



Advanced
Manufacturing
Solutions

Delcam for
SolidWorks

Why Delcam ?

>50% profit is **reinvested** in software R&D

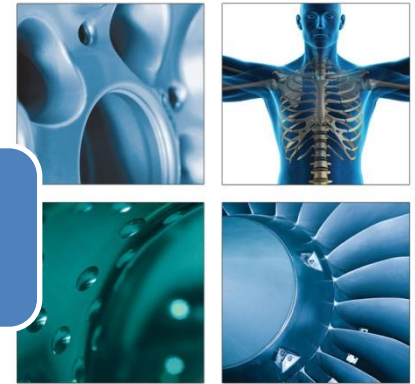


Over **800** Staff

People

Stability

Solutions



Local support
provided in **over 300**
offices worldwide

Support and
Services



Success

More than **45,000** customers

Experience

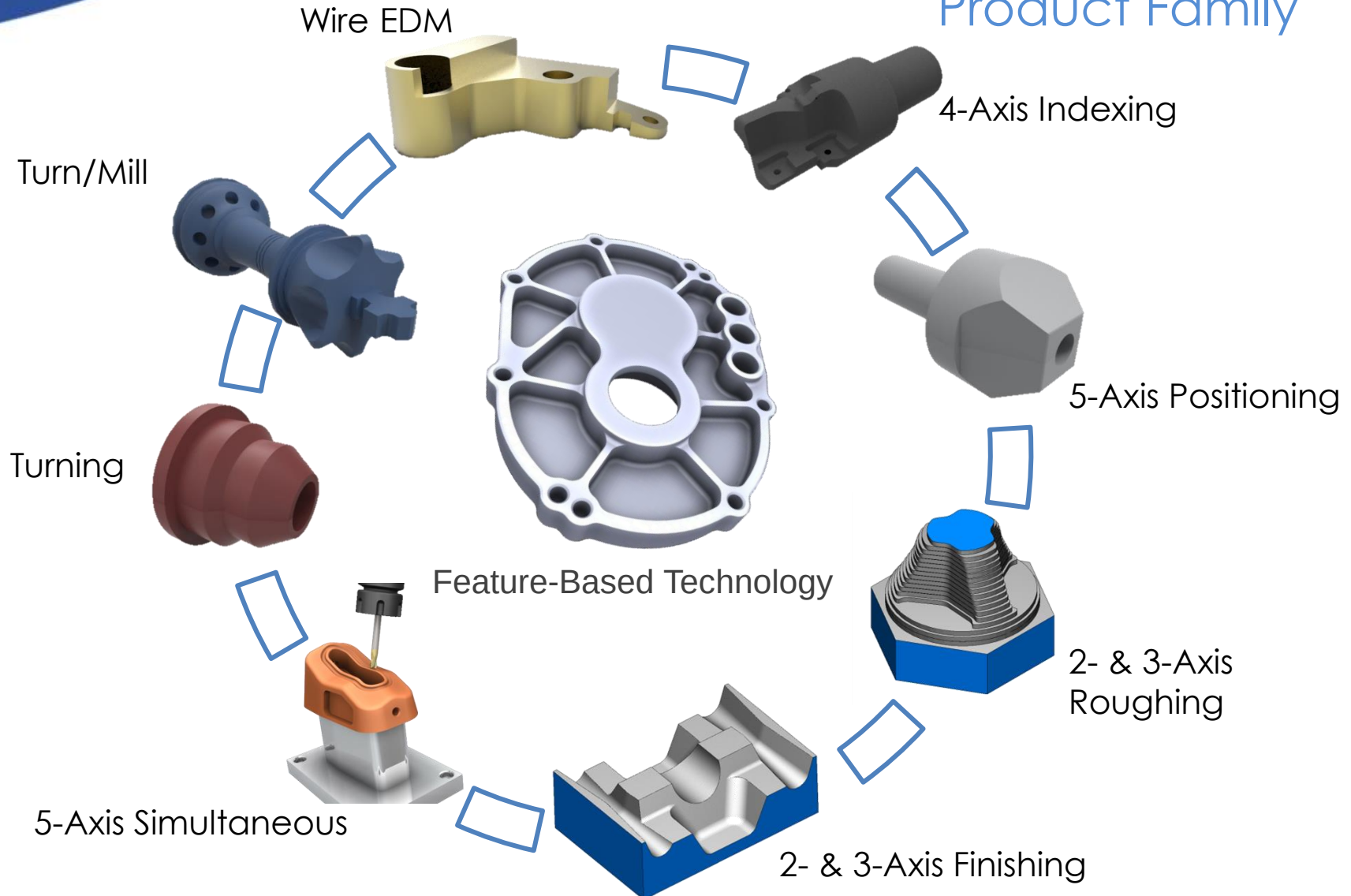
Delcam

Only CAD/CAM software
provider with an **in-house**
commercial Advanced
Manufacturing Facility



Delcam for SolidWorks

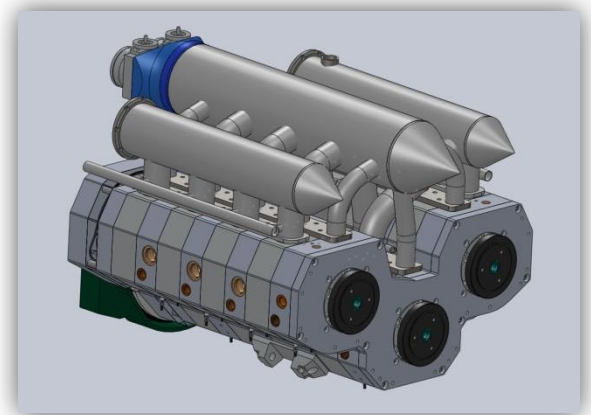
Product Family



Delcam for SolidWorks

Key Points

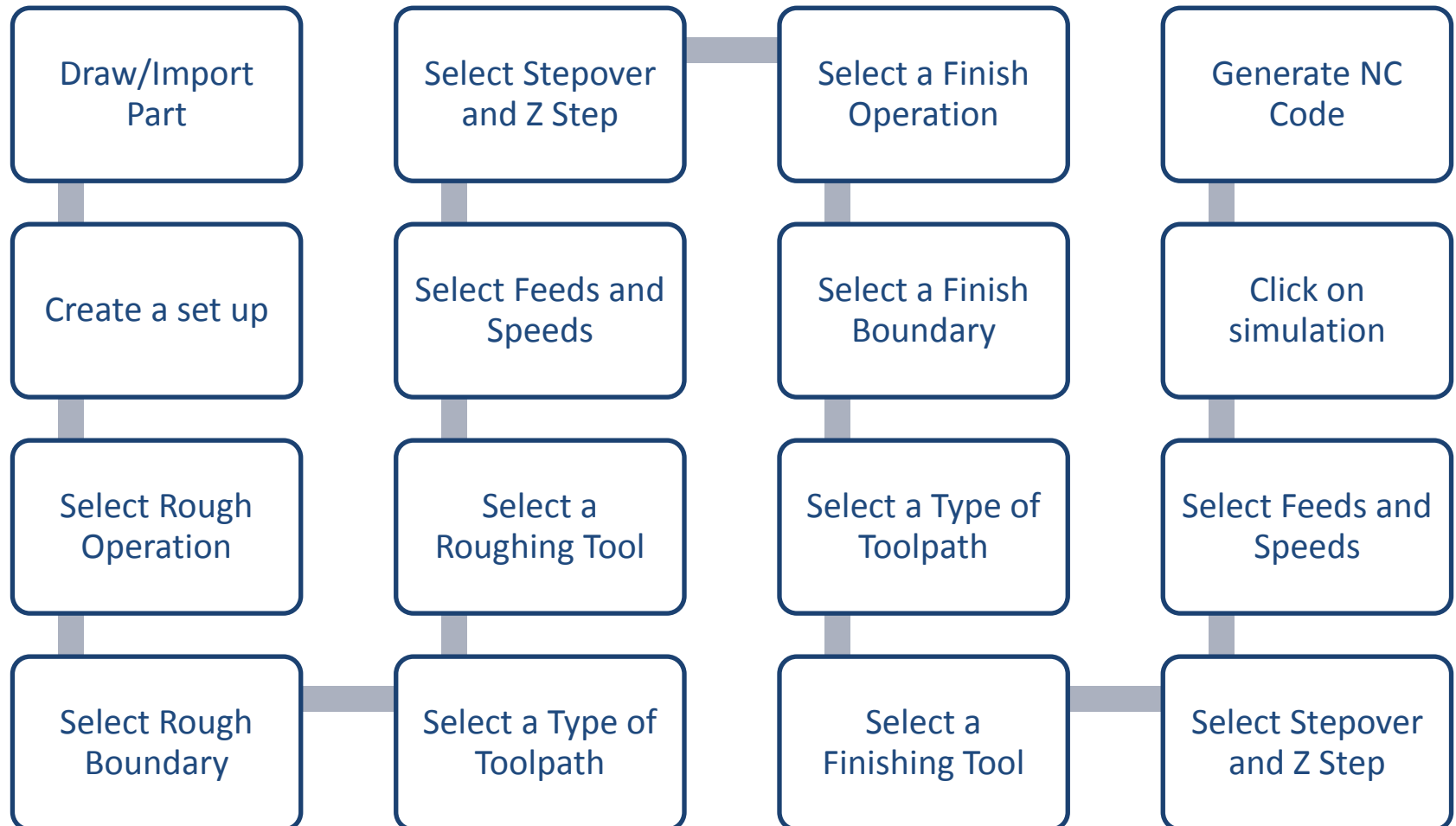
- **Fully Integrated SolidWorks CAM**
 - Single-window solution
 - Fully associative toolpaths
- **Quick and easy toolpath creation**
 - Feature-based programming
 - Single file (.SLDASM) contains all manufacturing operations
- **Complete manufacturing solution**
 - Milling
 - Turning and turn/mill
 - Wire
- **Robust and reliable NC code**
 - Based on 40 years of development



Comparison to Operation-based CAM

DFS vs Traditional CAM Method

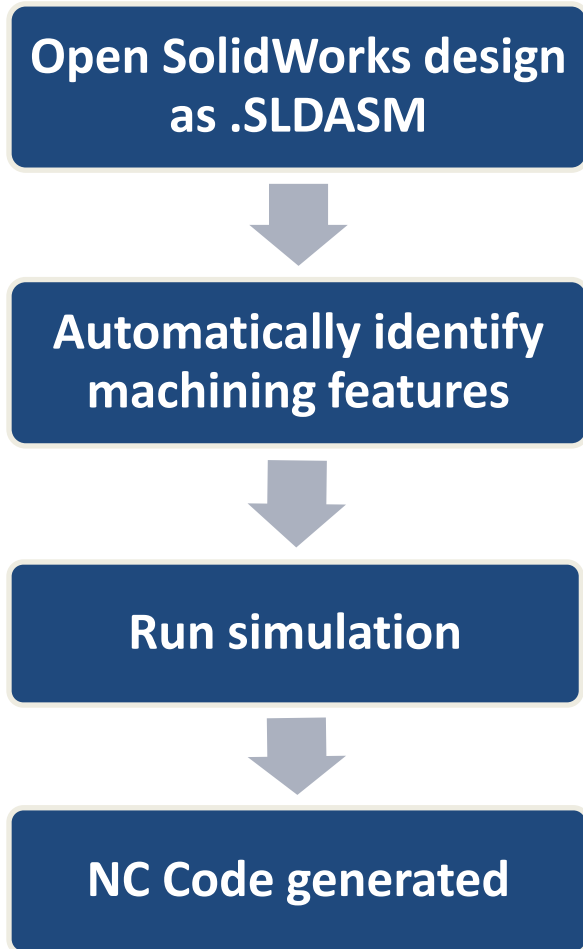
Operation-based CAM – repeat for every toolpath operation!



Comparison to Operation-based CAM

DFS vs Traditional CAM Method

Feature-based CAM (DFS)



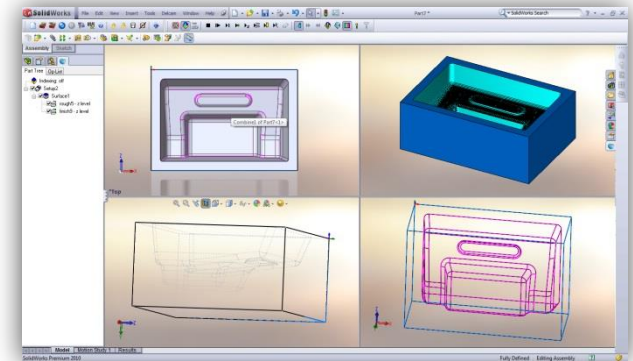
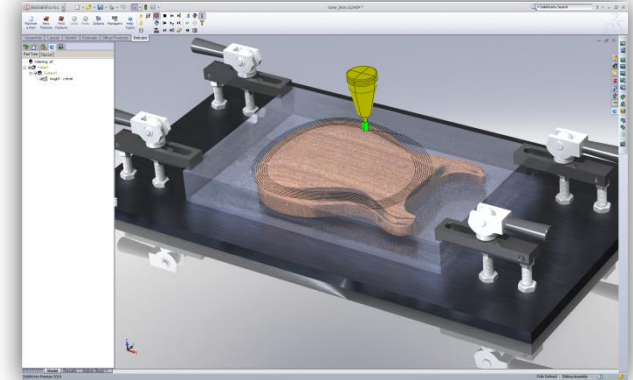
Delcam for SolidWorks automatically:

- Determines rough and finish operations
- Selects ALL tool sizes
- Calculates feeds and speeds
- Determines stepovers and Z increments
- Generates toolpaths
- Creates NC code

Feature-based programming

Benefits of using Delcam for SolidWorks

- Strong focus on ease-of-use
- Knowledge based automation
 - Consistent & reliable results
- Automatic selection of:
 - Cutting tools
 - Machining strategies
 - Feeds and speeds
- Exceptional toolpath calculation speed



Delcam for SolidWorks

Fully Integrated SolidWorks CAM

- Developed by the largest CAM development company in the world – Delcam

Benefits of Delcam for SolidWorks:

- **Fully Integrated in SolidWorks** - a single-window solution that looks and behaves like SolidWorks
- **Fully Associative** – create machining features directly on SolidWorks geometry. Toolpaths update automatically upon design changes.
- **Flexibility** – Program any type of machine, from mills to multi-tasking lathes and wire EDMs

FeatureRECOGNITION

Simplify your programming

Automatic Feature Recognition

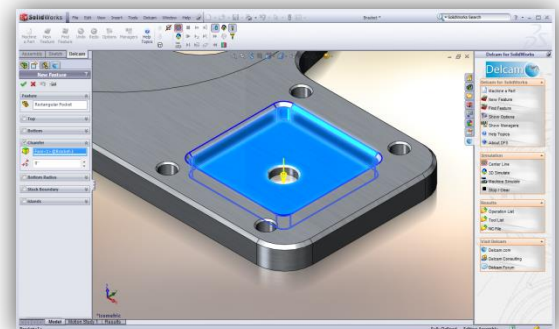
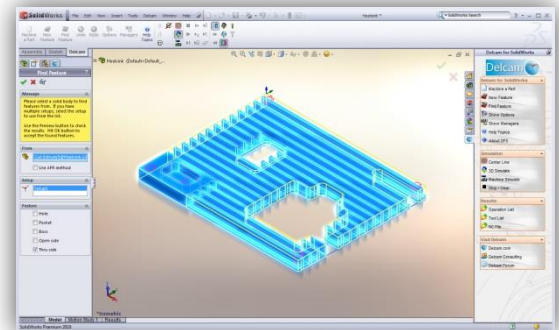
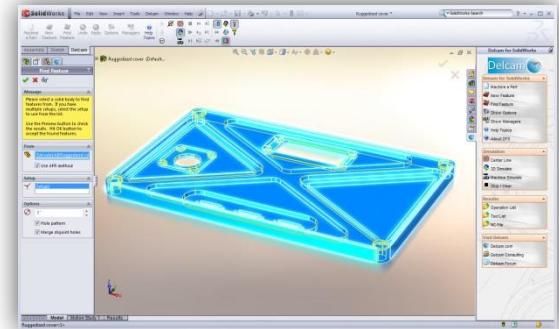
- Simply select the model
- DFS finds all the features and applies toolpaths automatically

Interactive Feature Recognition

- Specify which features to recognise
- DFS finds all the features of the specified type in a single operation

SolidWorks Feature Recognition

- Toolpaths can be generated directly from SolidWorks features
- Features can be selected graphically or from the SolidWorks Feature Manager

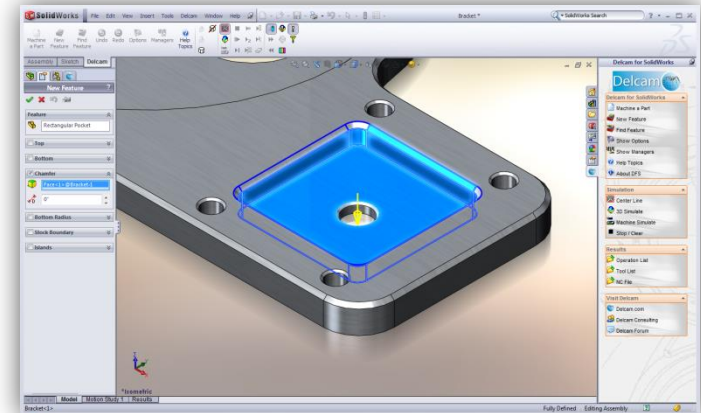


Technology Sharing

The best of all worlds

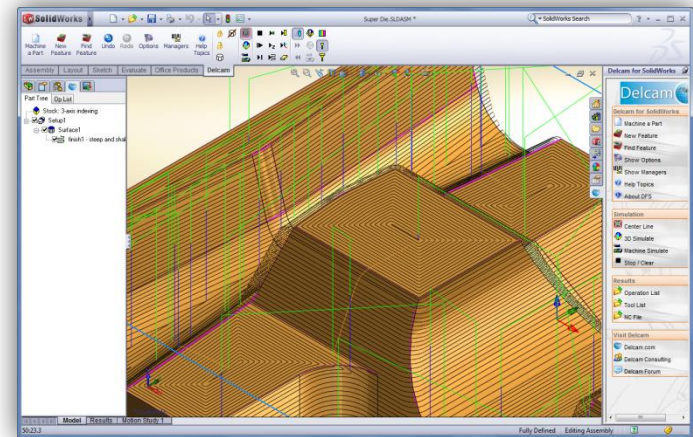
FeatureCAM

- Feature-based technology
- Milling
- Turning and turn/mill
- Wire EDM



PowerMILL

- Machining libraries
- Multi-threading algorithms
- High speed machining



- Completely integrated inside SolidWorks



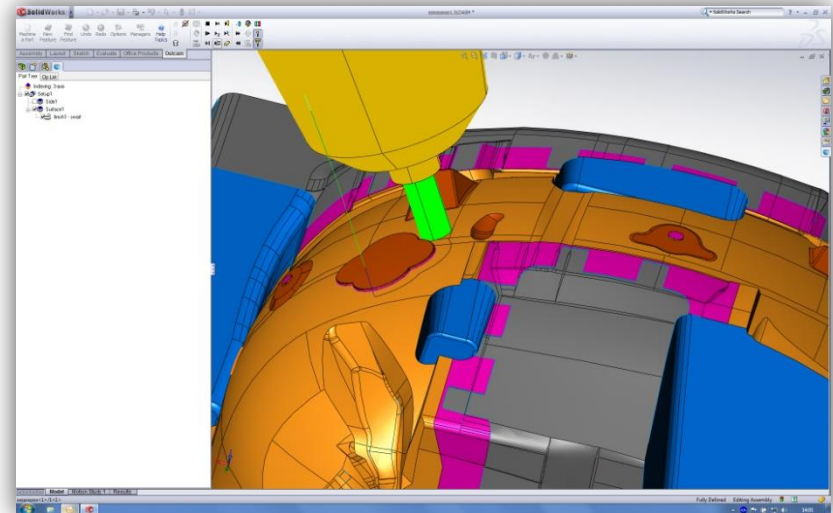
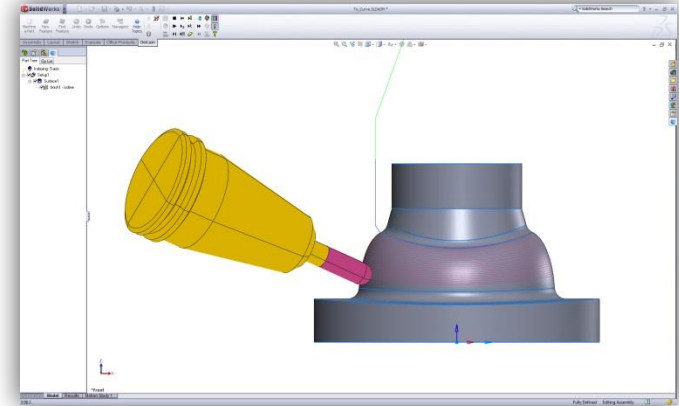
Delcam for SolidWorks

Modules Available

Delcam for SolidWorks

Modules Available

- **2.5D Milling**
- **3-axis Milling**
 - 3D Lite: single surface machining
 - 3D MX: multiple surface machining
 - 3D HSM: High Speed Machining
- **5-axis Milling**
 - Positional (3+2)
 - Simultaneous
- **Turning and Turn/Mill**
- **Wire EDM**

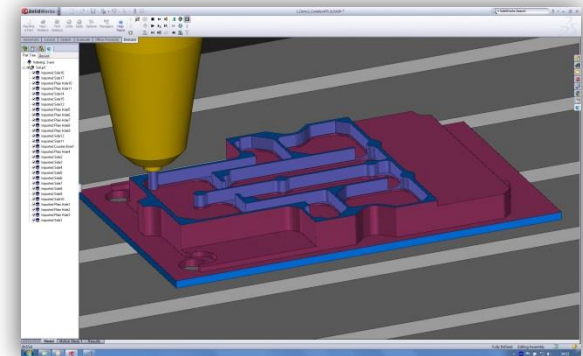
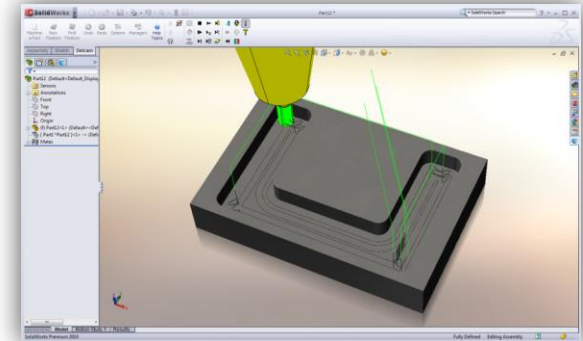


2.5D Milling

Functionality Summary

Delcam for SolidWorks 2.5D includes:

- 2.5D feature-based milling & drilling
 - Holes and pockets
 - Faces and slots
 - Sides, chamfers and bosses
- 4th-axis indexing & feature wrapping
- Milling of drafted features
- Drilling canned cycle support
- Creation of machining features from SolidWorks features



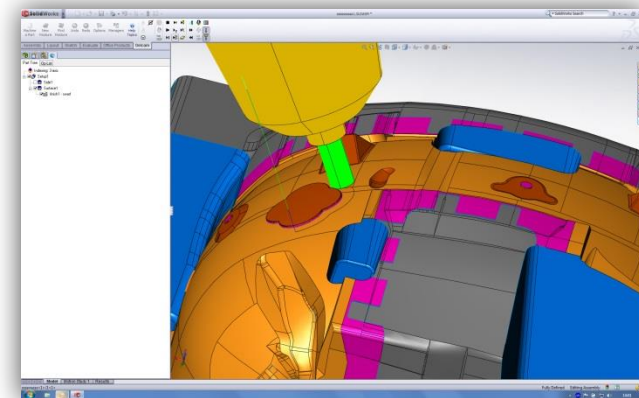
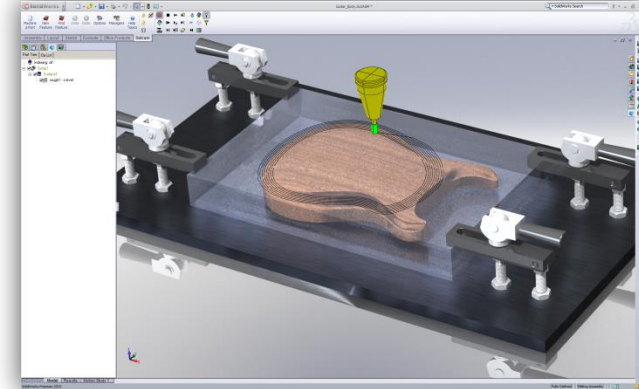
3-axis Milling

Functionality Summary

Delcam for SolidWorks 3D

- Single and multi-surface roughing and finish techniques
- Techniques include Z-level, Parallel, Spiral, Plunging, Radial, etc
- Patented high speed machining strategies from PowerMILL*

Vortex 



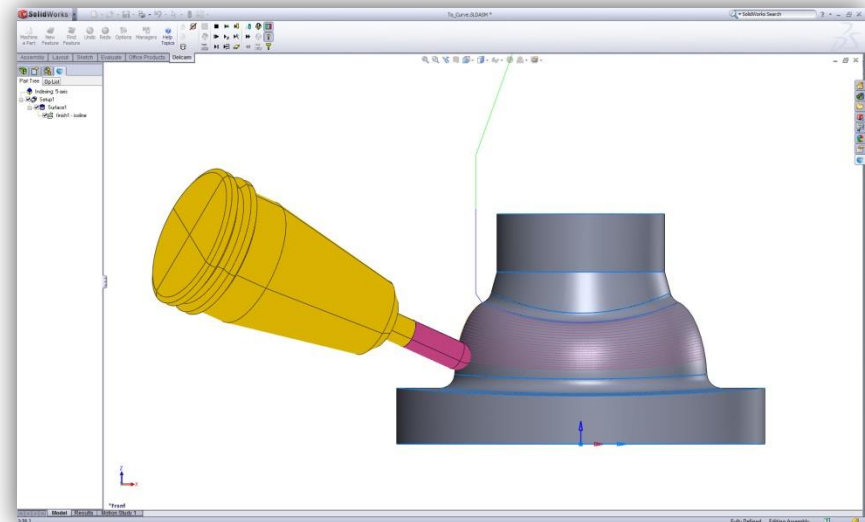
*Available in 3D HSM only

5-axis Milling

Functionality Summary

Delcam for SolidWorks 5-axis

- Positional & simultaneous machining
- Horizontal & vertical machines supported
- Techniques include 5-axis swarfing, profiling, contouring and trimming.
- Automatic tool axis control
- Tool axis control
- 5-axis hole recognition

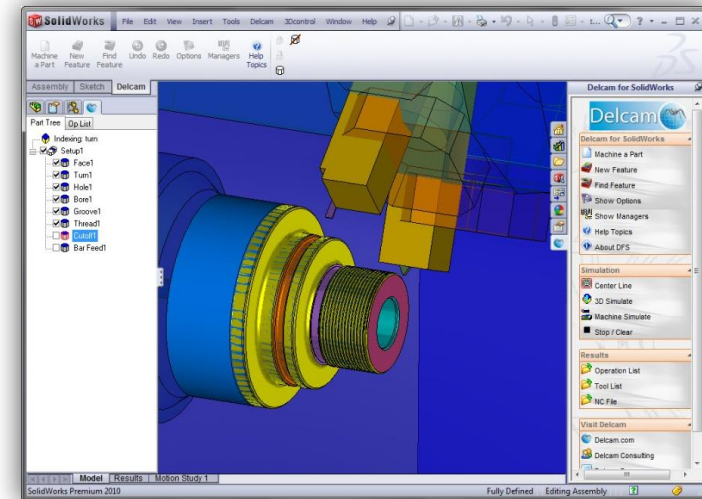


Turning

Functionality Summary

Delcam for SolidWorks TURN

- 2-axis turning
- Face, outer diameter (OD), inner diameter (ID) & backface turning
- OD and ID grooving & threading
- Library of standard thread forms
- Sub-spindle support
- Bar feeder and bar puller support
- No-Drag turning
- Extensive canned cycle support

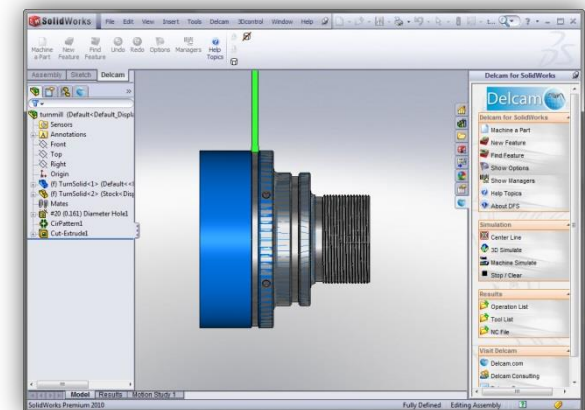
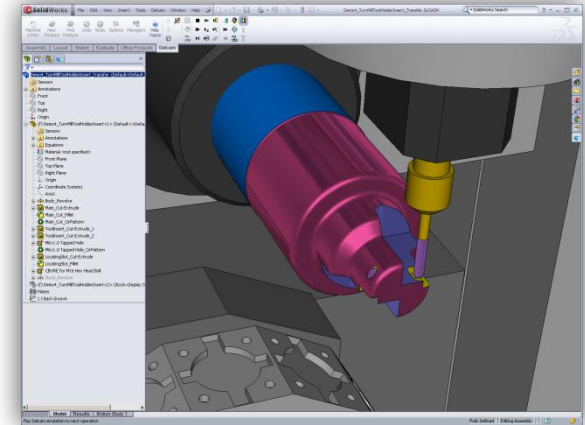


Turn/Mill

Functionality Summary

Delcam for SolidWorks TURN/MILL

- Turn/milling - live rotary tools from both the X and Z axes
- Support for C and Y axes
- Milling on face can use either polar coordinate interpolation on the machine or use the Y-axis
- Supports dual spindle, multi-turret machines with B-axis control
- Create 5-axis machining operations on turn/mill machines

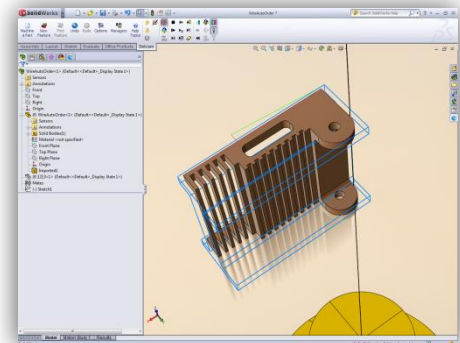
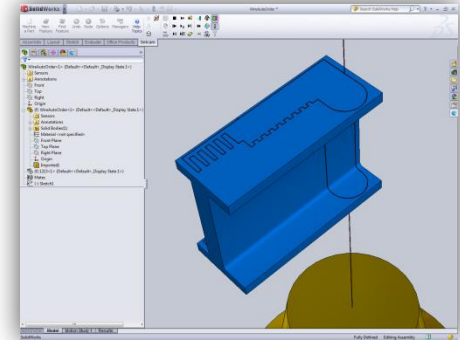


Wire EDM

Functionality Summary

Delcam for SolidWorks WIRE

- Create 2- and 4-axis wire EDM programs directly from SolidWorks models
- Die, punch, side, profile and rapid operations
- Fully associative to the SolidWorks model
- Post-processors for major machines
 - AgieCharmilles
 - Fanuc
 - Mitsubishi
 - Sodick



Delcam for SolidWorks

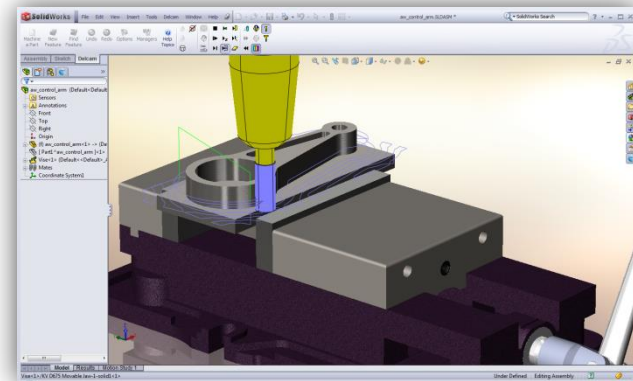
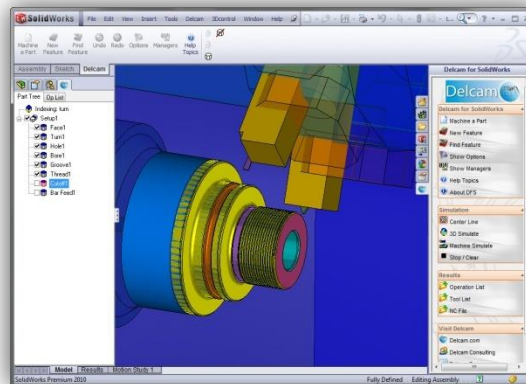
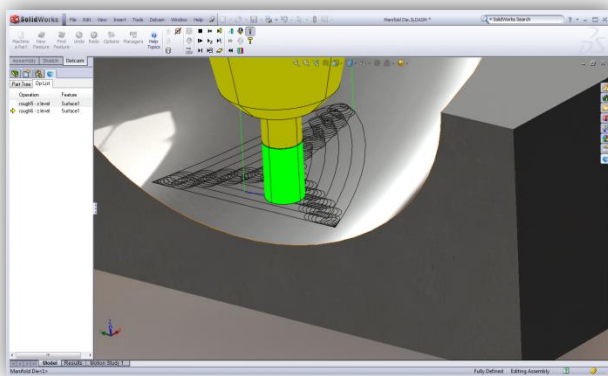
Product Feedback



Feedback From SolidWorks

Craig Therrien, SolidWorks Product Manager:

"Delcam has done a great job integrating its CAM functionality into SolidWorks. The level of automation, particularly the automatic tool selection, is amazing. I'm also impressed by the software's overall ease of use, as well as the number of post-processors that are available for all major machine tool manufacturers."



Feedback

From Customers – www.delcam.tv

WE LET OUR CUSTOMERS DO THE TALKING ...

"Delcam for SolidWorks has allowed me the freedom to try new things and create more complicated and complex designs."

David Crenshaw
Crenscor
Design and manufacture artistic consumer products.



Delcam   For more videos, visit Delcam TV

WE LET OUR CUSTOMERS DO THE TALKING ...

"The visual aspect is what I really, really like. It is very robust! Simple, clean, effective."

Mike Stringer
Custom Product Development
A leading supplier of metal products and assemblies for high-tech applications



Delcam   For more videos, visit Delcam TV

WE LET OUR CUSTOMERS DO THE TALKING ...

"We decided to go for Delcam for SolidWorks because of its full integration in SolidWorks."

René Cleijpool
Promolding
Design and manufacture innovative ideas into successful products.



Delcam   For more videos, visit Delcam TV



Thank You