

# G ZERO FIVE

## 4CAM

Streamline your CNC programming.  
Make your shopfloor more flexible than ever

### How adaptive is your CNC programming process?

- Do you have to re-write and re-work former CNC programs for new machines?
- Do you have to switch part production between machines at the last minute?
- Do you have to re-engineer some of your toolpaths and need to reprogram?
- Have you ever experienced difficulties while setting up a new CNC post processor?
- Do you have to update your 4CAM system after a CNC program modification on the machine?

If you answered YES to any of the questions above, you need NCSIMUL 4CAM

### NCSIMUL 4CAM benefits:

- Generate automatically new CNC machine programs from a formally created CNC toolpath
- Switch your part machining between the different CNC's, on-the-fly, without reprogramming
- Reuse existing APT or G-code files with just a copy/paste click, to optimize the manufacturing process
- Eliminate external postprocessors thanks to the integrated CNC processor
- Connections between machine sequences are automatically calculated in an optimal way

### The NCSIMUL 4CAM difference

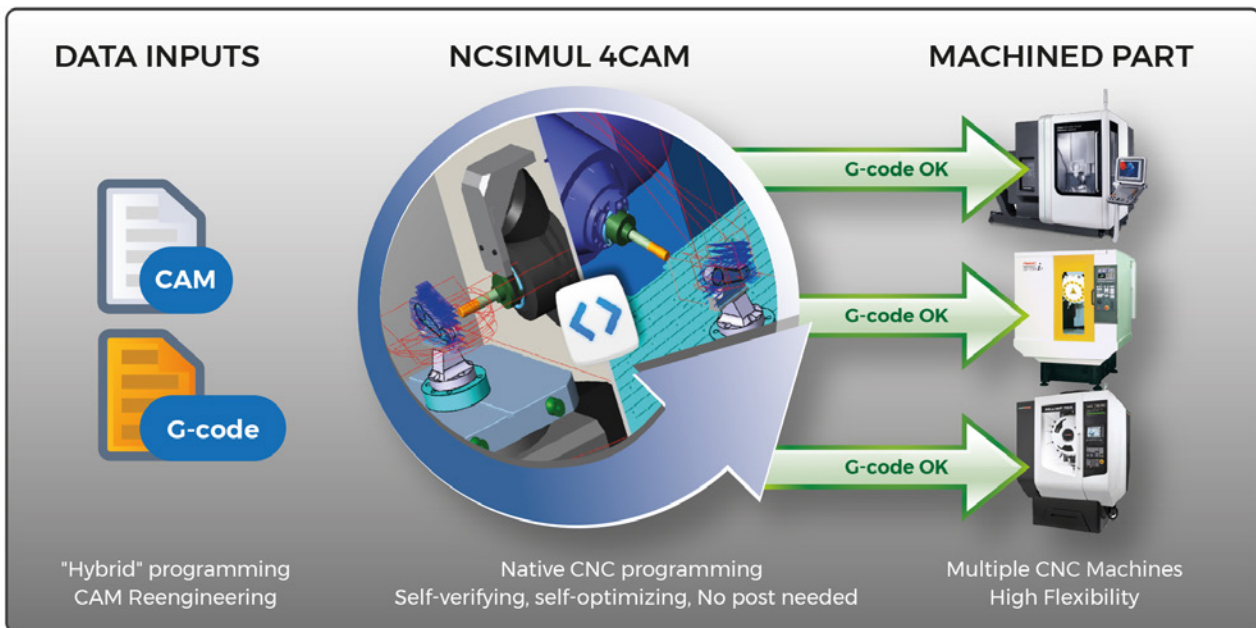
- « Hybrid » programming, for a seamless legacy program recovery
- Error-free native CNC code programming, as an all-in-one solution
- No more external postprocessor, streamlining the CNC process
- One-click re-programming, for complete flexibility
- Dynamic rest material management, for a peerless programming comfort





# 4CAM: The flexible CNC programming solution

Streamlined, bi-directional & seamless End-to-End machining process



## 1 | "Hybrid" Programming

- Generate CNC program from diversified input data: CAM files in neutral format (APT/CL-data), G-code files (Fanuc, Siemens, Heidenhain, and Num), or native 3D CADfiles
- Unique programming flexibility through the mix of input sources
- Modification or enhancement for recycled programs by reusing existing APT or G-code files, and manufacturing process optimization with a simple copy/paste action
- Partial or total toolpaths replacement, from imported APT or G-code files, by new toolpaths calculated by NCSIMUL 4CAM

## 2 | Error-free programming in native CNC code

- Capitalization of G-code modifications (e.g. machine proven out ...) directly into NCSIMUL 4CAM
- Single file tracks the part machining history, including the resources used and the machining steps
- Edition traceability

## 3 | No more external post-processor

- Integrated CNC processor, natively calculating the CNC program based on the logic of the machine and the CNC controller
- Optimal linking between machining sequences, tilted plan, polar mode, spatial correction...
- Withdraw the usual post-processors development costs and setup
- User friendly format output customization (program header format, for example)

## 4 | One-click reprogramming

- Change the CNC machine targeted in one click, to automatically generate a new G-code program on-the-fly
- Take into consideration the kinematics, CNC controller format and machine origins
- Adjust the tool storage magazine configuration and cutting conditions to be compatible with the new machine
- Automatic and optimal links recalculation between machining

- sequences (e.g. shortest distances, avoid collisions between the different elements, tools and machine axes.)
- Ensure a total flexibility of production tools

## 5 | Rest material dynamic management

- Advanced programming comfort by viewing, at any time, the machined rough stock status
- Evaluation of remaining work area to machine the final part, including full 5-axis machining
- Saving the rest stock for a fast visualization by a CNC operator
- STEP format export to be read by CAM software