NC simulator

alphaCUT

Detailed drawing

Smooth expansion down to macro units

×

High-speed operation

Multi-core processor support

&

Macro support

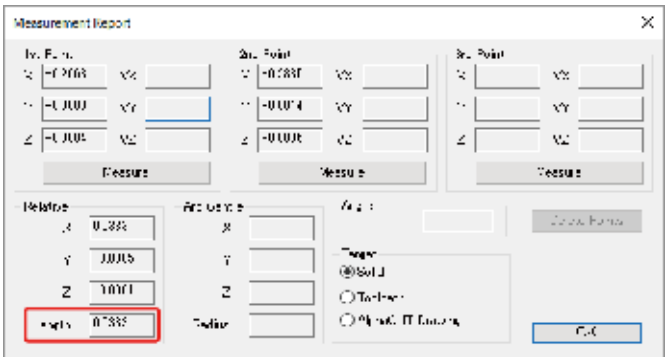
Special machine support

Customizable

LICOM The Total CAD/CAM Solution licom SYSTEMS CORP.

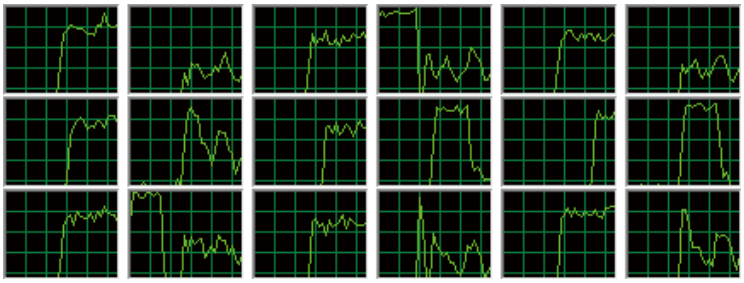
Precise drawing

Simulation display 30 microns wide.
Display down to 0.1 microns (100 nanos) is possible.



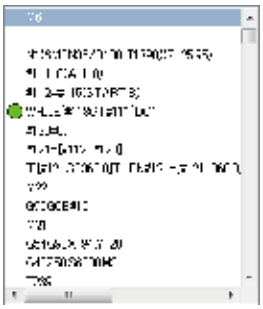
Measurement with measuring function.
Result of 0.0333mm (33.3μm).

High-speed calculation



High-speed operation with multi-core threading.
High-speed calculation settings (animation OFF) are possible.

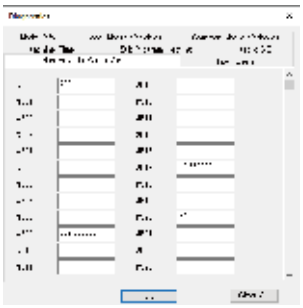
Macro support



IF,WHILE,GOTO...

Local variable

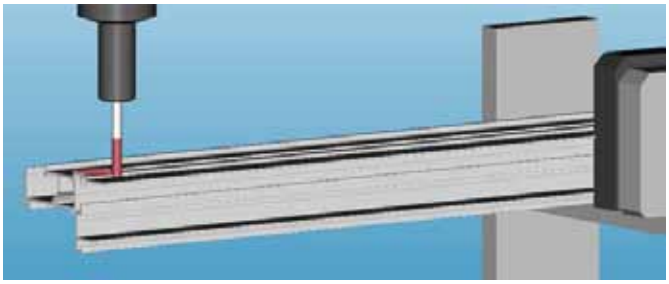
Common variable

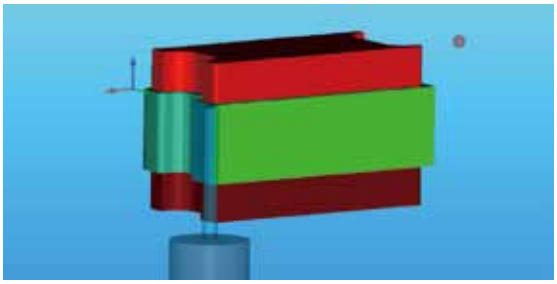


Memory-type common variable

Macro text can be converted to normal NC program

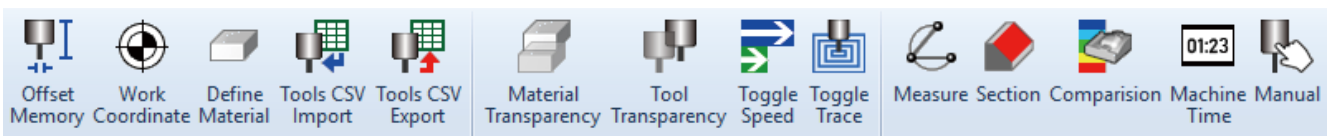
Special machine support





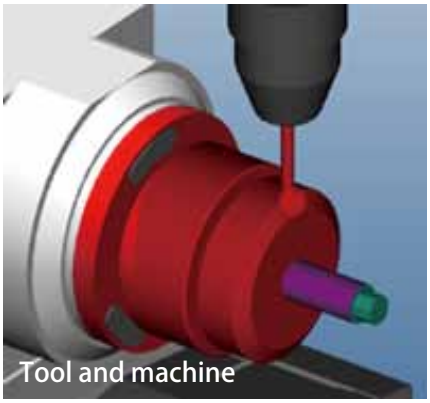
Support for aluminum sash processor, resin film processor, precision micro processing machines, knife cutting, corner chisels, probe, etc.

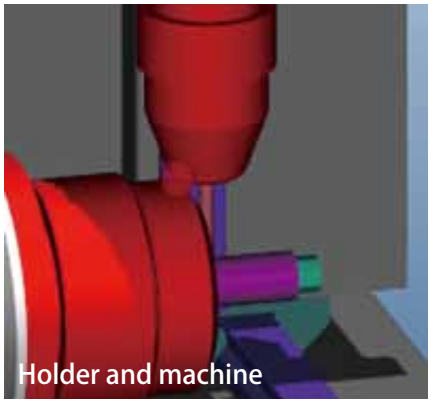
Customize

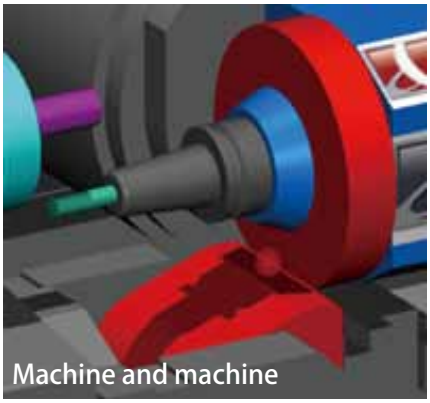


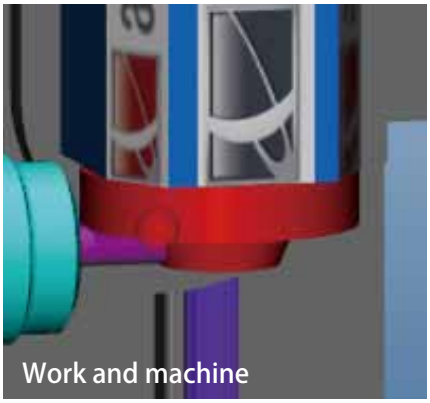
Original commands can be produced, such as labor-saving commands and dedicated commands.

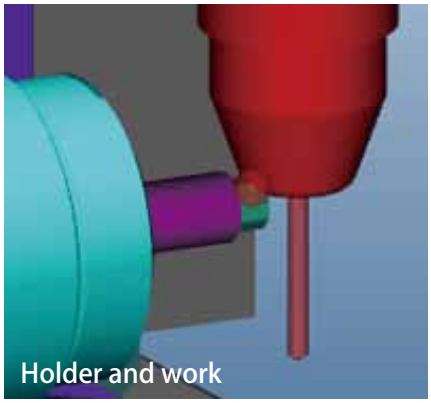
Interference detection

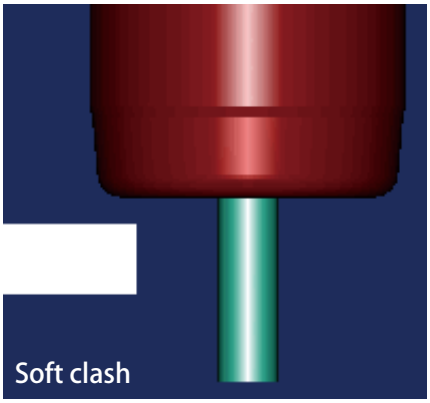






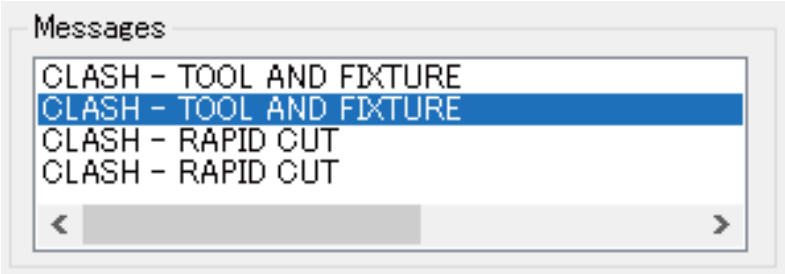






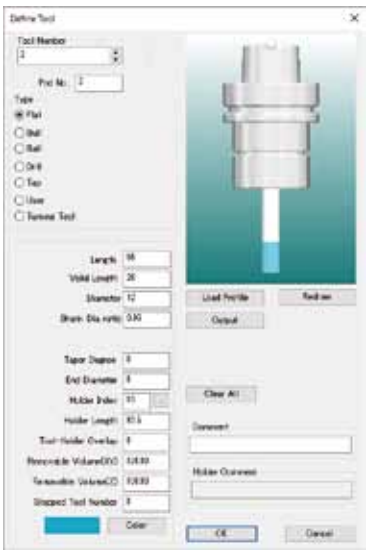
Message

Create holder and raw material interferogram. Detect tool end and length until interference position.

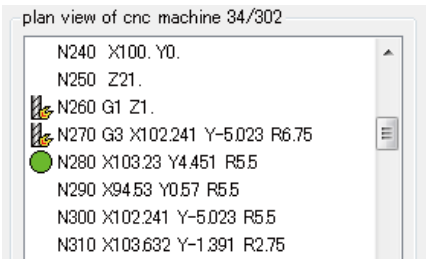


Can detect 19 types of warnings (interference, overstroke, rapid cutting, soft clash, etc.) and 104 types of program errors and syntax mistakes, etc.
(Click message text to specify program locations where mistakes occurred.)

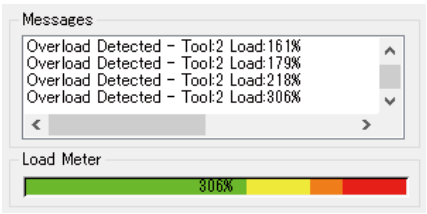
Overload detection



Value of volume to be removed can be set when registering tools.

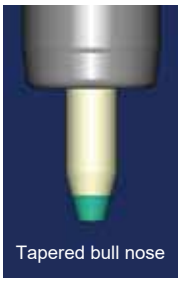


Mark and message are displayed in blocks where overload occurred.



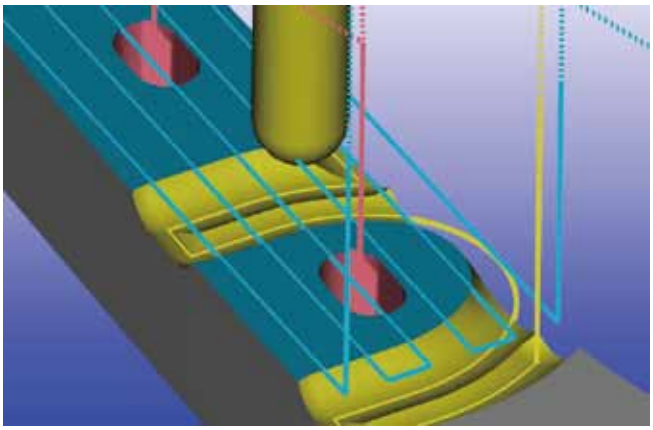
Details of overload and real-time load meter.
Tool removal volume units are mm^3/min (cubic millimeters + minutes).

Tool definition



Tools can be captured from alphacam tool route and tool files.
Interference is detected when shank part touches work.

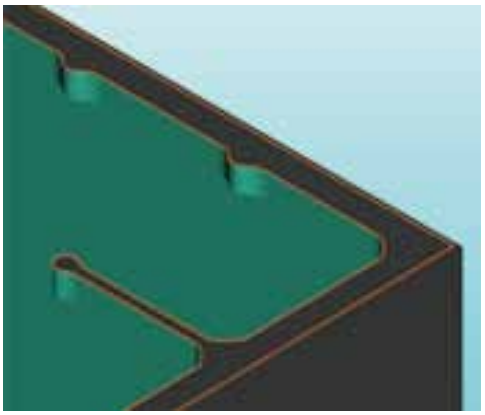
Trace line display

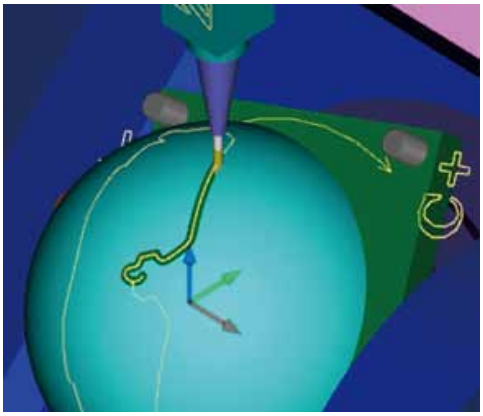


Tool trace line (locus) can be displayed.
(Line thickness can be changed.)
Also, tool center position can be calculated by combining trace line and measurement function.

It is possible to convert/output from trace line to data such as DXF, etc.

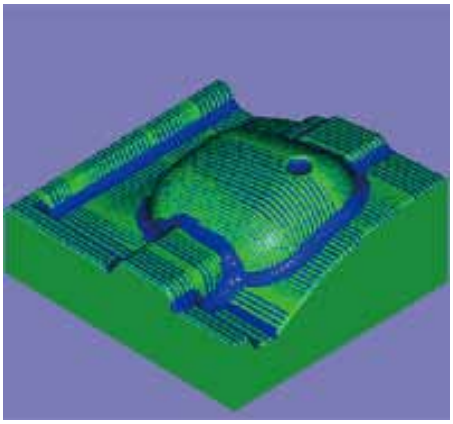
Drawing

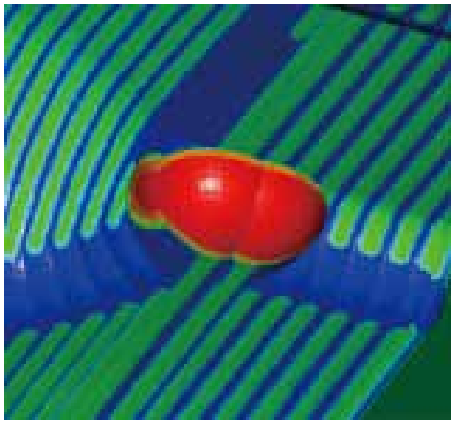


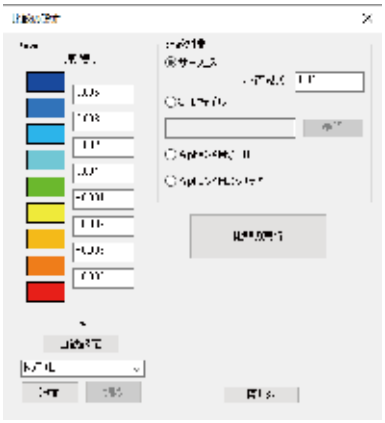


Alphacam form and polyline can be displayed as drawings.

Comparison function

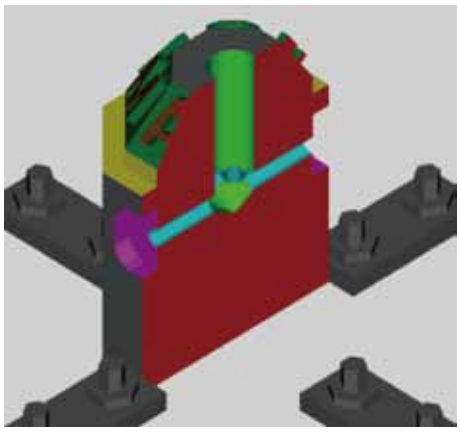




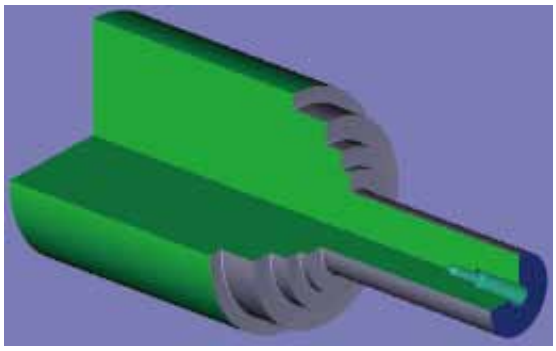


Compare product form and processing results in all directions. Cut leftovers and over-cut parts are displayed in different colors.

Cross-section production



Cross-section can be produced even during simulation. This can be produced by specifying coordinate points and with mouse operation.



1/4 cut (lathe)

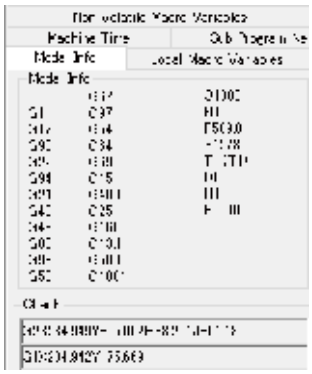
Measurement function

Measure form and distance of trace lines, etc.

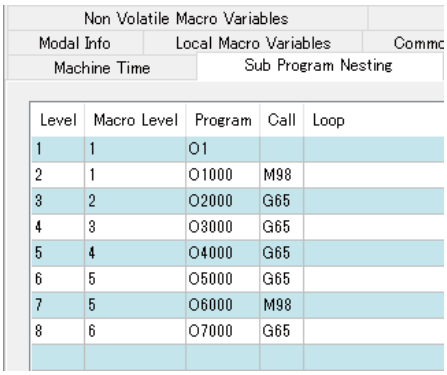
2-point measurement:
Display XYZ coordinate points and relative distances between 2 points.

3-point measurement:
In addition to 2-point measurement, also display arc center/ radius.

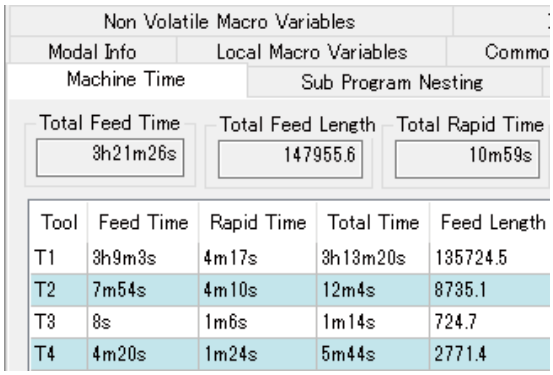
Diagnosis function



Real-time modal information

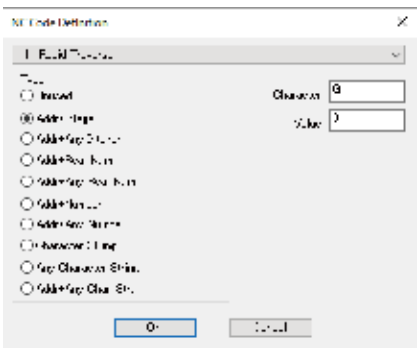


Sub-program nesting

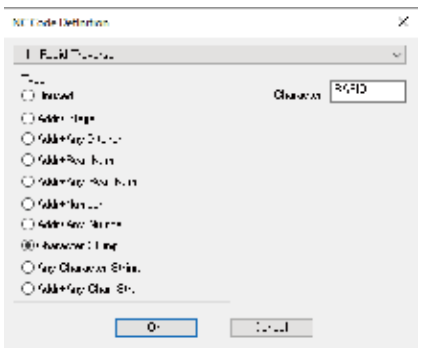


Processing time

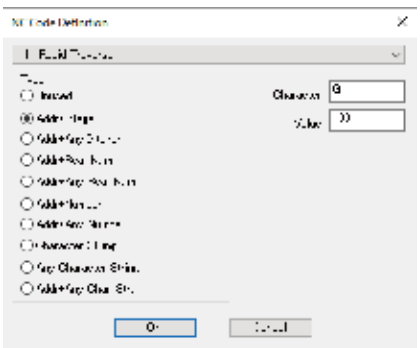
NC code settings



Fast-forward is G0



Fast-forward is RAPID



Fast-forwards is G100

NC code system is configurable rather than fixed.

Basic functions

●Simulation
Capture as solid/wire/form, speed settings, step feed (move forward/back), break point

●Interference check
Interference check ON/OFF, cutting raw material in fast-forward, holder raw material collision, soft clash, stop settings at time of interference, beep sound at time of interference, holder interference length detection

●Diagnosis
Coordinates (work, machine, local, remaining amount of movement), modal information, input signal, processing time, load detection, overload detection, macro variables (common memory type, common, local, nesting log, macro input/output)

●Manual movement
Manual absolute ON/OFF

●Precision settings
Display precision, arc interpolation, linear interpolation, axis of revolution, straight line + axis of revolution

Display performance

●Display settings
Internal drawing/separate screen drawing, color-coding of machining tools, color settings (parts holder background), transparency settings, holder hiding, display ON/OFF during fixture execution, multi-window/multi-view display, tool tracking display function/screenshot

●Tool display
Surface/wire, tool/work movement

●Cross-section display
Vertical, horizontal, arbitrary direction

●Viewpoint movement
Move, zoom and pan in any direction during simulation, and viewpoint rotation with tool end

●Transparency modification
Work, tool, holder, jig

Verification functions

●Trace function
Playback function, trace line function (cutting feed, fast-forward, tool vector)

●Search
Tool display from NC block, NC block search using trace line pick

●NC data editing
1-line editing (delete change insertion), NC data editor startup and transmission

●Measurement
Coordinates, distance between 2 points, arc radius center coordinates from 3 points

●Precision comparison
Arbitrary direction/perpendicular direction, incremental solid generation, cut leftover solid display, interference solid display, reference line (2D form) display for edge comparison

●Report
File output of macro variable contents specified during simulation

●Output of simulation results
STL output

OSP

●OSP mnemonic
Coordinate calculation part

●OSP system parameters
Partial

Development

●Create special machine settings
Aluminum sash processor, resin film processor, precision micro processing machines, corner chisels, etc.

●Create customized commands
Labor-saving commands, dedicated commands, etc.

Alphacam Ultimate Mill -

File | Home | Edit | View | Geometry | Work Planes | 3D | CAD | Machine | Nesting | Solid Model Extract | Solid

Open Machine | Open NC | Output STL — File
Tool Definition | Offset Memory | Work Coordinate | Define Material | Tools CSV Import | Tools CSV Export — Setting
Material Transparency | Tool Transparency | Toggle Speed | Toggle Trace — Display
Measure | Sect

AlphaCUT4

File Settings View

Work Coordinates		Machine Coordinates	
X	211.083	X	211.083
Y	-25.042	Y	-25.042
Z	-33.000	Z	115.500

Local Coordinates		Distance To Go	
X	211.083	X	0.058
Y	-25.042	Y	0.286
Z	-33.000	Z	0.000

2D-3D 3930/8288

```
G2X211.14Y47.968I8.232J1.937
G1Y103.672
X211.213Y104.41
X211.331Y104.975
X210.376Y105.438
Z-29.F30000
X205.806Y-14.455
Z-32.
Z-33.F424
X205.177Y-15.248F849
X205.196Y-24.303
X210.119Y-24.299
X210.138Y-15.259
G0Z10.
X204.885Y-13.225
Z-32.
G1Z-33.F424
X203.905Y-13.622F849
G2X204.157Y-15.473I-4.877J-1.607
G3X204.202Y-24.965I266.115J-3.498
X204.752Y-25.313I0.487J0.161
X210.739Y-25.298I2.747J98.503
X211.141Y-24.756I-0.101J0.495
```

Modal Info

T2 (T2) F849.0 S2122 D0 H2

☐ Step ☑ Animation ☑ Monitor

Messages

```
Overload Detected - Tool:2 Load:242%
Overload Detected - Tool:2 Load:104%
Overload Detected - Tool:2 Load:268%
Overload Detected - Tool:2 Load:238%
```

Load Meter

60%

- Reseller License: 2D-3D

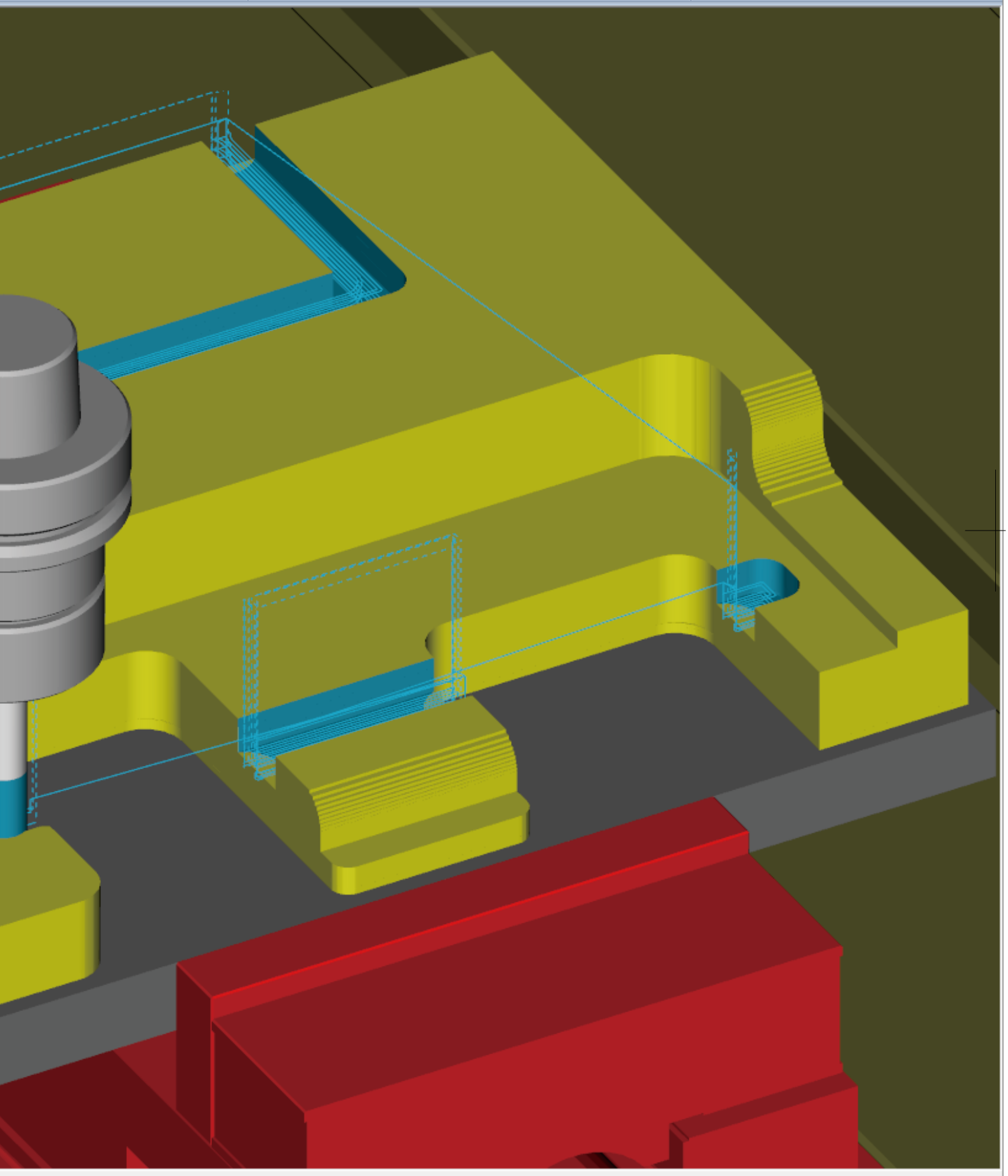
d Model Utilities | Constraints | AlphaCUT | Automation Manager | Add-Ins/Macros | Command Search

ction | Comparision | Machine Time | Manual

Diagnose

ISO | Front | Back | left | Right | Top | bottom | Capture

View



SNAP | ORTHO | AUTO | HIDE

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Partial

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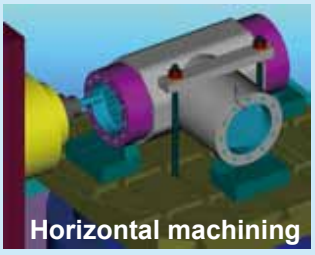
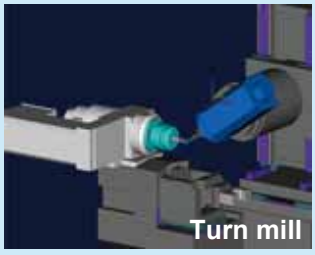
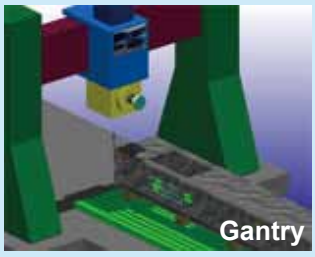
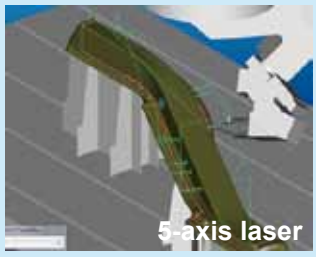
Supported machine configurations









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Yokohama-shi, Kanagawa-ken 222-0033

Product details and specifications, etc. are subject to change without prior notice.

- Please state and inquiries/requests to stores below