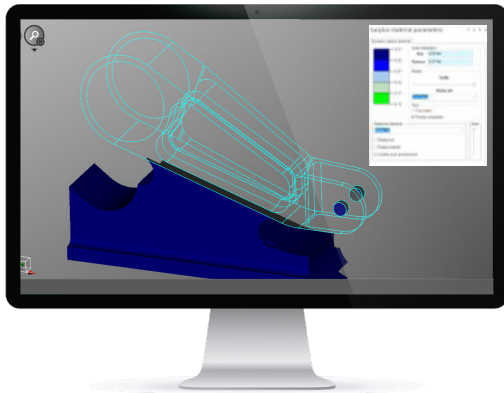


The New NCSIMUL 2021

Surplus Material

A new comparison mode, Surplus Material, detects excessive material during a fast and hidden simulation. It is a Solid Comparison between the CAD/CAM models or previous cut stock and the NCSIMUL simulated model.

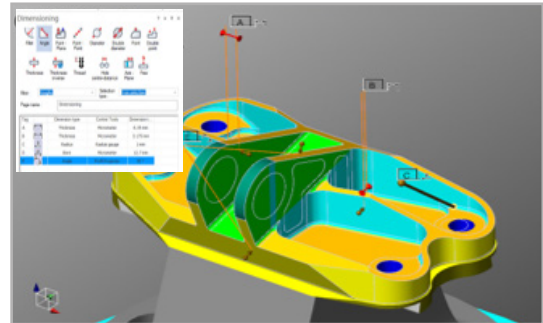
- List of excess material left
- Display in 3D window, linked to the list
- The only way to detect unwanted rest stock on large part



In Process Control and Report

Integrated to NCDoc, Dimensioning is a new function to create control instructions for the Operators during the CNC process.

- Define a dimension check-list with user defined tolerances
- Dimensioning defines the minimum measurement needed per cut automatically
- Generate a comprehensive view for the programmer and operator on the 3D simulation
- Works with NCDoc documentation template



Optimization new options

Quickly evaluate the tools that can benefit from “air-cutting” optimization, with the “Out of material working time” in the sequence list.

- Customize stock nearness values for each sequences
- Optimization are automatically saved for the next strategy

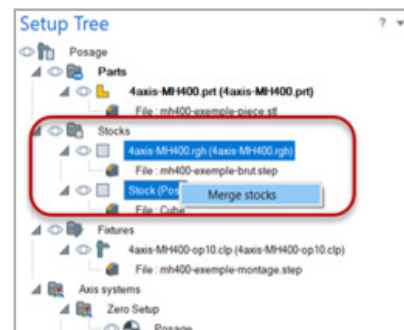
#	Optimization type	Comment	To address
1	1	F2140	54°5'
2	11	F14016	19°32'
3	2	F12516	44°32'
4	3	F12016	07°50'
5	4	F12516	01°32'
6	5	F2025	11°59'
7	6	F11314	29°
8	7	F12516	07°59'
9	8	F12516	31°12'
10	9	F2132	26°12'
11	10	F125	06°13'

Operation	Security	Feed rate strategy	Out of material working time
1	1	F2140	44°
2	11	F14016	19°32'
3	2	F12516	44°32'
4	3	F12016	07°50'
5	4	F12516	01°32'
6	5	F2025	11°59'
7	6	F11314	29°
8	7	F12516	07°59'
9	8	F12516	31°12'
10	9	F2132	26°12'
11	10	F125	06°13'

Editing Setup Improvements

Reduce the simulation time by merging fixtures, parts or rough stocks elements from one or multiple CAD files read in NCSIMUL.

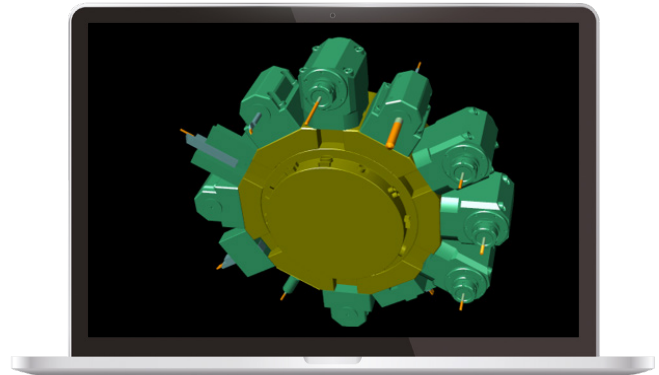
- Create simple geometric rough stocks (Cylinders or Cubes)
- Create an automatic part envelop
- Move up or Down all setup elements



Mill-Turn Tooling management for ESPRIT CAM and TopSolid'CAM Interface

Map the tools between the CAM and NCSIMUL and the tool will be loaded in NCSIMUL in the selected station and turret.

- All tools are oriented with holders and accessories
- Tool can be moved in the NCSIMUL Tool magazine
- Tool station mapping is customizable for each machine



Simplified Display- for Turning parts in 2D

This 4 sections display is a better view analysis of the dynamic rough stock.

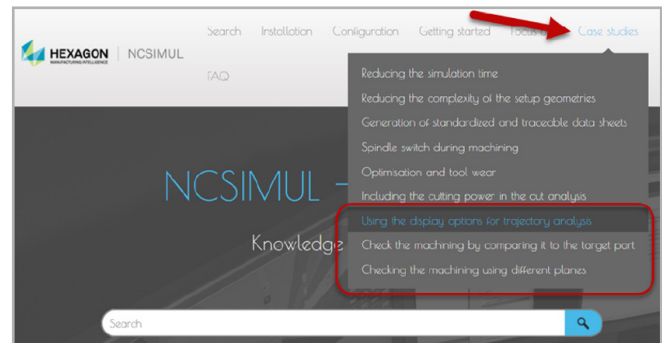
- Quickly display the tool and toolpath next to the cut model and reference part profiles.



New Doc Center Tabs

The doc center is available online and includes more description on the new feature for the released versions.

- More details on “Case studies” Tab
- Enriched description on “Focus on” Tab



Cutting Tool wear Simulation as defined in the tool magazine

Run simulation for tools either “fresh out of the box” or “worn down”, by switching a simple button located in the tool magazine.

- User define value defined per cutting tools
- Check if a worn tool will generate alarms or collisions with unwanted rest stock material

