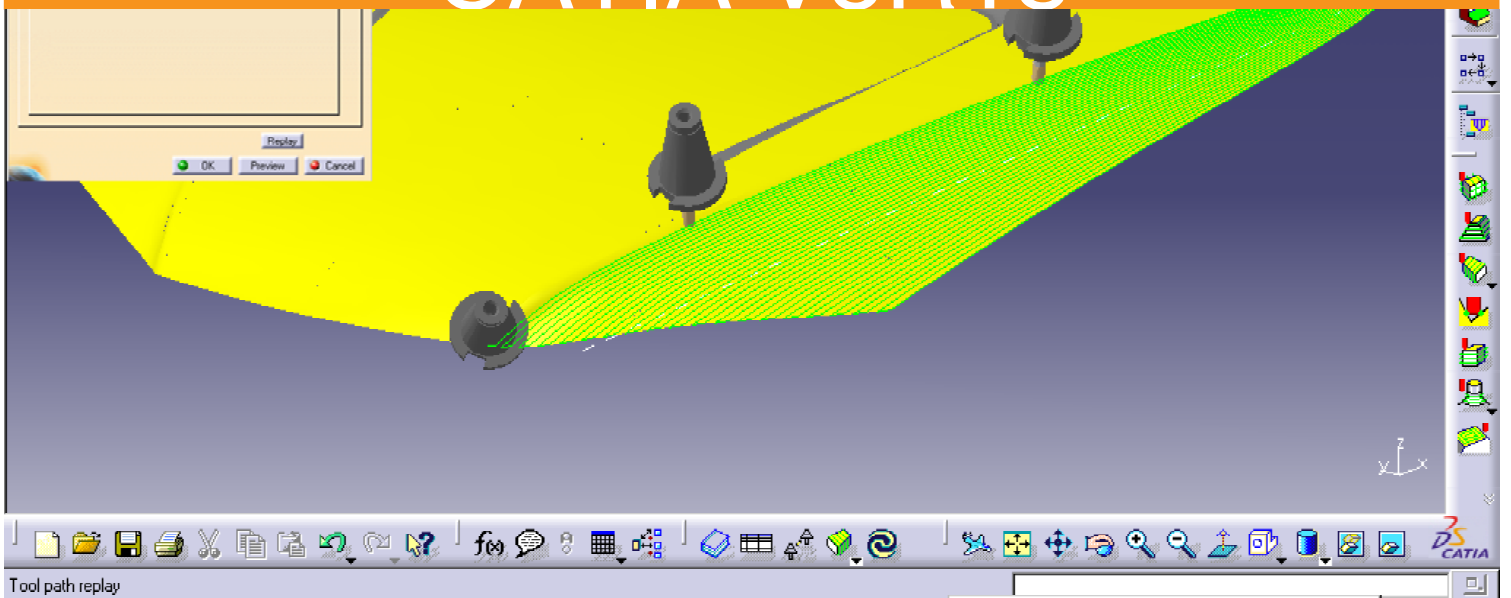


Machining

CATIA - Multi-Axis Surface Machining 2 (MMG)

CATIA V5R18





Machining

CATIA - Multi-Axis Surface Machining

Easily define NC programs dedicated to machining 3D parts using multi-axis surface machining operations

Product overview

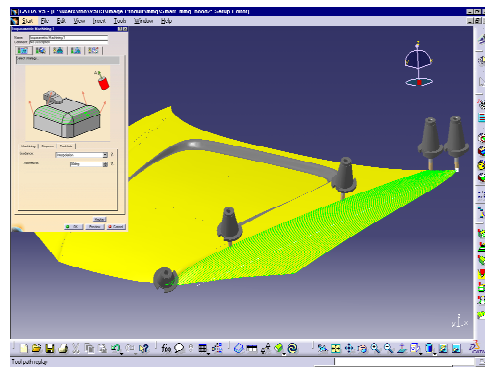
CATIA - Multi-Axis Surface Machining 2 (MMG) easily defines NC programs dedicated to machining multiple surface and curves of 3D parts in multi-axis mode. It offers 5-axis simultaneous surface machining operations and a variety of tool axis strategies including dynamic tool axis inclination for collision avoidance. As a complementary product to CATIA - 3-Axis Surface Machining 2 (SMG), MMG extends 3-axis surface machining to multi-axis machining. Furthermore, it takes advantage of the intuitive user interface based on graphic dialog boxes for quick tool path creation, and the tight integration between tool path generation and verification including material removal simulation.

Product Highlights

- Multi-axis machining of multiple surfaces with full collision avoidance using various path styles
 - Multi-axis machining of multiple curves using various tool path styles
 - Various tool axis strategies including dynamic lead/lag and tilt angle
 - Supports material removal simulation in multi-axis mode
- Complementary product to CATIA - 3-Axis Surface Machining 2 (SMG)

Product Key Customers Benefits

Full set of tool path operations for multiple



surfaces machining...

Machining operation types include multi-axis sweeping and multi-axis contour driven techniques, which can use various tool path styles (between contours, parallel contour, spine contour). Multi-axis face-isoparametric allows to get a high quality surface finish by interpolating the tool path between surface boundaries. Multiple surfaces machining also includes support of multiple-check surfaces with collision avoidance and dedicated accuracy for optimal performances. For both part surfaces and check surfaces, interferences with the cutter and tool holder are checked.

Full set of tool path operations for multiple curves machining...

Multiple curves machining brings an extra level of flexibility to the machining operations allowing to program quickly and efficiently grooving, engraving, swarf cutting or profile contouring. Various tool path styles are provided guiding the tool "by contact", "between two curves" or "between curve and surface".

Various tool axis strategies...

Tool axis can be controlled by lead/lag (forward/backward in feed direction) and tilt (lateral direction) angle, dynamic inclination of the tool axis is used to avoid collisions. Additional strategies allow to control the tool axis through a point or a line and to interpolate tool axis orientation in curves machining. Furthermore, 4-axis machining is supported.

Material removal simulation in multi-axis mode...

In order to verify the tool path the user can run a material removal simulation interactively or in batch-mode and visualize the in-process model.

ABOUT CATIA V5R18

CATIA is Dassault Systemes' PLM solution for digital product definition and simulation.

plm.3ds.com/CATIA

