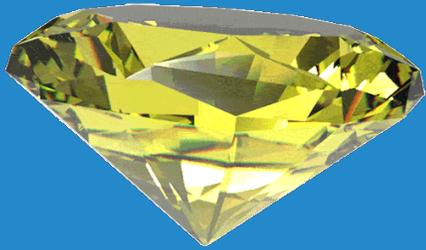


Hidden Gems in CAM



Presented by: Al Kraus

Gem 1; CAM Foundation license

If you have considered giving access to the operators on the shop floor, there is a relatively inexpensive way to accomplish it.

For \$1253 plus \$251 maintenance, your operators get some very nice capabilities.

- Assemblies capability including Master Model
- Open Parasolid, Step, IGES, DXF, JT and more
- Editing via Synchronous Modeling techniques
- Create wireframe geometry for Engage/Retract
- Surface extensions and patches
- Surface and edge extraction
- Basic Solid shapes (Block, Cylinder etc.) for blanks
- Wizard Builder,
- Postprocessing and Post Building
- Shop Documentation
- Tool path visualization
- Tool path editing
- Feed rate optimization
- Add on modules including Teamcenter integration

Gem 2; Bounding Body

You likely know that you can create a temporary block or cylinder during the definition of the Blank Geometry.

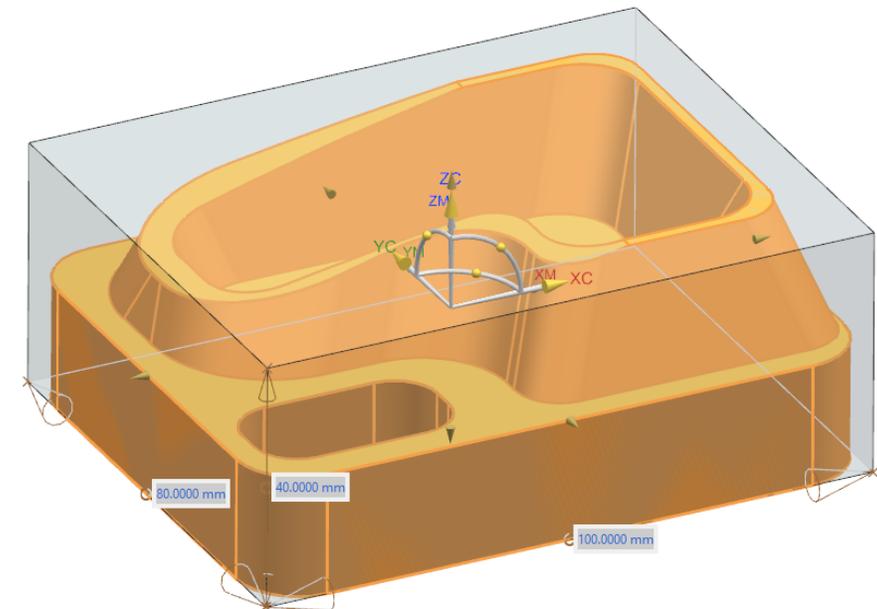
You can create a Block or Cylinder using a very similar function...

“Bounding Body”

<= NX12 icon



>= NX1847 icon

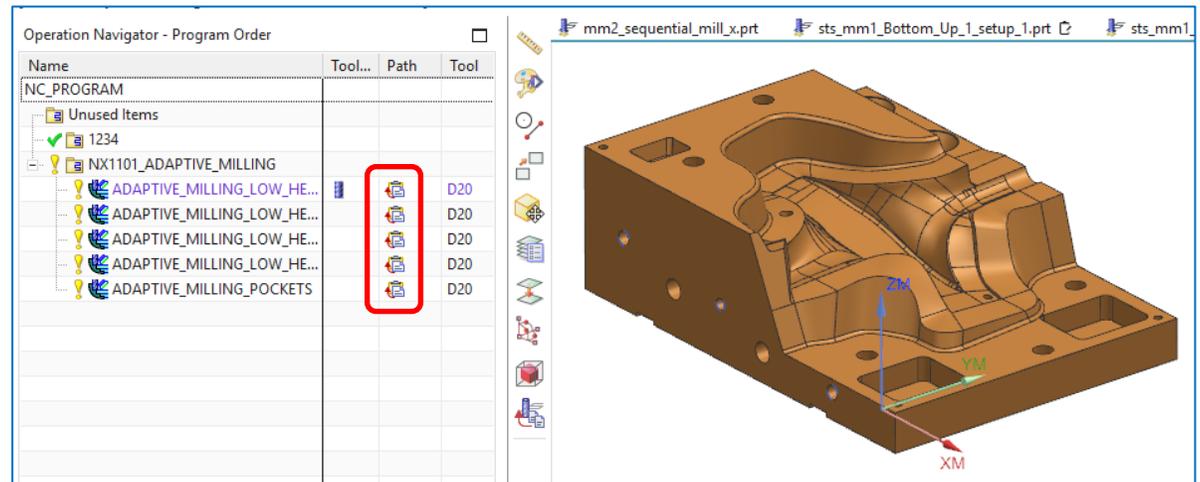


Gem 3; Copy CAM from component

If you have been putting your CAM operations in the same part file as the model and have considered changing to the “Master Model” method. This is a painless way to convert your parts.

“Copy Cam from Component”

<= NX1847 icon

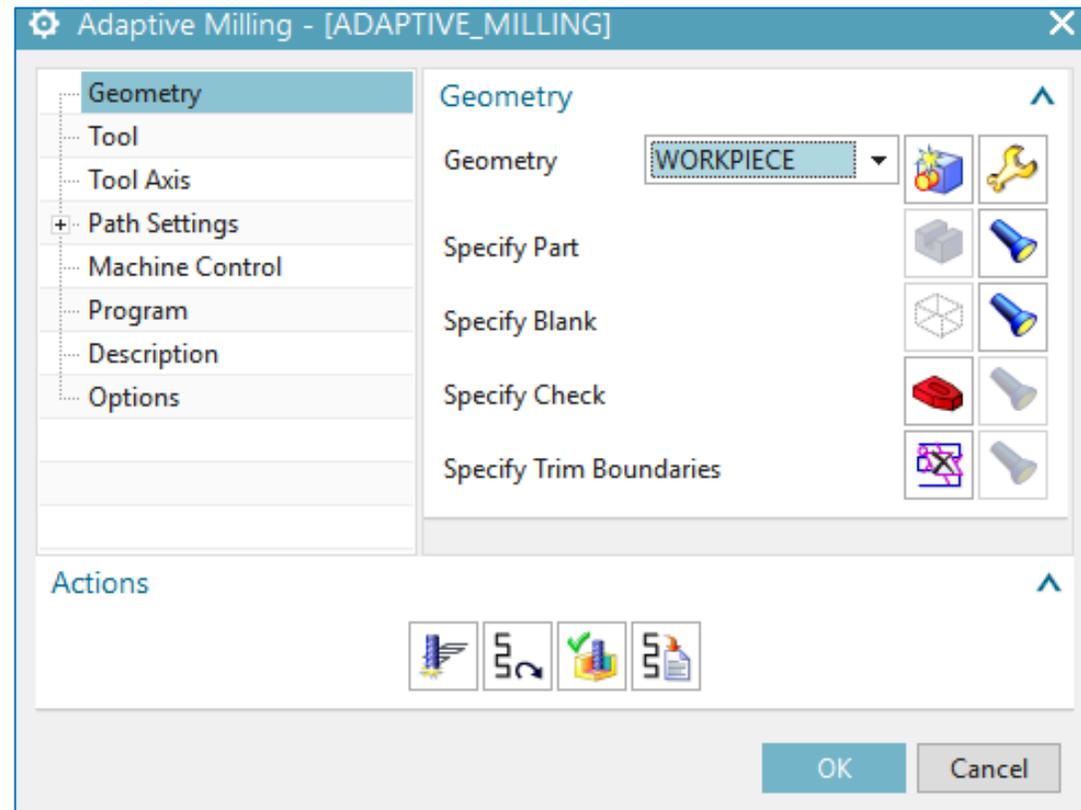


Gem 4; Explorer style dialogs

The dialogs inside an operation can be quite long if you expand all of the dialog groups. The future is here!

“Explorer Style Dialogs”

>= NX12.0.1

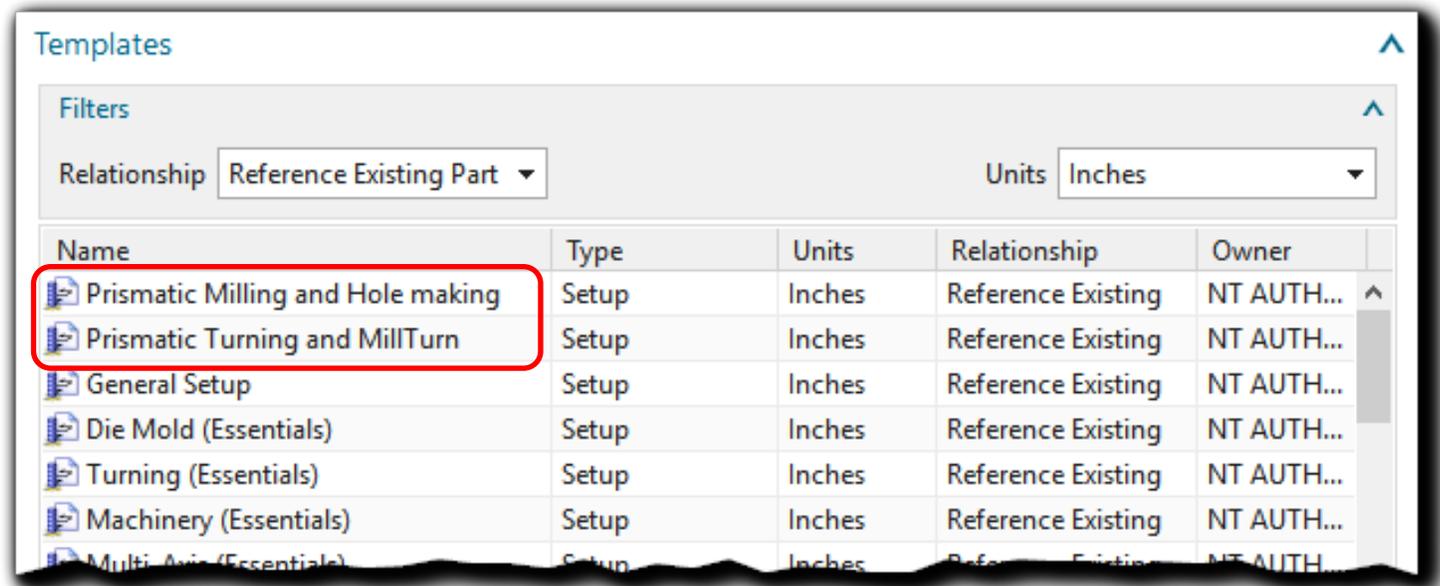


Gem 5; Prismatic Templates

If you are using 12.0.2, did you notice there are a couple of new templates labeled “Prismatic” for Master Model users?

“Prismatic Templates”

>= NX12.0.2

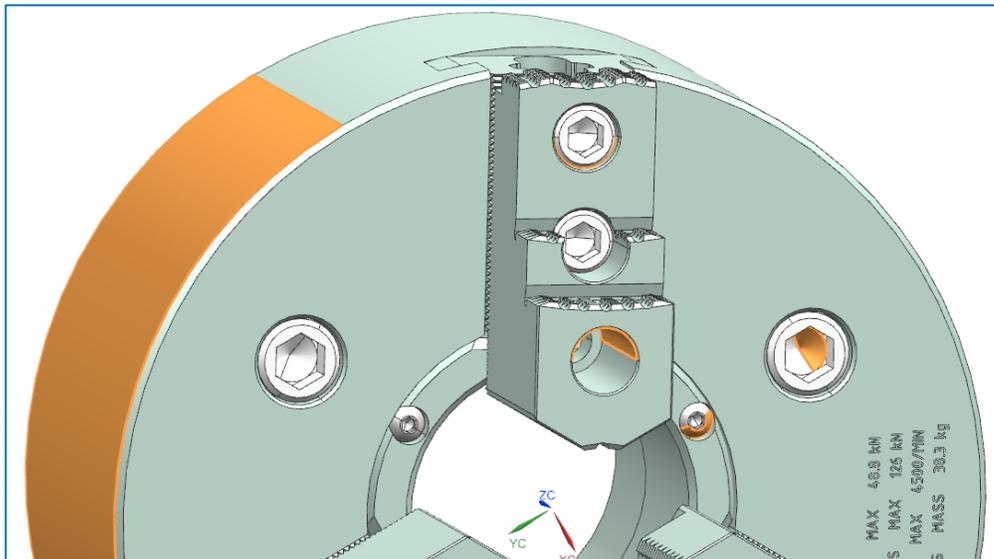


Name	Type	Units	Relationship	Owner
Prismatic Milling and Hole making	Setup	Inches	Reference Existing	NT AUTH...
Prismatic Turning and MillTurn	Setup	Inches	Reference Existing	NT AUTH...
General Setup	Setup	Inches	Reference Existing	NT AUTH...
Die Mold (Essentials)	Setup	Inches	Reference Existing	NT AUTH...
Turning (Essentials)	Setup	Inches	Reference Existing	NT AUTH...
Machinery (Essentials)	Setup	Inches	Reference Existing	NT AUTH...
Multi-Axis (Essentials)	Setup	Inches	Reference Existing	NT AUTH...

Gem 6; Optimize Face

Clean up faces and edges on models imported from another CAD system.

“Synchronous Modeling” → “Optimize Face”



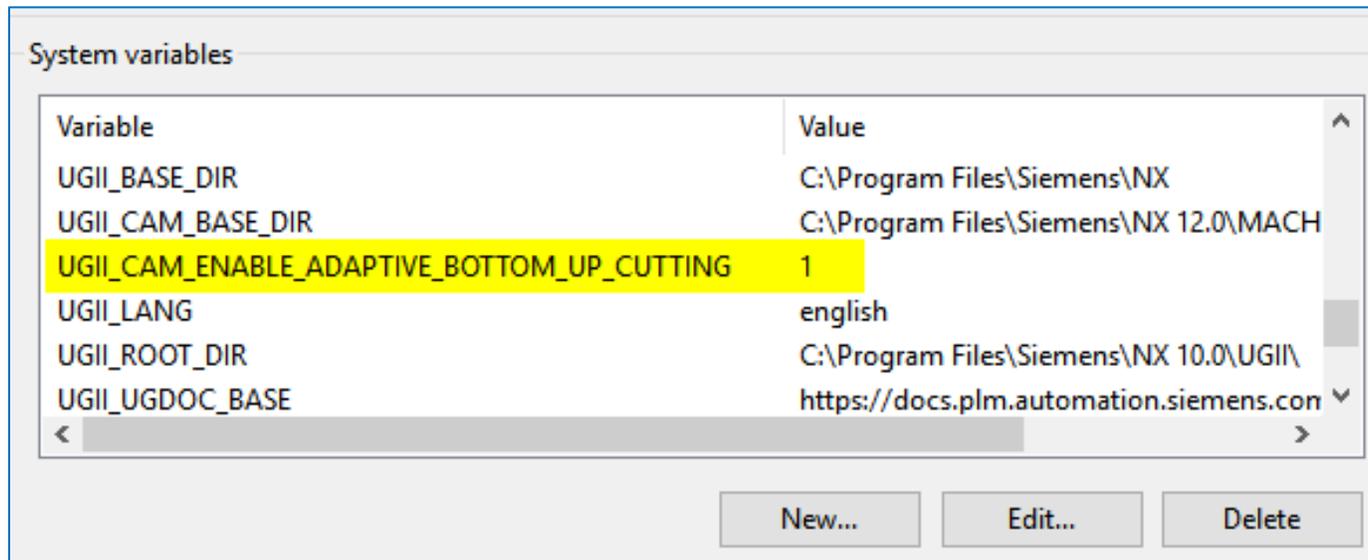
Information		
Face Count:	Before	After
Plane	336	164
Cylinder	224	174
Cone	0	0
Sphere	0	0
Torus	0	18
B-surface	138	32
Blend	0	48
Offset	0	0

Demo

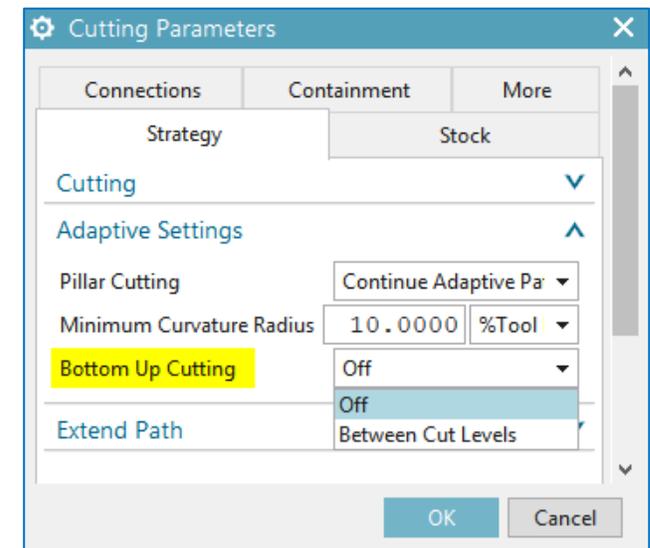
Gem 7; Enabling “Bottom-Up” cutting in NX12 Adaptive Milling

If you have tried Adaptive Milling and you are having some issues with its predictability, try enabling “Bottom Up” cutting.

Control Panel → Advanced Sys Settings → Environment Variables



=



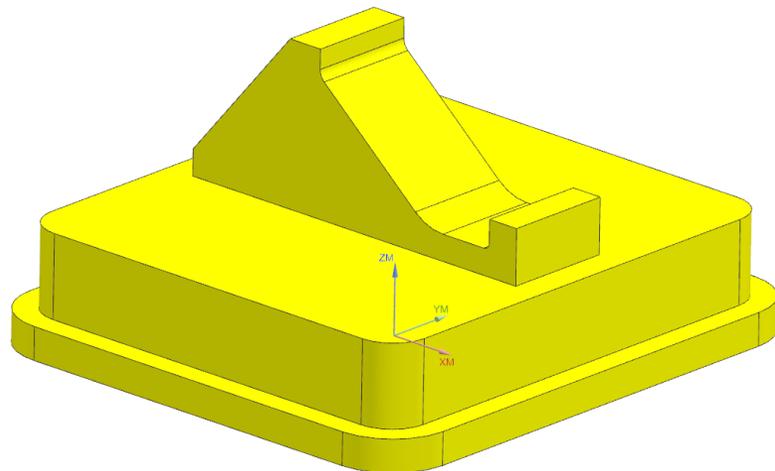
Gem 8; Layout Layer option

If you use multiple setups in the same file. Separate your geometry onto layers, the system can change layers and view orientation to the correct settings for that Operation.

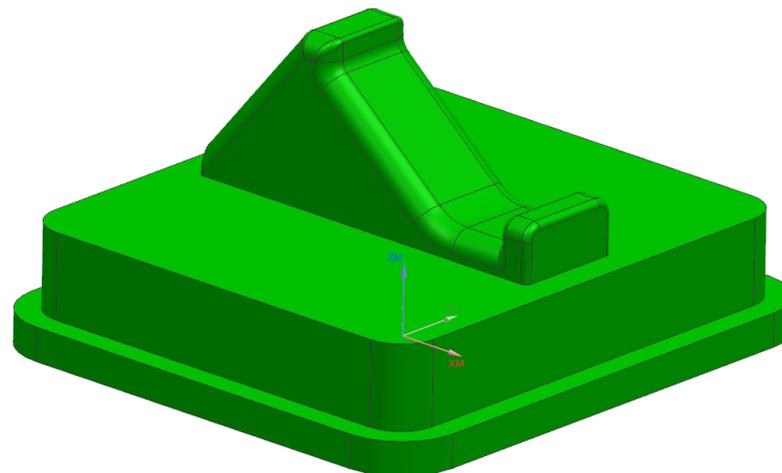
MB3 (right mouse) on group → Edit → Layout and Layer → Save Layer Settings

MB3 (right mouse) on group or operation → Object → Switch Layer/Layout

Operation 1



Operation 2



Operation 3

