

# NC MOLD & DIE PROGRAMMER

## 3DEXPERIENCE MANUFACTURING & PRODUCTION ROLE



*NC Mold & Die Programmer* provides a lifelike workpiece setup, cutter tool assembly and toolpath simulation experience for creating and optimizing milling operations for 3D parts. There's fast, easy access to machining resource information and part setups which can also be used to collaborate with other stakeholders to develop and optimize NC programs. Reduced programming time, lower production risk, and valuable resource savings all combine to deliver faster, smarter design-to-manufacturing machining cycles.

## POWERFUL, SEAMLESS STRATEGIES FROM ROUGHING TO FINISHING

A full set of 2.5 and 3 axis operations (milling and drilling) and probing cycles are provided along with dedicated hard metal machining cycles. It also includes high speed milling technology that helps to shorten machining time and ensures higher surface quality. Standardized NC tool path template programs help save set-up and programming time. A smart 3 to 5 axis converter can adjust a 3 axis tool path to avoid collisions. Machine behavior can be simulated to detect collisions, further mitigating errors and reducing the need for re-setup.

## STRONG RESOURCE MANAGEMENT AND OPTIMIZED TOOLS

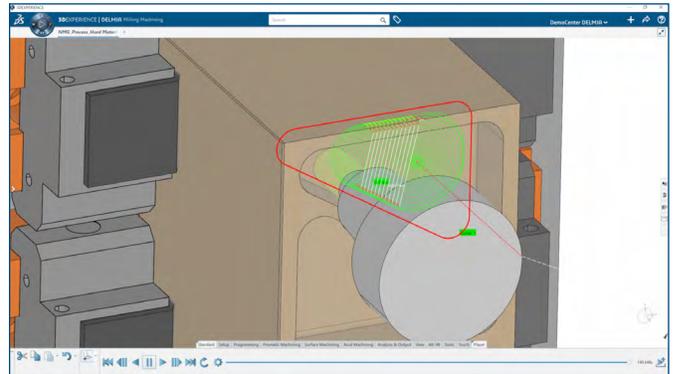
Standardization, managed machining resources and high automation optimize the entire design-to-manufacturing process. Time is saved on making standard parts, and there's less need for prototypes or rework. Programmers can maximize tool utilization and understand the machining cell to avoid production delays. There's full associativity between product engineering, manufacturing and resources. Product design changes are managed and notified to the stake holders and change updates can be visualized with shop floor resources, NC processes and programs. NC Programmers can make better decisions on updating machining strategies and tools needed for parts with changes.

## TROUBLESHOOT WITH MACHINE BEHAVIOR SIMULATION

NC programs can be optimized in a lifelike experience in the context of machine tool behavior. Machine-tool simulation is possible with material removal simulation based on the tool path. Accessibility and reachability can be validated early, at the point when operations are being defined. Tool changes and machine rotations are automatically generated and easily visualized.

## HIGHLIGHTS

- 3 axis roughing and finishing cycles
- Provides all high-end strategies from roughing to finishing
- Local or global conversion of 3 to 5 axis motions
- Full HSM cycles
- Dedicated cycles for hard material machining
- Best in class surface machining quality
- Associativity with design (if part is designed native with CATIA or SolidWorks)
- Capitalize and leverage NC expert knowledge
- Real-time collaboration
- Fast computation with 64-bit support
- Wire EDM cycles
- A context-based user interface
- Seamless generation of APT source and NC Code ISO format
- Toolpath programming for geometrical-machined parts
- Extends the 2.5 axis capabilities with 4 axis pocketing operation
- Supports non-cylindrical, non-conical and revolution surfaces beyond 180 degrees
- Automatically generates toolpaths for an entire part
- Key information exported as documentation



Tool changes and machine rotations are automatically generated and can be visualized in the machining operation definition panel

## Our 3DEXPERIENCE® platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our 3DEXPERIENCE platform and applications, our customers push the boundaries of innovation, learning and production.

Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).



3DEXPERIENCE®