

MFG125441-L

CAM Certificate 5 of 5: Turning

Kevin Ellingson
Mechanical Advantage

Learning Objectives

- Create Turning operations using Fusion 360
- Create Mill-turn operations using Fusion 360
- Improve existing workflows and implement industry best practices
- Program wrapped geometry

Description

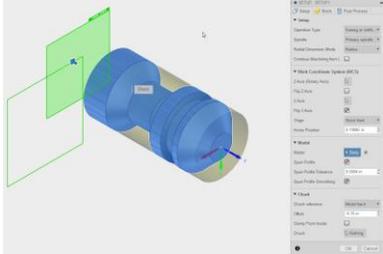
This class will cover the fundamental concepts of turning in Fusion 360. Product experts will share their tips, tricks, and best practices. Attendees should expect to learn full turning workflows, including generating, containing, and making fine adjustments to turning operations.

Speaker(s)

Kevin Ellingson is currently an applications specialist at Mechanical Advantage in the areas of training and product support, and he also serves as a technical resource for product demonstrations. He graduated with an AAS degree in mechanical design and drafting from the North Dakota State College of Science, and he has been working with Autodesk, Inc., manufacturing products for over 15 years. In 2012 Kevin joined the Autodesk Expert Elite program. Kevin has a strong understanding of manufacturing processes and how to help customers understand how different CAD and CAM products can help solve their engineering problems. He enjoys teaching customers how to use their Autodesk software and has trained many customers using Autodesk HSM Products.

Turning Setup

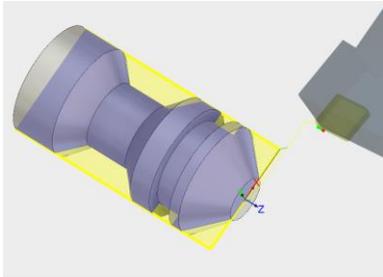
The Setup in Turning will define the stock, model, and WCS just like in Milling. This is also where a Secondary Spindle, Spun Profile, and Chuck reference can be defined.



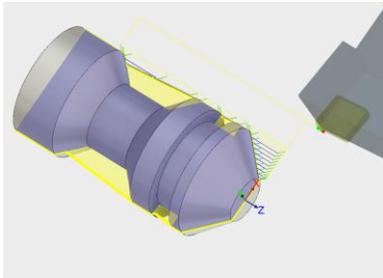
Turning Operations

Every turning operation in Fusion 360 uses the same 5 tabs that the milling operations use, but the turning version.

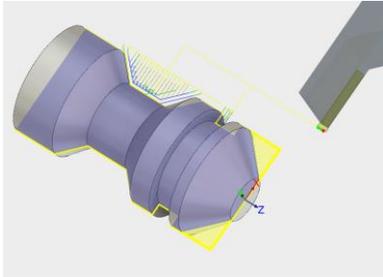
Face



Profile

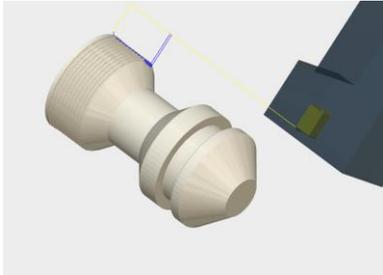


Groove



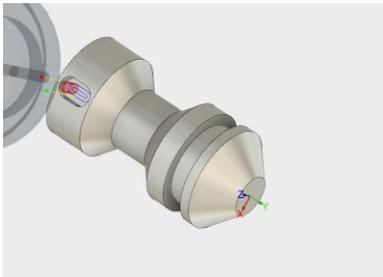
Threading

It's easier to leave the model *unthreaded* and just let the toolpath generate the threads. The stock simulation shows threads well.

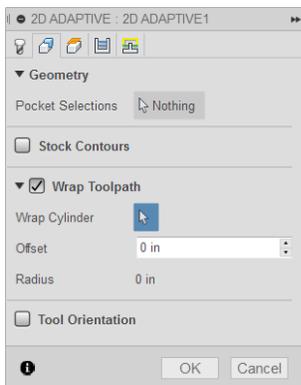


Live Tooling

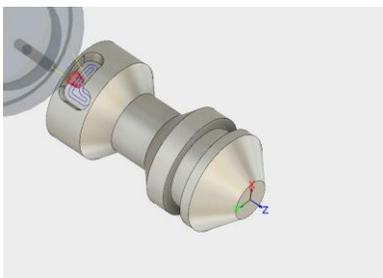
Using the Tool Orientation strategy from the Multi-Axis section, axial and radial live tools are simple to program.



Wrap



Any 2D toolpath can be wrapped by checking the Wrap Toolpath checkbox in the Geometry Tab.





Additional Resources

Fusion Learning Content - <http://help.autodesk.com/view/fusion360/ENU/?guid=GUID-DBD1D4D1-6E70-4924-ADFE-E4DFF4D24AC1>

Intro to Turning in Fusion 360:

<https://www.youtube.com/watch?v=dY2cGeMBRaA&list=PLTjecPfBybTwrWsj42EipRGkMiNtpHzR>