



NCSIMUL
MACHINE

HIGH SPEED 3D G CODE VERIFICATION



MILL

LATHE

MILL-TURN

COMPLEX CNC MACHINES

INTERACTIVE & SMART CNC MACHINING SIMULATION

REDUCE PRODUCTION COSTS MASTER YOUR SHOP FLOOR CHALLENGES



NCSIMUL MACHINE reduces your production costs
Virtualize your shop floor for more productivity

G-CODE VALIDATION IN 3 STEPS

PERFECT RESULTS WITH HIGH SPEED



3 STEP PROCESS
NO TIME LOSS. NO ITERATIONS



G-Code Analysis

- G-code decoding
- Full program verification
- Interactive tool path visualization
- Automatic error detection
- Accurate estimate of cycle times



Motion Verification

- Realistic simulation and material removal
- Detection of machining errors/collisions (rapid/spindle stopped in material, clipped part set-up, etc.)
- Probing macros included



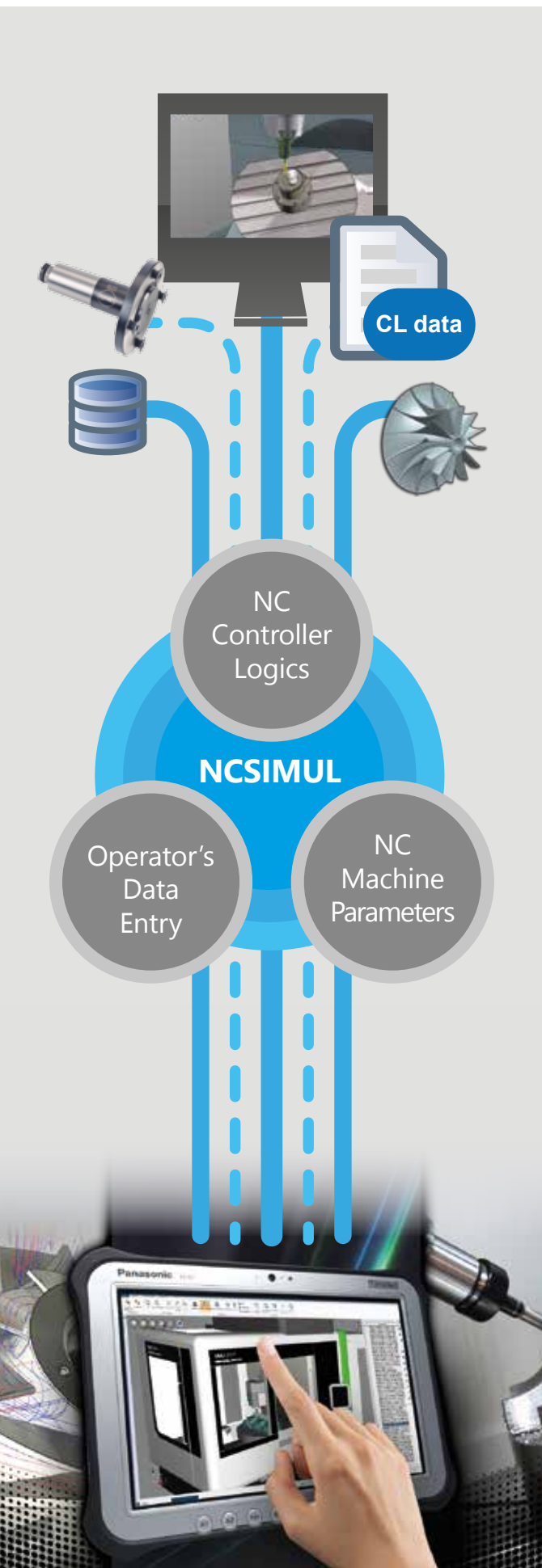
Part Validation

- Compare with the design model
- Display gauged/excess material
- Measure thickness, distance, drilling, etc.
- Dynamic 3D section planes



NCSIMUL MACHINE verifies your G-code as if you were using your real machine

AUTOMATED, DIGITAL & EASY-TO-USE PROCESS FEATURES



Easily **integrated to your existing software system** with CAM interfaces and tool management.

No machine is too complex.

Simulation accounts for complete machine parameters:

- Initial positioning of the part on the table
- Clamp addition/removal during machining
- Part rotation/translation between 2 programs
- Manual tool mounting
- Operator data input
- Command validation
- Decodes G & M-codes
- Tool compensations (diameter, length)
- NC Controller logic
- Calculate cycle times (block by block or cumulatively)
- Machine kinematics
- Machine limits
- Maximum feed rate and the direction of each axis
- Spindle torque
- Axis acceleration/deceleration

Collaborate interactively with operators, customers & suppliers on your virtual machine environment- in real-time:

- Generate technical data sheets to communicate with the shop floor
- Share automatically 3D videos to be shared via computers or mobile devices

Capitalize on the digital workflow

AUTOMATED, DIGITAL & EASY-TO-USE BENEFITS



Validate your parts offline

- Safe and collision-free machining
- No tool, head or spindle breakage
- Eliminate need for dry-runs
- Increase safety for machine operators



Speed up your part's production

- Reduce set-up time
- Avoid CNC downtime due to crashes
- Prove out G-codes on your computer before machining
- Optimize production



Optimize resources and machining results

- Part machined correctly the first time
- Avoid waste of raw material
- Confidently run your machines unattended

10X
faster

G-code calculation

70%
reduced

Set-up times

100%
safe

Machines & Tools

BUILDING CONFIDENCE

"When I used NCSIMUL MACHINE for the first time, I was surprised just how easy it was to use [...]"

CRAFT

"In addition to the time savings, NCSIMUL MACHINE has delivered other benefits: shorter manufacturing cycles and the ability to debug programs immediately after the NC programming phase."

AIRBUS

"High-speed manufacturing has been one of the greatest strengths of our business, helping to produce higher-quality work and shorten turnaround times for our customers."

ASCENTEC

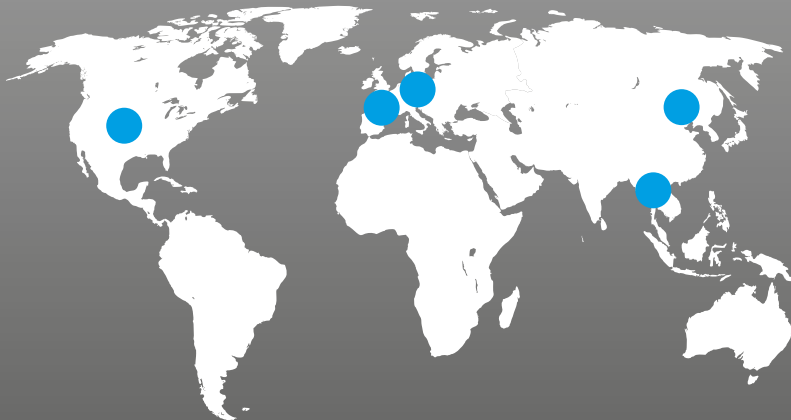
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FRANCE



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INTELLIGENT CNC MACHINING FLEXIBILITY DRIVES PRODUCTIVITY