



EUREKA 9 – What's New

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Eureka Internal Reviewer

- Go forward/backward in the simulation updating the stock and reaching warnings/errors very fast
- Slider can be dragged to navigate in the simulation history



Editor with Colored Syntax

- Color your ISO and APT code to better understand the syntax
- Define color for each command
- Fully customizable

```

908 M3
909 PLANE SPATIAL SPA0 SPB0 SPC0 STAY
910 PLANE RESET STAY
911 CYCL DEF 7.0 DATUM SHIFT CANCEL
912 CYCL DEF 7.1 X0
913 CYCL DEF 7.2 Y0
914 CYCL DEF 7.3 Z0
915 L A-90 C0 R0 FMAX
916 CYCL DEF 7.0 DATUM SHIFT
917 CYCL DEF 7.1 X0
918 CYCL DEF 7.2 Y40
919 CYCL DEF 7.3 Z0
920 PLANE SPATIAL SPA-90 SPB0 SPC0 STAY
921 L X-137,613 Y156,944 FMAX
922 L Z2 FMAX

```

+ Block

- Comments

Rule name	Comments
Color	 008000
Bold	True
Italic	False

+ Block

- CYCLE DEF

Rule name	CYCLE DEF
Color	 #ff00ff
Bold	True
Italic	False

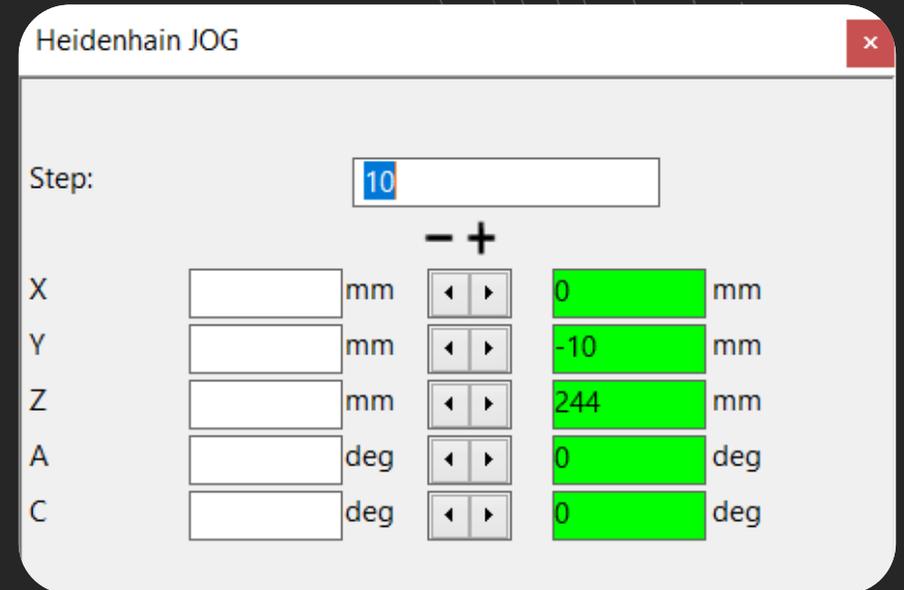
+ Block

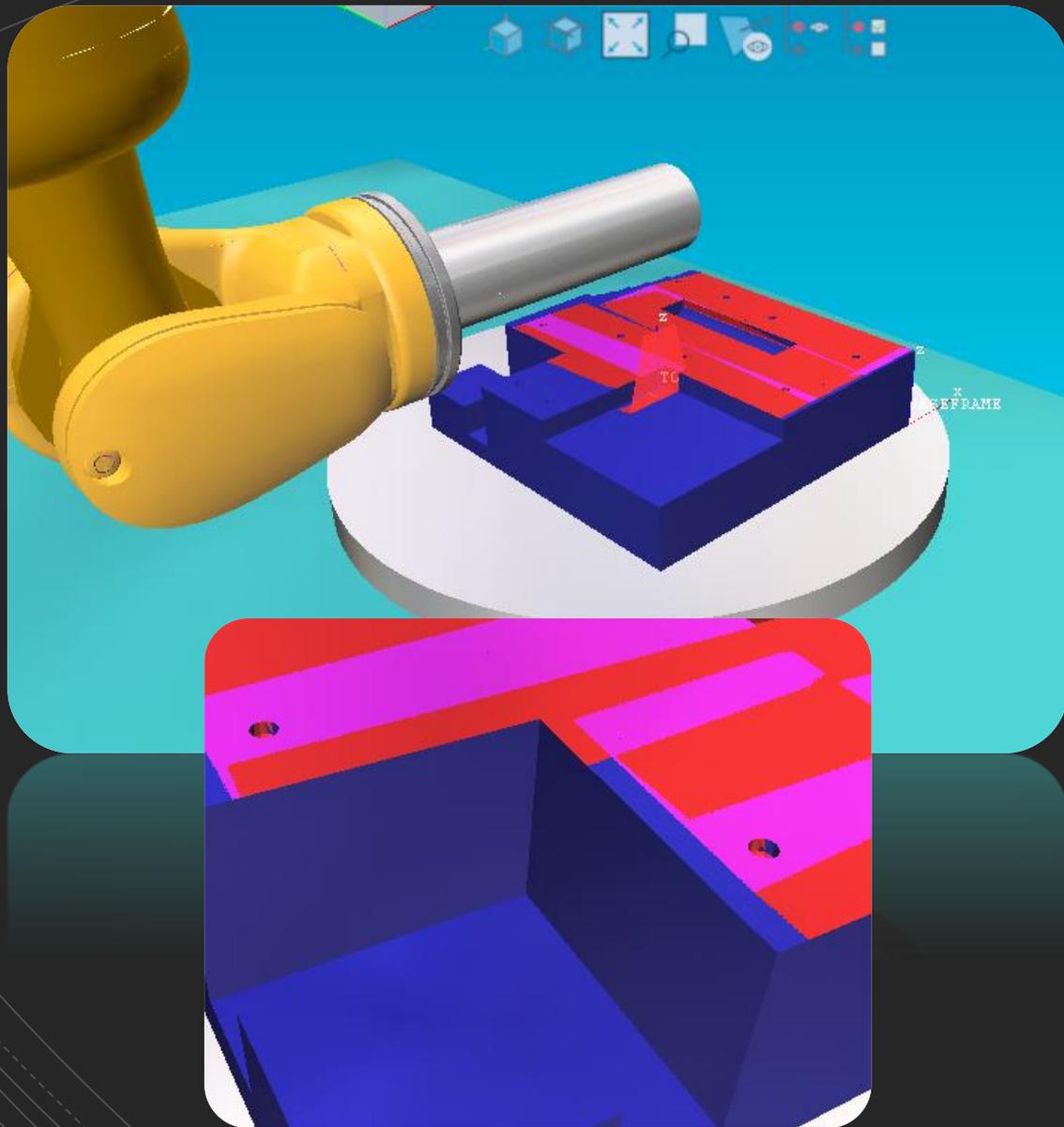
+ Block

Rule name	Comments
Color	 008000
Bold	True
Italic	False

Enhanced JOG for CNC Simulation

- Powerful functions to manage the rotary axes (CNC machines)



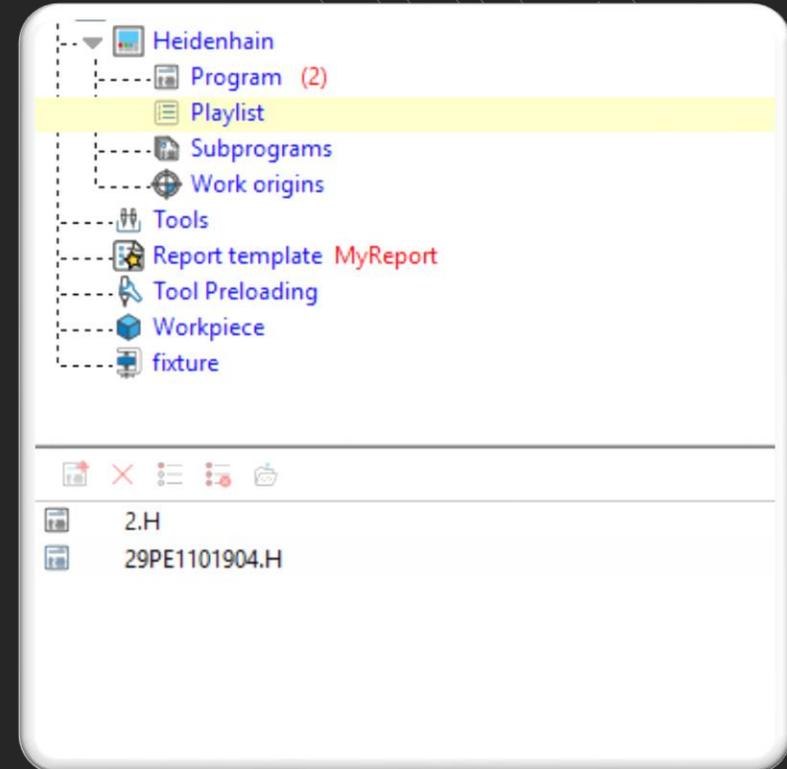


Laser Scan Module

- Simulate the scan process
- Configure the laser blade as the actual one
- Analyze the workpiece to detect shadowed areas
- Detect overlapped zones

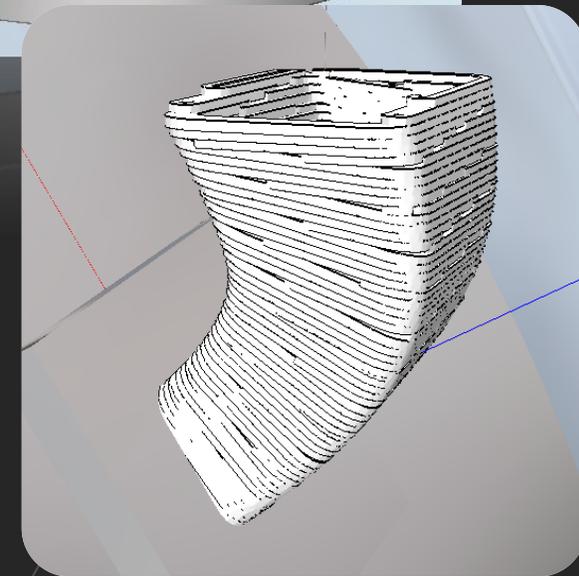
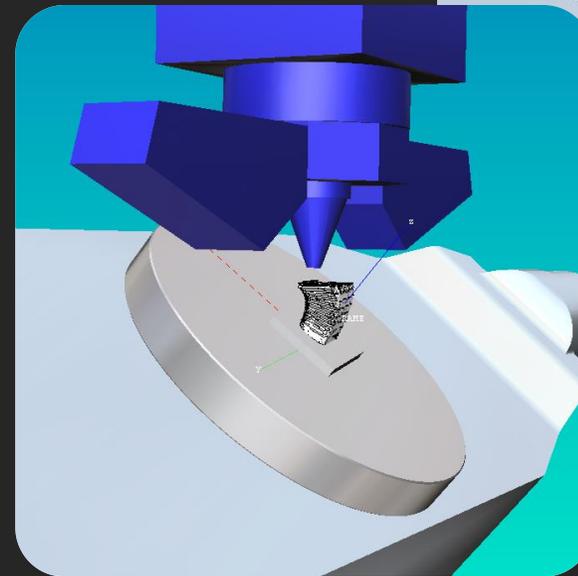
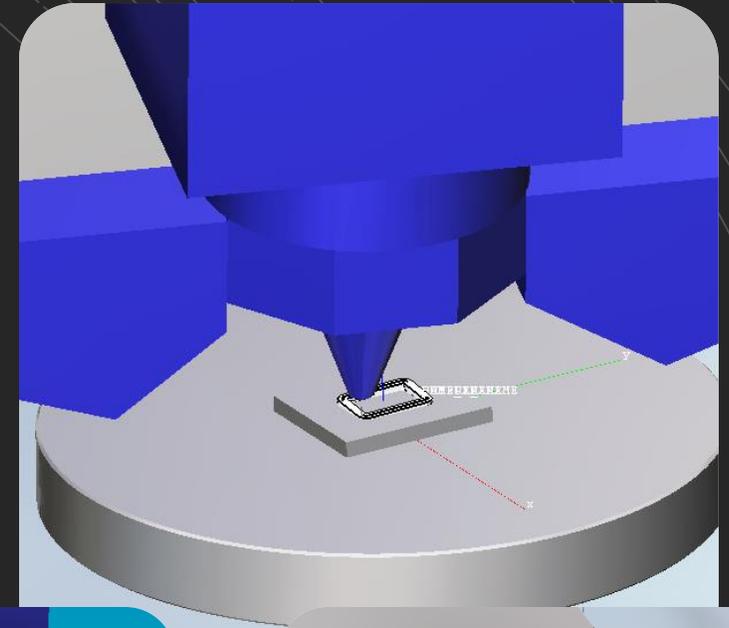
Playlist Module

- Possibility to load more than one program
- Auto-functions at the end of the program
- Switch automatically to the next program



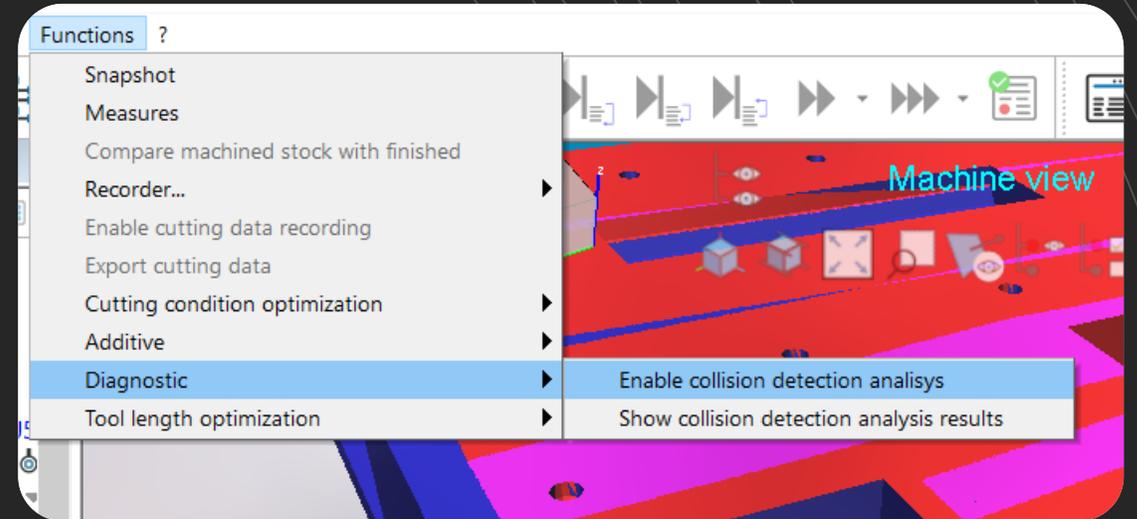
Enhanced Eureka Additive Module with 3+2 Strategy

- Use the 4th and 5th axis to optimize the slicing
- Define the slicing direction, inside the workpiece parameters
- Define one or more slicing directions
- All inside Eureka



Collision Detection Diagnostic

- Identify which 3D models slow down the simulation in order to optimize performances

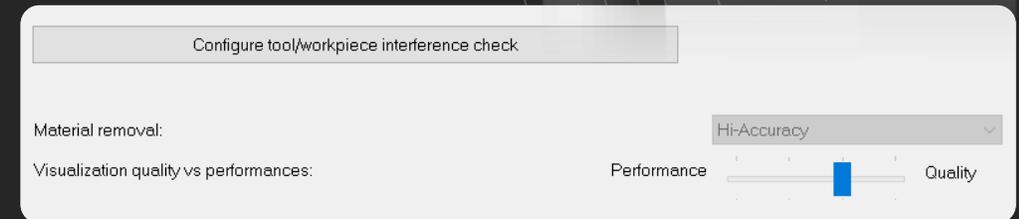
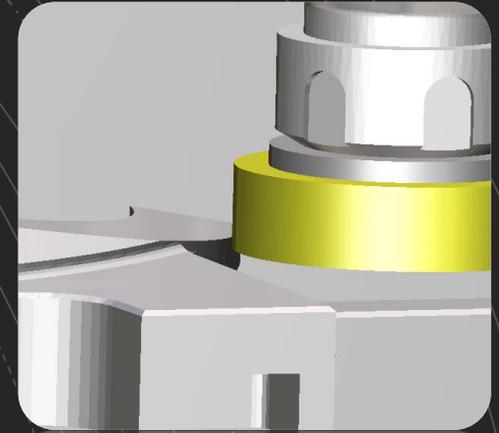


CPU	Shape1	Shape2
	J1	PMP_2
	J2	PMP_1
	J3	J5
	J5	Cylinder

- Great influence on performances

New Tool Interference and Near Missing Management

- Define how much the tool is allowed to plunge inside the workpiece
OR
how close the tool can be to the workpiece before raising a warning
- Different parameters for the cutter and the finished part
 - Cutting part
 - Non-cutting part

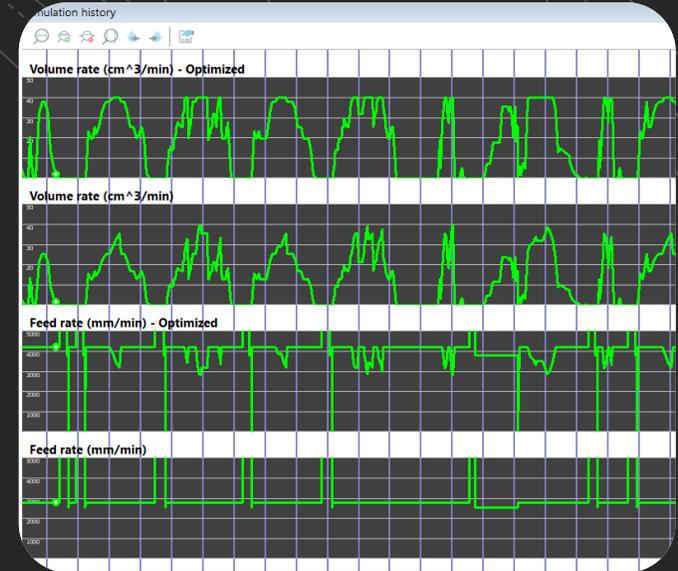


 A screenshot of a software dialog box titled "Interference check". It contains a table with two main sections: "Cutting part" and "Non-cutting part".

Cutting part	
Verification type	Allowed interference
Max interference	0.100000
Non-cutting part	
Verification type	Near miss
Safety distance	0.500000

Cutting Conditions on Turning

- Toolpath Analysis and Optimization now available also for Lathes and Mill-Turn Machines



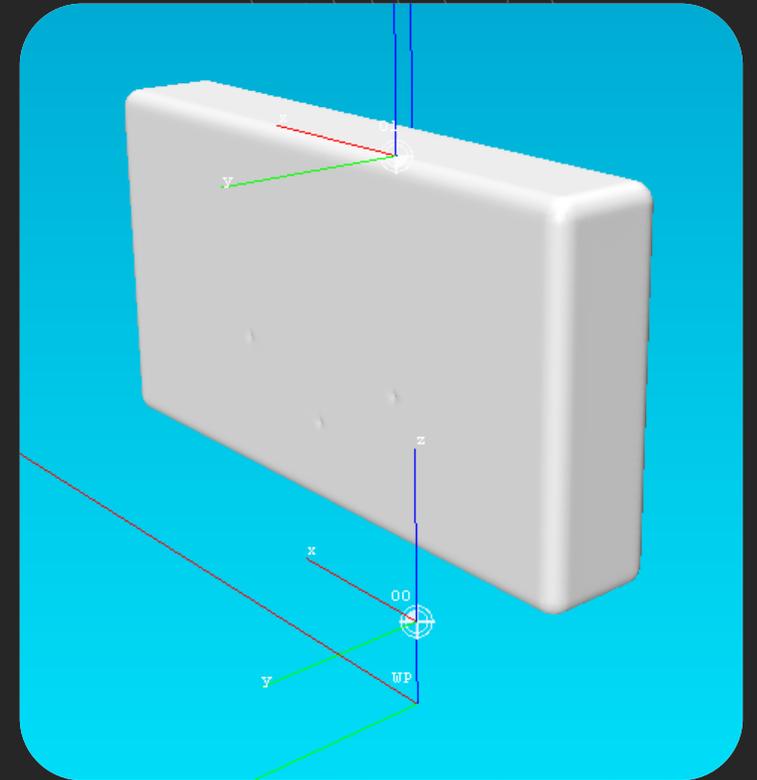
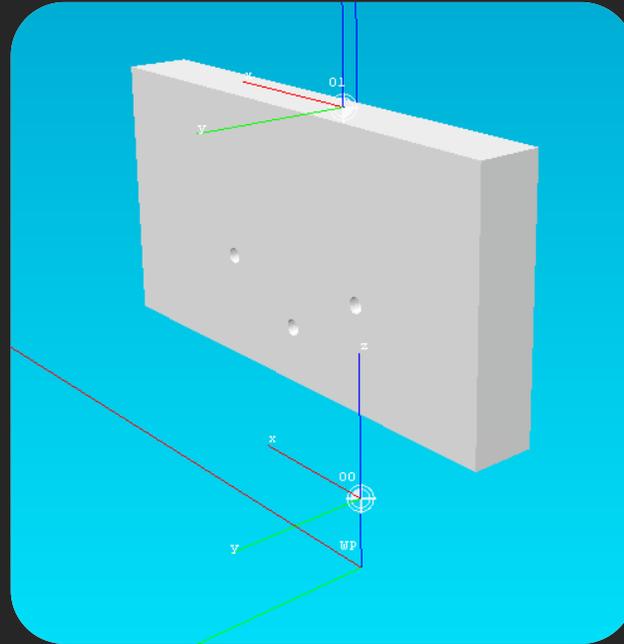
Screenshot of the Cutting conditions dialog box, showing optimization parameters for turning. The dialog is divided into sections for Air cut and In cut. The In cut section is active, showing various parameters and their optimized values.

Parameter	Optimization	Optimized Value	Limit
Max air cut feed (MMPM)	<input type="checkbox"/>	40000	
Max feed in cut (MMPM)	<input checked="" type="checkbox"/>	20000	
Fmax / Fprogrammed	<input type="checkbox"/>	1.2	
Fmin / Fprogrammed	<input type="checkbox"/>	0.5	
Volume rate (cm ³ /min)	<input checked="" type="checkbox"/>	50	70
Chip thickness (mm)	<input type="checkbox"/>	0.1	0.2
Power (kW)	<input type="checkbox"/>	5	20
Torque (Nm)	<input type="checkbox"/>	0	0
Chip width (mm)	<input type="checkbox"/>	0.1	0.2
Chip cross section (mm ²)	<input type="checkbox"/>	0.01	0.04
Roughness profile depth (mm)	<input type="checkbox"/>	50	100

The dialog also includes a 3D model of a turning operation on the right side, showing a tool cutting a cylindrical part.

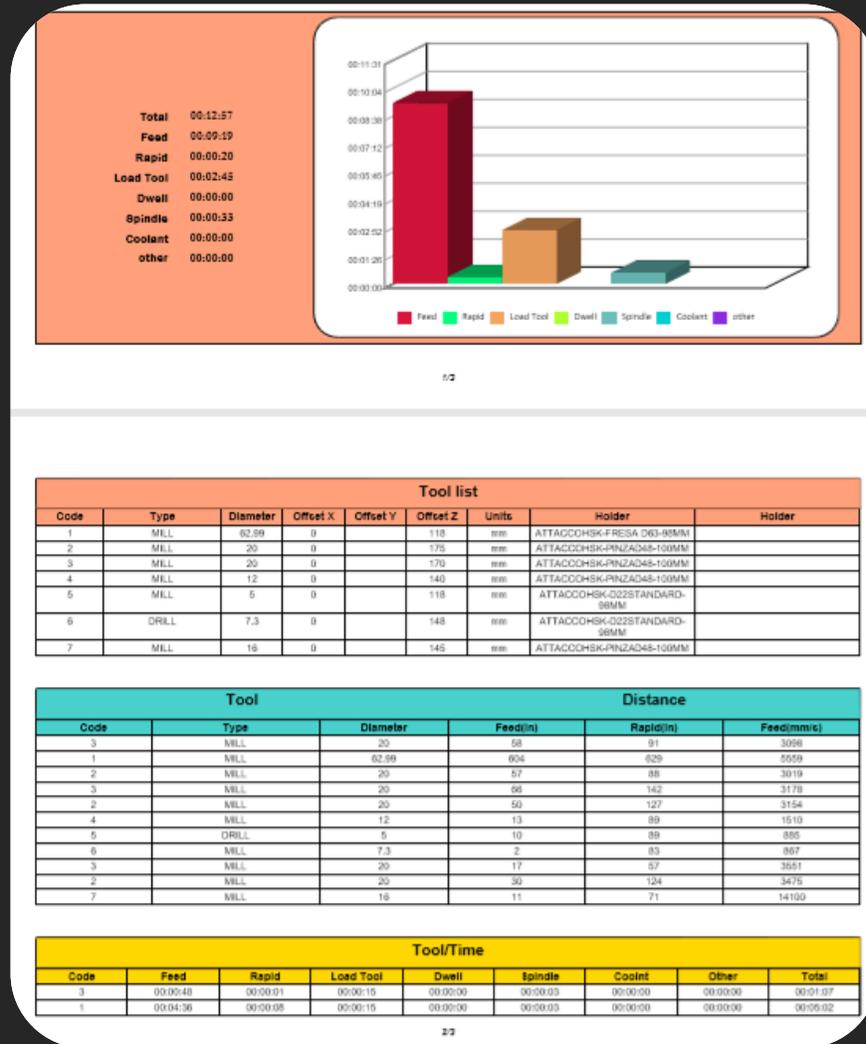
Save STL Files with an Offset

- Add an offset to a 3D Model and save the resulting STL file



PDF Report

- Machining time
 - Rapid
 - Feed
 - Tool change
 - Head change
 - Etc...
- Information for each tool
 - Rapid
 - Feed
 - Etc...
- Origins



Eureka Batch

- Simulate in background
- More than one “.epf” file
- Each simulation can output
 - Report
 - Evdf (Eureka Mobile)
 - Evpf (Eureka Viewer Pro)
 - Stock/design comparison results
 - Log files

Eureka authorized reseller



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