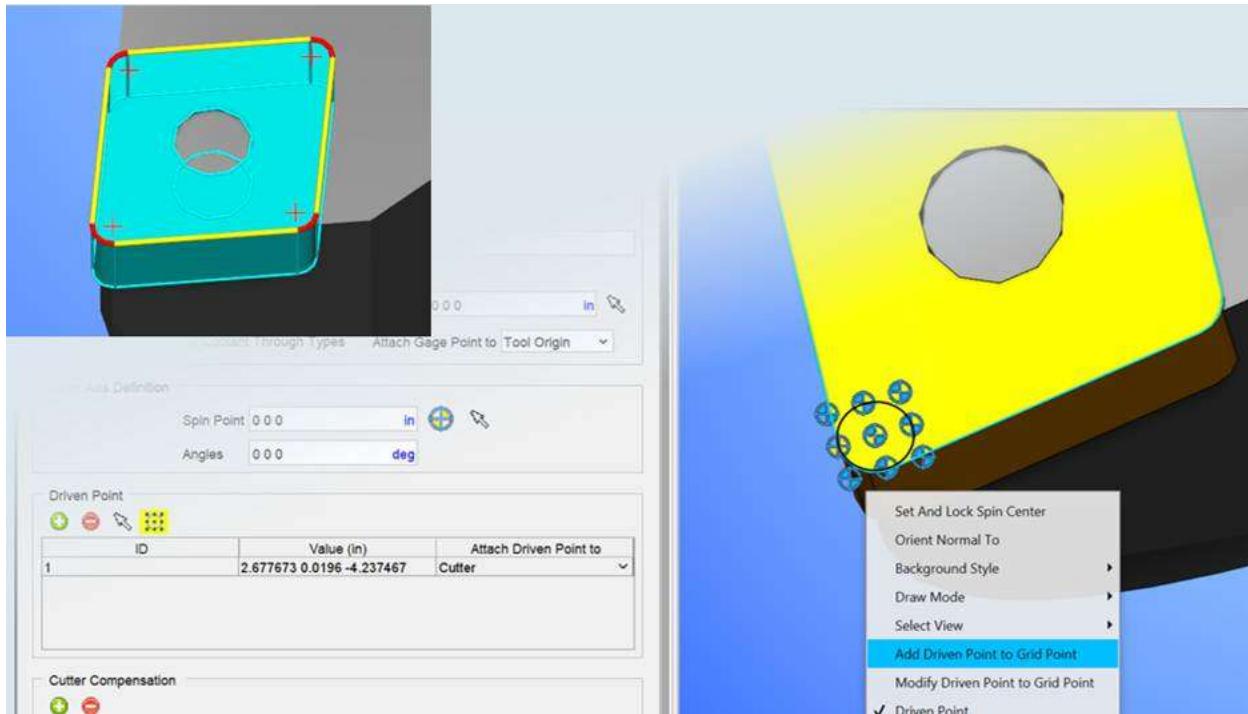
The Cutting Conditions section of the Status panel displays more information including Axial Depth of Cut and Angular Contact.



Driven Points/Qualified Dimensions

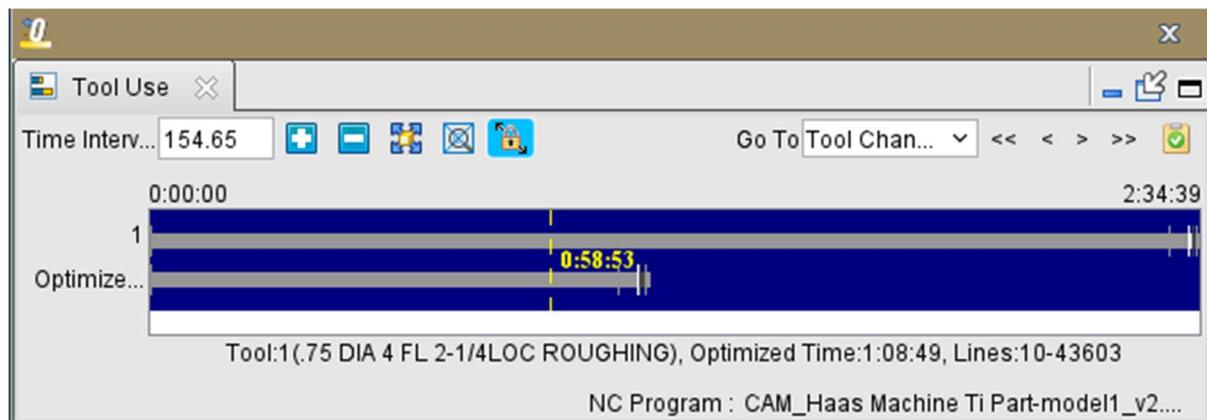
New Cutting Face display in Tool Manager displays curves and segments on imported turning inserts. New functionality to view and select desired Driven Point from interactive 3x3 point grid that also creates the Qualified Dimension. Includes new option to define Nose Radius with 3 points from the Cutting Face.

Qualified Dimensions are now added automatically in Tool Manager. You can also manually add Drive Points.



Tool Use

The Tool Use panel has been revamped to provide more in-depth tool information by hovering over sections of the chart with your mouse.



Hot Keys in Review Mode

Optimizer can now be controlled through hot keys while in Review Mode. Each key is mapped to an action in the software:

UP/DOWN Arrow key: Step Forward/Back

HOME key: Reset

END key: Set current to the end of program

Page UP key: Go to the beginning of current tool change

Page DOWN key: Go to the end of current tool change

Several quick key functions to enhance the interaction:

S: Set Start at the line where the cursor is

E: Set End at the line where the cursor is

C: Set Current at the line where the cursor is

Tool Use

The Tool Use panel has been updated with additional features like a Go To section to navigate between various changes. There are also new zoom options including a Zoom to Box functionality (which can be replicated with the right-mouse button) and an Auto Fit option. Errors and warnings will show up on the timeline and user can select the error there then enter review mode to see where in the code the error occurred.

Color-coded markers identify where Errors (Red) and Warnings (Orange) occurred during the simulation. Users can select a marker, then enter NC Program Review mode via the new icon added to the window, to see where in the NC program the event occurred.

Learn Mode Options

Enhanced Learn Mode Options feature evaluates machining performed by each cutting tool, then auto-configures optimization to increase cutting performance and efficiency. This feature now learns from cutting tools used multiple times (e.g. roughing, semi-finishing, finishing, etc.), then uses the learned information to optimize those tools uniquely, per each machining operation it performed. Create Stock Material Record per Tool Use feature can be toggled on (checked) to create individual stock material records for each tool as it is used.

Tool Performance Data

Optimizer provides enhanced and expanded tool performance data for additional cutter types and cutting materials. When adding Stock Material Records to cutters or inserts, choose "VERICUT Tool Data" to see recommendations for cutting feedrates, spindle speeds and more, compiled from the world's leading tooling brands. This data is available to all users, not just Force optimizers.

Optimizer Release Notes

Other items:

- Modernize CAM interfaces
- Improvement to the core, improve simulation speed

Optimization fixes

An issue of "Save as Optimization Setting" opening the wrong file type has been corrected.

An issue of attached driven point not working as expected during Optimization has been resolved.

An issue of Analysis improperly requiring licensing to function has been resolved.

An issue of Air Cuts Only optimization incorrectly increasing the cycle time has been corrected.

An issue of Optimization generating unrealistically high chip thickness values in certain cases has been resolved.