

ShopMill

Milling and Drilling with ShopMill

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SINUMERIK

SIEMENS

Milling and Drilling with ShopMill






The technology package for the shopfloor

Need a solution with comprehensive functions for your milling tasks? With SINUMERIK and the ShopMill software you will be on the right track.

The ShopMill operating and programming software is designed for easy machine operation and straightforward programming of workpieces.

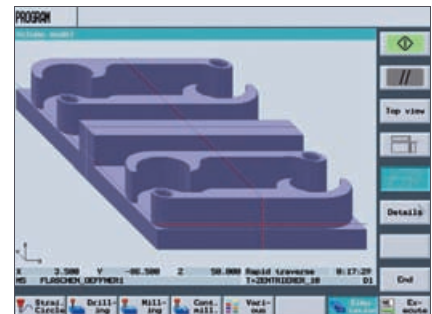
Graphical programming

- Extremely short programming time for single parts and small series
- Operator-friendly implementation of technological production steps in ShopMill machining plans without DIN/ISO know-how
- Clear display of all technological information in machining steps
- Input without documentation thanks to dynamic help displays
- Avoidance of invalid inputs through dynamic online graphics

P	Transparent, clearly structured programming in machining steps
	Programming without DIN/ISO know-how
	Easily understandable symbols for characterizing the machining steps
	Linking of contours with solid machining cycles
	Linking of drilling and milling operations with position patterns
	Simple modification, insertion and deletion of machining steps

Significant reduction in programming time compared to the DIN/ISO programming

- Dynamic broken-line graphics for to-scale representation of the workpiece
- Dynamic auxiliary graphics as input support for cycle parameters



Simulation

DIN/ISO programming

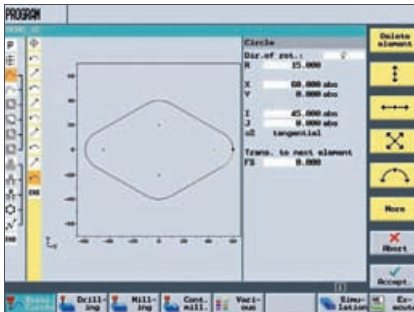
- Text editor for large mold making programs
- Input support for standard machining cycles
- Input support for automatic measuring cycles and contours
- Complete flexibility thanks to high-performance DIN/ISO programming for a maximum number of machining options
- Wide range of standard cycles for machining and measuring tasks

Mold making

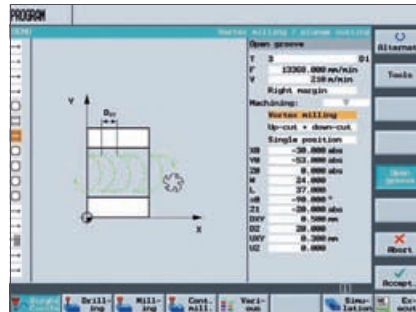
- High-performance text editor for large mold making programs
- Simple programming of the mold making functions with high-speed-settings cycle

Simulation

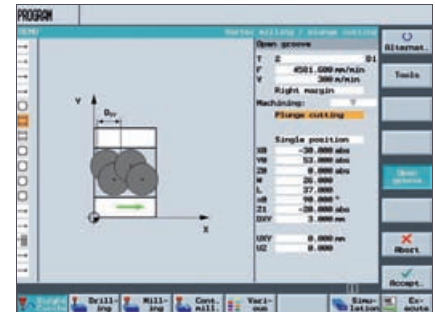
- Maximum process reliability thanks to simulation with real tool data
- Uniform simulation for graphic programs, DIN/ISO programs as well as programs generated externally by CAM systems
- Additional functions, such as calculation of machining time
- Display in front and side view as well as 3D view
- Quick view of mold making programs (PCU 50.3)



Contour calculator



Vortex milling



Plunge cutting

Machine setup

- Extremely short setup times thanks to operator prompting for determining workpiece zero points and tool geometry
- Simple management of tools through clear display of geometry and magazine loading in a single table
- Menu-assisted contact function for determining the work offset also in swiveled machining planes
- Tool measuring through scratching or tool probe
- Face milling cycle for workpiece pre-machining
- Swivel cycle for setup and measuring tasks

Contour programming

- High-performance contour calculator for the creation of contours in the milling plane and on the peripheral surface of cylindrical workpieces
- Automatic calculation of partially defined geometry elements
- To-scale display of contours with up to 255 contour elements
- Import of DXF files possible via optional CAD reader

Machining cycles

Milling cycles for free contours

- Machining of contour pockets with up to 12 islands
- Cutting of contour spigots with up to 12 isolated contours
- Automatic detection and remachining of residual material
- Automatic or manual specification of the machining starting point with the option of pre-drilling
- Insertion strategy: straight, inclined, helical

Milling cycles for standard contours

- Face milling cycle with side delimitation
- Rectangular and circular pockets with different insertion strategies
- Rectangular and circular spigots
- Longitudinal and circumferential groove
- Thread milling
- Combined drill and thread milling
- Engraving of arbitrary texts

Drilling cycles

- Centering, reaming, boring
- Drilling with chip breakage and chip removal function
- Tapping with chip breakage and chip removal function

High-speed-settings

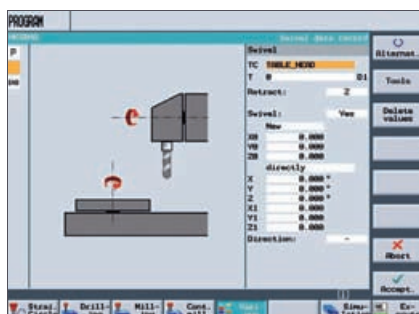
- Mold making cycle for selecting the machining type and the contour tolerance

Position pattern

- Arbitrary position pattern in the milling plane and on the peripheral surface of cylindrical workpieces
- Position pattern such as line, circle, grid or frames
- Suppression of individual positions in position patterns

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Swivel cycle

Complete machining

Peripheral surface machining

- Arbitrary drilling and milling operations on the peripheral surface
- Milling of guiding grooves with parallel flanks on cylindrical workpieces

Multiple clamping

- Runtime-optimized machining of identical and variable parts in several clamping positions

Swivel cycle

- Arbitrary drilling and milling operations in swiveled machining planes on 5-axis milling machines
- Flexible input of the swivel angles in the workpiece coordinated system (axis angle, solid angle or angle of projection)

Tools

- Clear display of tool and setup data in a single tool list
- Quantity and tool life monitoring with replacement tools
- Dynamic 3D representation of the tool according to type and diameter
- Direct import of the tool into the parts program from the tool list

Automatic functions

- Block search also on certain machining operations in position patterns
- Display of traversing paths of machining steps in G code (basic block display)

Accessories

- PC training and programming tool
- CAD reader for PC

CNCs

ShopMill is available on the following CNCs

- SINUMERIK 810D/840D
- SINUMERIK 840D sl/840Di sl

More information on SINUMERIK and ShopMill is available at:

www.siemens.com/sinumerik

www.siemens.com/cnc4you

Electronic ordering via the Internet with the A&D Mall:

www.siemens.com/automation/mall

Your personal contact partner is listed at:

www.siemens.com/automation/partner

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