

DELMIA V6

Milling Machining

Program Milling Machines with 3-Axis Technology

NC programmers benefit from full associativity with V6 product designs and powerful machining automation capabilities which can dramatically reduce NC programming and program optimization time.

DELMIA Milling Machining (MIM) is an extension to DELMIA Prismatic Machining (MTM) which enables users to program milling operations for parts requiring advanced 3-axis milling capabilities, including the ability to switch to 5-axis motion. NC Programmers are immersed in a V6 3D environment that delivers a lifelike experience as they create, optimize and validate their milling programs in the context of the physical machine.

Through its V6 Product Lifecycle Management (PLM) environment, DELMIA Milling Machining provides easy access to machining resources, program and part setup information that is always up-to-date. This allows NC Programmers to capture and leverage the enterprise's intellectual property and collaborate with other stakeholders as they develop, validate and optimize their NC programs.



DELMIA V6 Machining

Efficient programming of 3-axis milling operations

DELMIA Milling Machining offers a full set of high-end strategies – from roughing to finishing – such as sweeping, Z-Level, contour-driven machining and curve machining. Efficient programming is supported through the automatic generation of machining tool paths for the entire part. The user can also author any machining operations needed to machine specific features on a part. High-speed milling features and specific pattern operations for hard material machining (concentric, trochoid) are also included. This powerful combination ensures optimal machine usage by driving program generation to shape the desired proven-quality tool path.

Powerful roughing and seamless roughing rework

Users can select their preferred strategy for roughing, such as back-and-forth, helical, concentric and part-offset, based on the material being machined and the shape of the part. Tool assemblies are taken into account during computation in order to generate a collision-free tool path. As roughing operations are defined, the in-process part is computed and used as the starting point for the next set of operations. This means the user can then create a new roughing operation with a smaller diameter tool and DELMIA Milling Machining will automatically generate a new tool path based on the remaining material to be removed from any previous operation (not only roughing but whatever type of operation).

Instant Update Technology boosts user productivity

DELMIA Milling Machining allows you to adjust parameters in the machining operation, fine tune the approach/retract macros and optimize the sequencing of path almost instantaneously. Only the tool path subset impacted by the change is recomputed, saving both time and effort.

3-to-5 converter automatically adjusts the tool axis orientation to optimize milling tool paths

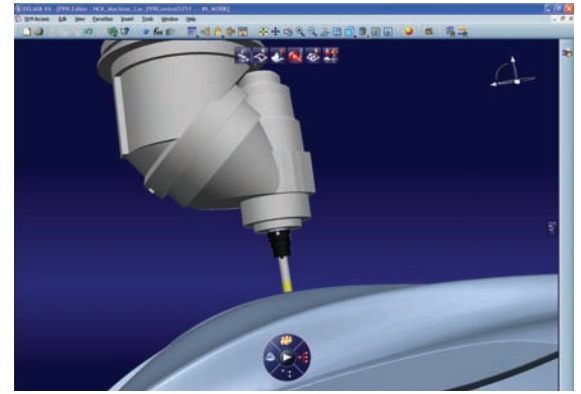
This unique feature allows users to apply 5-axis motions locally, which is useful for solving interferences between the part and the tool assembly, as well as for machining 3-axis operations along surfaces that require continuous 5-axis interpolated moves.

Share and reuse of surface machining features

Areas to be machined, such as user-defined geometrical zones, areas not accessible for a given tool, flat areas and steep areas are managed as machining features. By storing these features independently from the part and from the machining operation, they can be computed, manually edited as desired, and then saved in order to be shared and reused.

Product Highlights

- Single Intellectual Property platform to manage machining resources
- Context-based, immersive user interface
- Quick tool path verification and editing
- In-process part visualization and material removal
- High level of automation and standardization
- Product design change management
- Efficient NC data generation



DELMIA Milling Machining operations gives users the ability to locally apply 5-axis motions.



DELMIA Milling Machining offers a full set of high-end strategies such as roughing, advanced finishing, Z-Level, pencil, contour-driven and curve machining that sculptures any complex surfaces.

About Dassault Systèmes

As a world leader in 3D and Product Lifecycle Management (PLM) solutions, Dassault Systèmes brings value to more than 115,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes applications provide a 3D vision of the entire lifecycle of products from conception to maintenance to recycling. The Dassault Systèmes portfolio consists of CATIA for designing the virtual product - SolidWorks for 3D mechanical design - DELMIA for virtual production - SIMULIA for virtual testing - ENOVIA for global collaborative lifecycle management, and 3DVIA for online 3D lifelike experiences.

For more information, visit 3ds.com

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