

Machine Tool Products

Siemens SINUMERIK 828 Analog Retrofit

for

Milling Machines

Revised: 06/04/2018

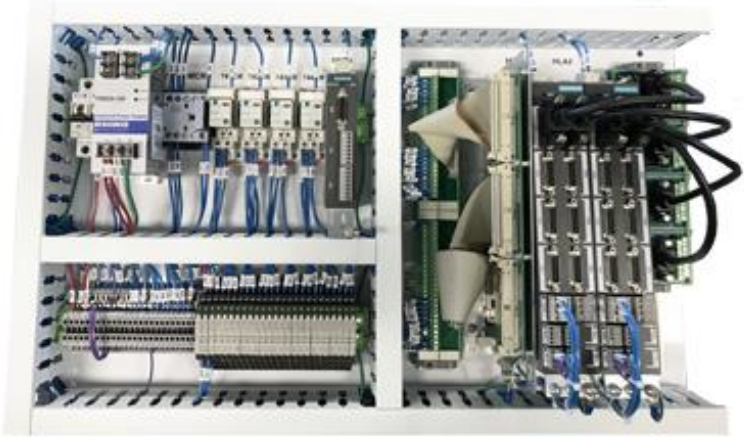
For more information or to request a quote please contact:

MTP Support
Email: support@machinetoolproducts.com
Cell: 317-830-3057

Table of Contents

| | |
|------------------------------------------------------------|---------------|
| Table of Contents | - 2 - |
| Analog Retrofit Photos | - 3 - |
| Requirements for Analog Control Only Upgrade: | - 4 - |
| Siemens 828 Control System Overview | - 5 - |
| Standard Siemens 828 Control Features | - 5 - |
| Included in Package: | - 5 - |
| Available Options | - 5 - |
| Control Screenshots | - 6 - |
| Probing Cycles (AUTOMATIC) | - 8 - |
| ShopMill Conversational Features (Optional) | - 10 - |
| Drilling Cycles..... | - 10 - |
| Milling Cycles | - 10 - |
| Contouring Cycles..... | - 10 - |
| ShopMill Screenshots | - 11 - |
| Want to Try Sinumerik CNC Before you Buy? | - 14 - |
| Download the FREE PC Software HERE | - 14 - |
| FREE Training Webinars covering the following: | - 15 - |

Analog Retrofit Photos





Put a NEW Siemens control on your machine for a fraction of the cost, reusing your motors and drives

Requirements for Analog Control Only Upgrade:

- Current Drive command is analog
- Drives operational
- Enclosure depth from back-plate at least 12"
- Feedback Encoders AqBq TTL
- Ratios/Pitches required between motors and load

Siemens 828 Control System Overview

Standard Siemens 828 Control Features

- 10.4" Color Display
- Ethernet/USB Data Transfer
- Siemens ProgramGUIDE & ISO Programming (Fanuc Dialect)
- 4th Axis Capable (interpolating)
- Tool Wear Monitoring
- Speeds/Feeds Calculator
- Tool Table
- Full Alphanumeric Keyboard
- in to mm toggle
- Backlash & Temperature Compensation
- 3MB of User Memory (Additional Memory - CF card)
- 128 Tools / 256 Cutting Edges
- On Screen Help Manual

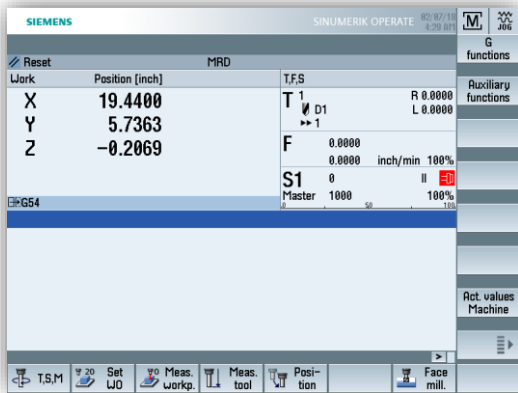
Included in Package:

- Siemens 828 PPU with MCP (Operator Station Optional)
- Back Plate (27" x 17") with the following components mounted:
 - (2) Analog HLA Modules
 - (4) Encoder Feedback Breakouts
 - (2) IO Breakouts wired to relays
 - 24V and 120V Relays
 - 50 Terminal Blocks
 - SMC30 Module for Spindle Feedback
- Bi-Directional Compensation Software Option
- Measuring Cycles Software Option (Probing)
- MTP Source Code (tool changer optional)
- 72in/48out IO Board

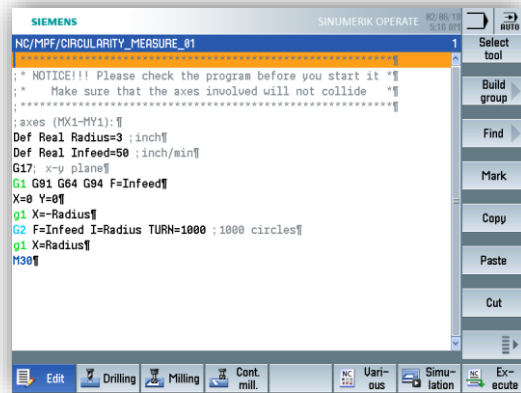
Available Options

- NEW Siemens Analog Drives and Motors (V90 Drives + 1FL6 Motors)
- ShopMill Conversational Programming
- Advanced Technology Functions
- DXF Reader
- 3D Simulation
- [FREE Offline Software \(Not full feature\)](#)
- Turnkey Installation & Commissioning

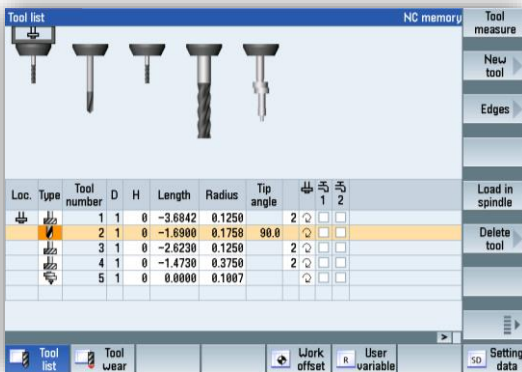
Control Screenshots



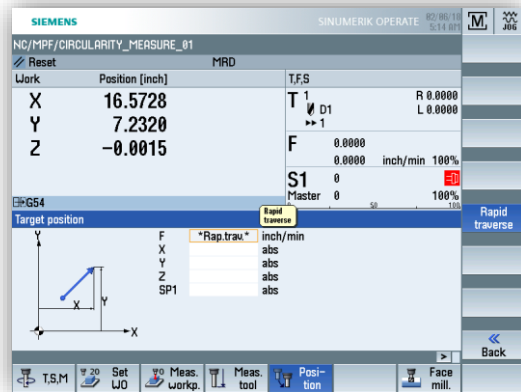
Main Start Up Screen



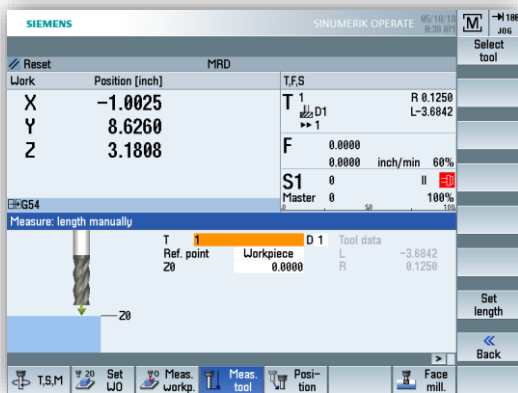
G-Code Editor



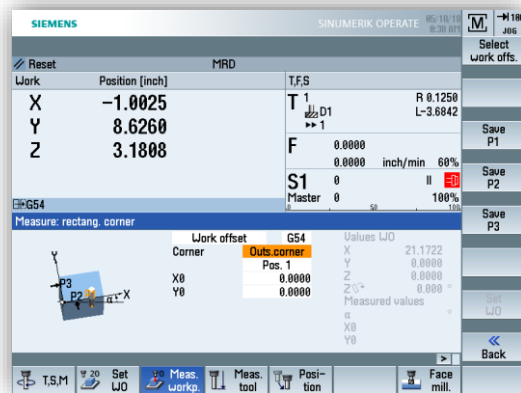
Tool Management



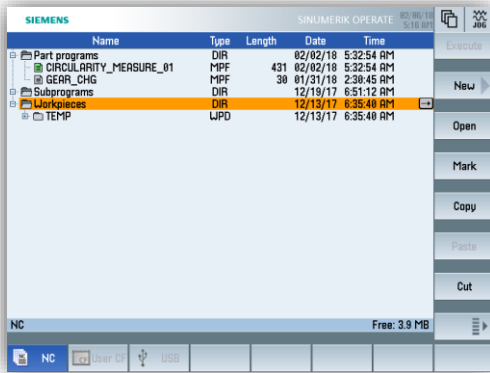
Move Position Command



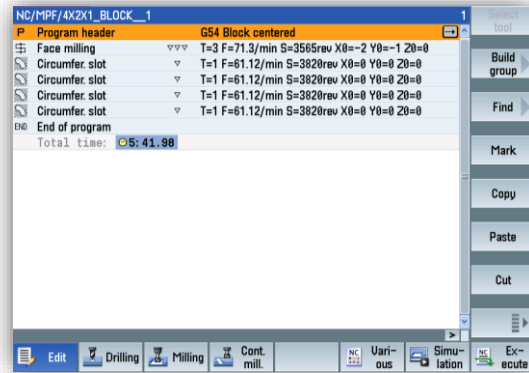
Measure Tool



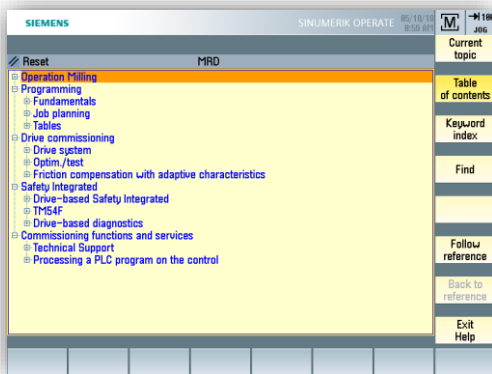
Measure Workpiece



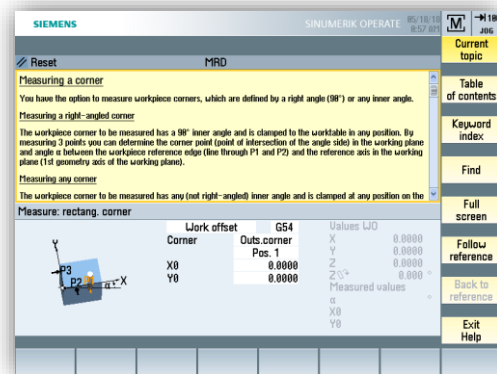
Program Manager



Program Edit Screen

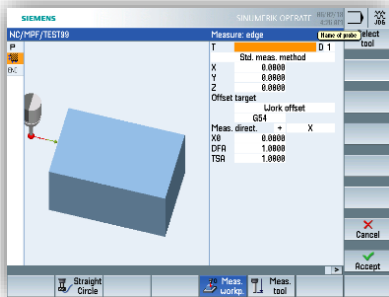


Help Manual Main Menu

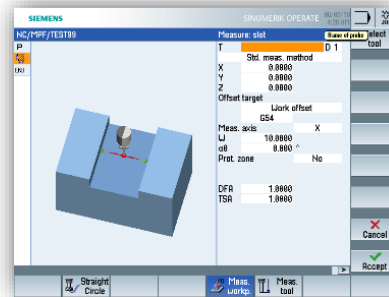


Help Manual Example

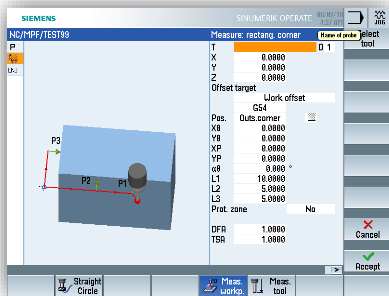
Probing Cycles (AUTOMATIC)



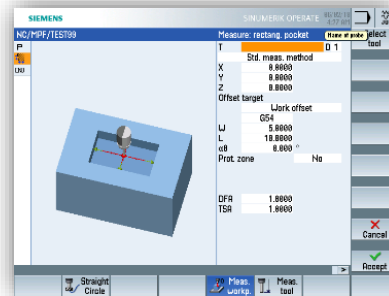
Edge



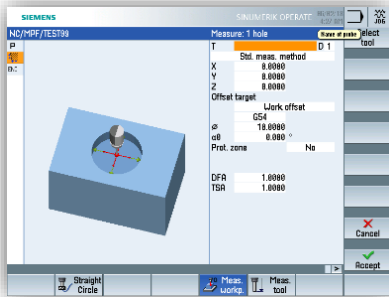
Slot



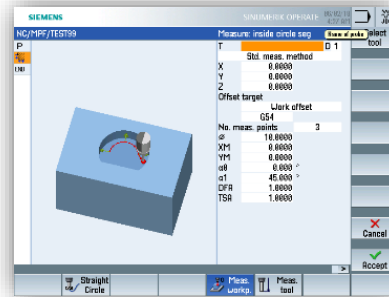
Rectangular Corner



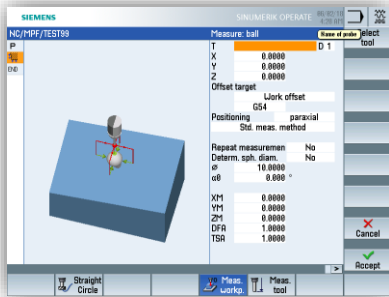
Rectangular Pocket



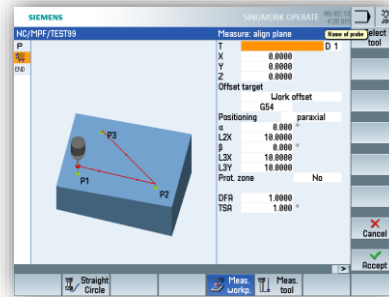
Hole



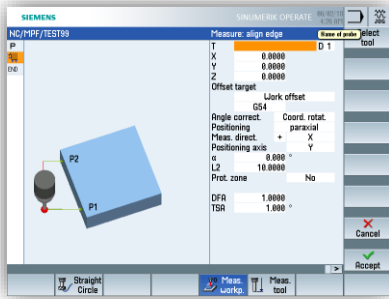
Inside Circular Segment



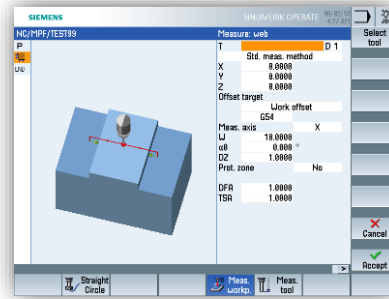
Ball



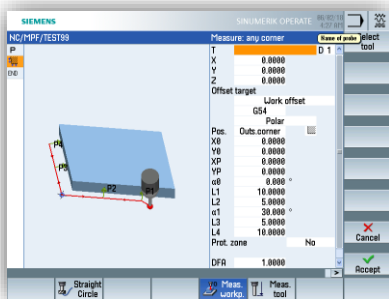
Align Plane



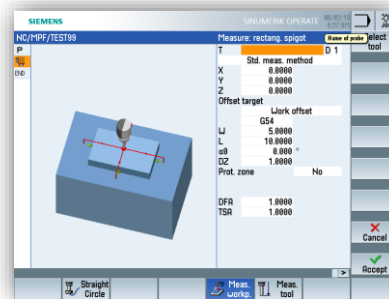
Align Edge



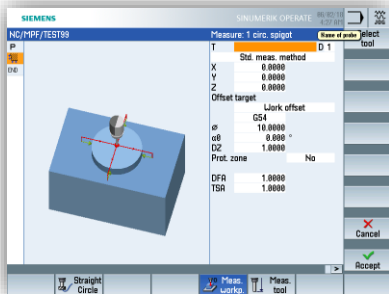
Web



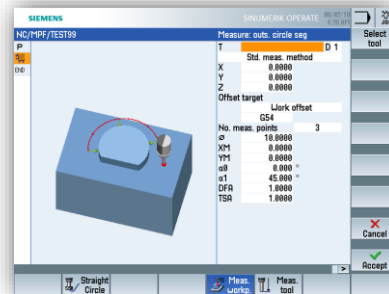
Any Corner



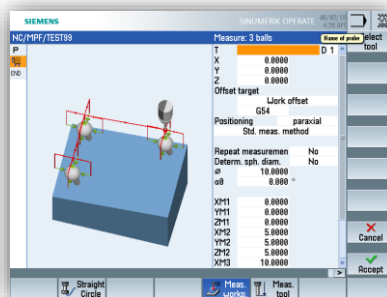
Rectangular Spigot



Circular Spigot



Outside Circular Spigot



3 Balls

ShopMill Conversational Features (Optional)

**non-standard features included in options*

- Ability to Write and Edit G-Code
- Repeat, Rotate, Mirror, Offset, and Scaling
- Solid Model Graphics (Centered Block, Pipe, Cylinder, N Corner, and Regular Block)
- 2D or 3D Multiview Operation Graphics
- Estimated Machining Time
- *Advanced Technology Functions (Option)
- *DXF Import (Option)
- *3D Simulation (Option)

Drilling Cycles

- Centering
- Drilling
- Reaming
- Deep Hole Drilling
- Boring
- *Tapping (rigid tapping requires high performance spindle option)
- Positions (bolt hole circle, rectangle, array, position, repetition)

Milling Cycles

- Face Milling
- Pocket Milling (*expansion pack for pocket milling cycles included)
 - Rectangular Pocket
 - Circular Pocket
- Slot Milling (*expansion pack for slot milling cycles included)
 - Circumference Slot
 - Open Slot
 - Longitudinal Slot
- Helix Milling
- *Multi-Edge Spigot (rectangular, circular, multi)
- *Thread Milling (requires high performance spindle option)
- *Engraving

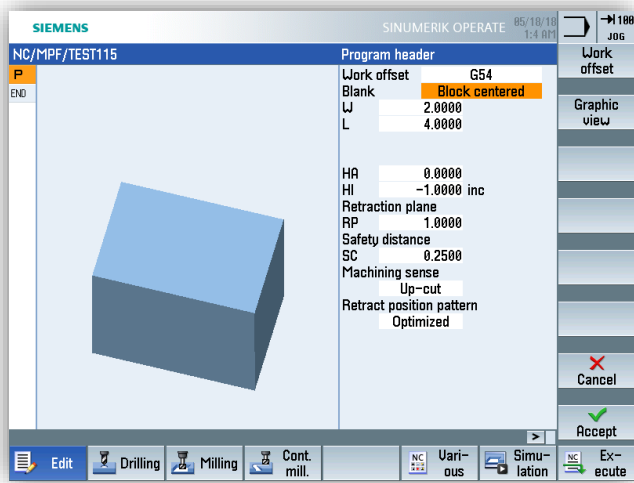
Contouring Cycles

- Path Milling (rough, finishing, chamfer)

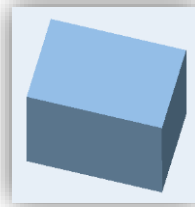
- Rough Drill
- Pocket & Spigot
- Chamfering

ShopMill Screenshots

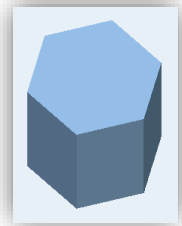
Solid Model Graphics (Blank)



Block Centered



Block



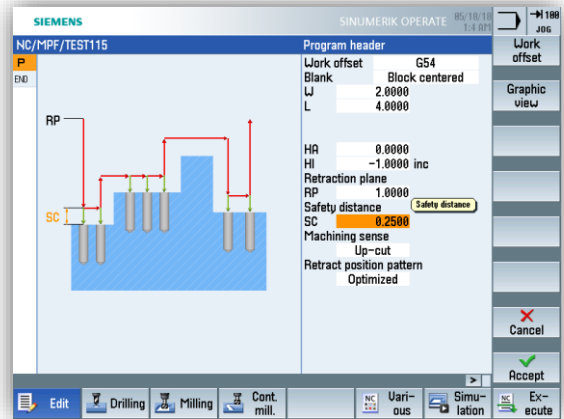
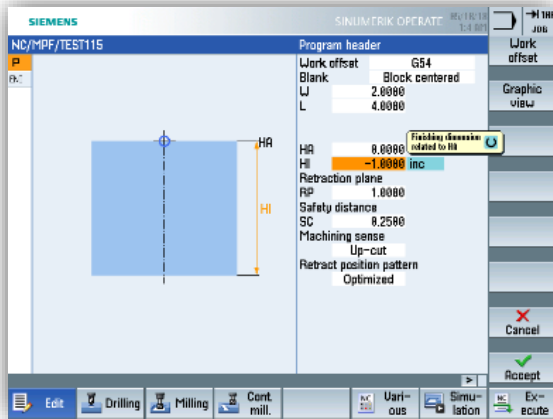
N Corner



Cylinder

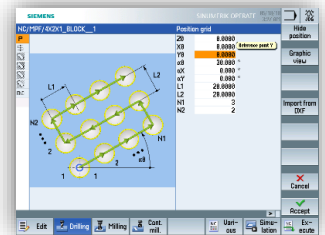
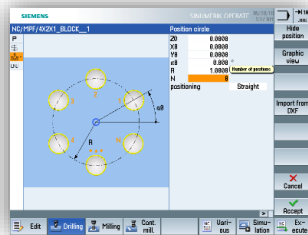
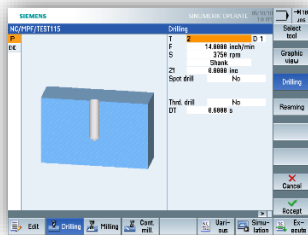


Pipe

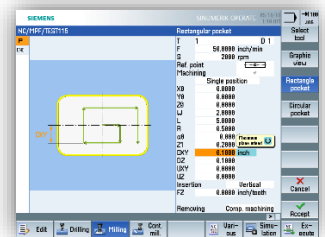
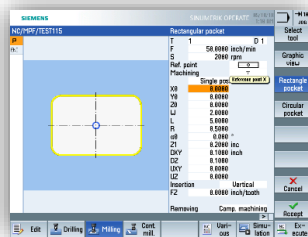
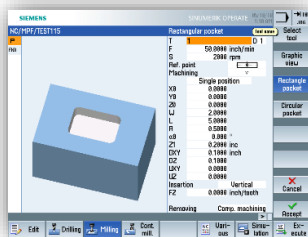


ShopMill Machining Cycles

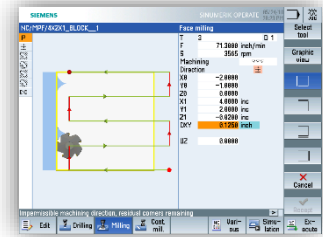
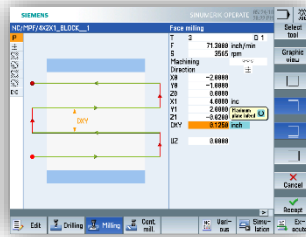
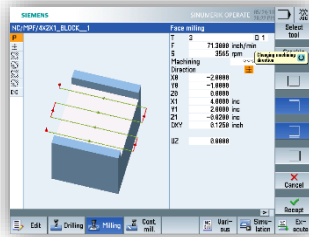
Drilling



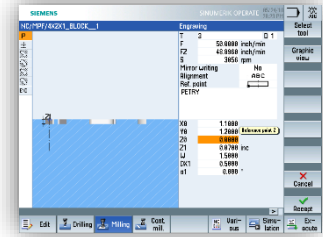
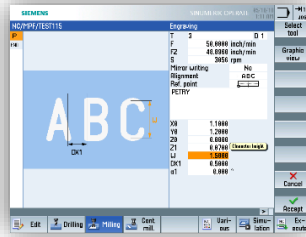
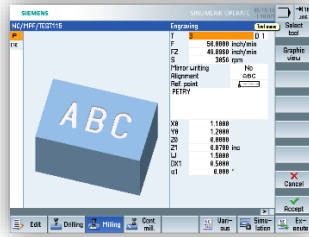
Pocket Milling



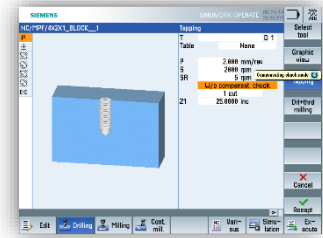
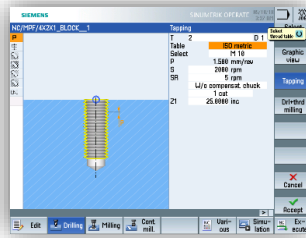
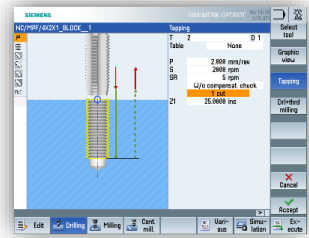
Face Milling



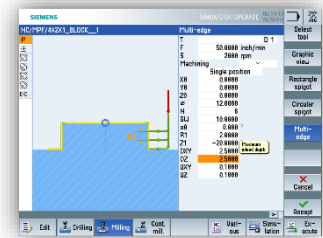
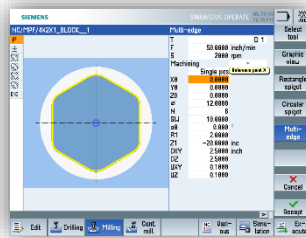
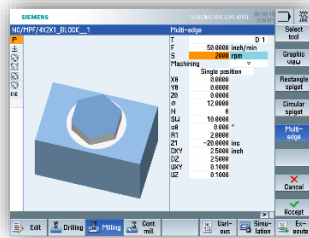
Engraving



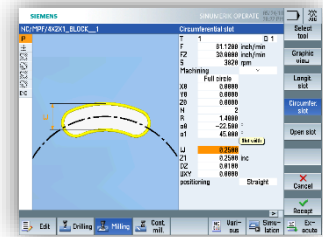
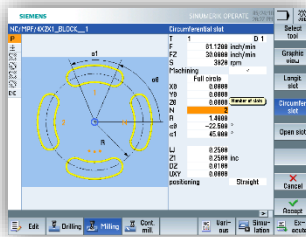
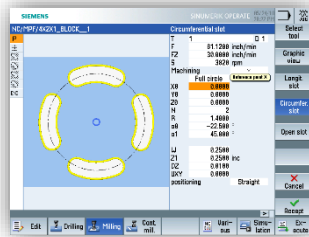
Tapping



Spigot

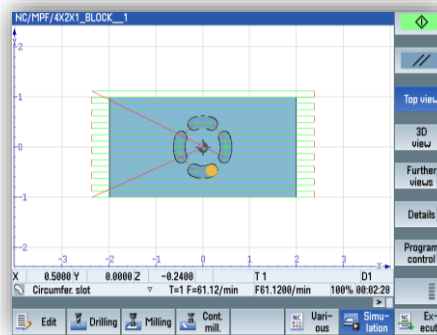
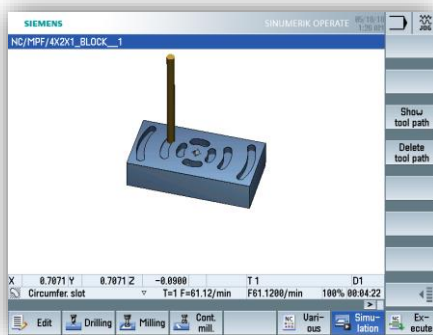
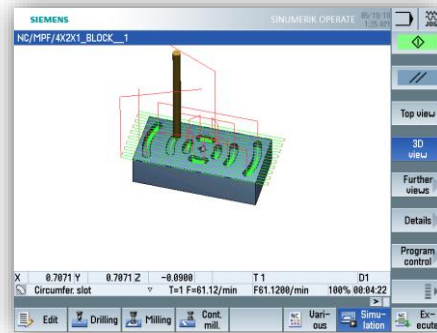
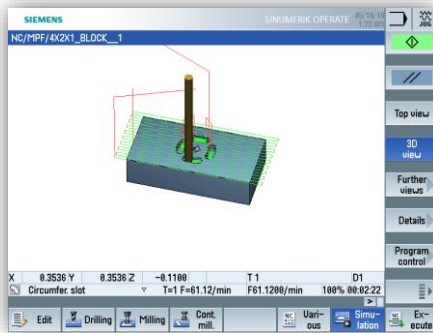


Slot Milling

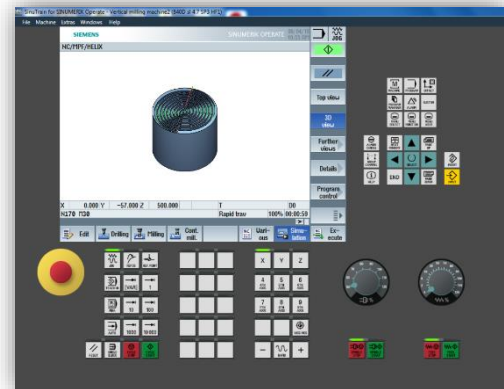


***This is not a complete list of the included machining cycles**

3D Simulation



Want to Try Sinumerik CNC Before you Buy?



Download the [FREE PC Software HERE](#).

FREE Training Webinars covering the following:

- Workpiece/Tool Setup
- G-Code Standard/Advanced Cycles (programGUIDE)
- Program Simulation
- Create & Manage Tools/Offsets
- Conversational Standard/Advanced Cycles (ShopMill/ShopTurn)
- Working with CAD/CAM Programs
- DXF Programming
- Automatic Calculations (trig, contours, etc.)
- Probing Cycles (Manual/Automatic)
- And Many more!

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