

M8

VERTICAL MACHINING CENTER



EXCELLENT COMPREHENSIVE ABILITY! HIGHEST MILLING CAPACITY IN SAME CLASS!

HIGH RIGIDITY!
HIGH ACCURACY!
HIGH EFFICIENCY!

M8 compact machining centers provide you with more choices to meet your various and special needs!



- + **High Rigidity** Extend tool life and improve heavy cutting capabilities
 - The FEA finite element analysis technology provided by the Kellenberger engineering team.
 - Design and build machines with balanced rigid structures to ensure optimal rigidity and longevity.
 - Ensure that the design complies with ISO 230-2 international standards.
 - X/Y/Z axes are equipped with high-strength linear rails and sliders
 - Grinding grade ball-screw, low noise, low temperature rise, heavy load.
 - Casting are made of high-quality cast iron to ensure the overall rigidity and machining performance.

- + **High Precision** Excellent static accuracy and Machining Accuracy
 - The positioning accuracy of the full stroke reaches 0.008mm (ISO 230-2).
 - Full stroke repeatability is achieved with 0.004mm (ISO 230-2).
 - Strict static precision quality control
 - Ball bar test and laser accuracy compensation to ensure mechanical static and geometric machining accuracy.

- + **High Efficiency** Shorten the machining cycle and reduce the non-cutting time
 - 12000rpm direct drive spindle(BBT40)
 - High power spindle motor; maximum torque 47.7Nm.
 - Three-axis high Power drive servo motor
 - X, Y, Z three-axis max. rapid speed of 36m / min, improve productivity.
 - The maximum rigid tapping speed is 3000rpm.





12,000rpm
BBT40 Spindle



20T AIS ATC



Automatic Central Lubrication



Spindle Chiller



Part Probe (Optional)



Tool Probe (Optional)



Fanuc Oi MF Plus

- 10.4" color display
- Max controlled axes 5, Simultaneous controlled axes 4
- Servo Control HRV3
- Programming Resolution 0.001mm
- Part program storage size 2MB
- Tool compensation number 400
- Number of registered programs 1000
- AI contour control, Look ahead block no.40 paragraphs
- USB slot, PCMCIA slot
- Embedded Ethernet
- Self-diagnosis function
- Dynamic graphic display
- Tool life management

STANDARD

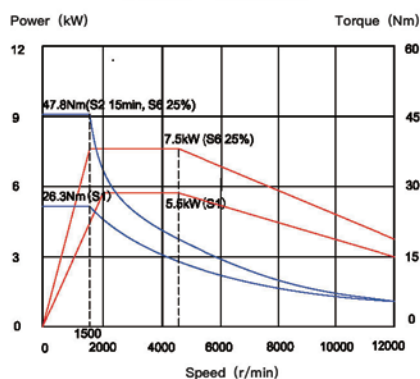
- Fanuc Oi MF Plus System
- 12,000 rpm direct drive spindle
- Spindle chiller
- Automatic central lubrication system
- 10.4" Color flat panel display
- Ethernet interface
- Coolant tank
- Scraper Type Chip Conveyor and Chip collector
- 20 tool capacity (Automatic tool changer)
- Three-color indicator

OPTIONAL

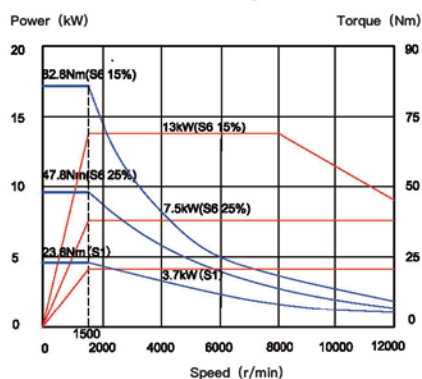
- X/Y/Z Linear Scales
- Z-axis riser 200mm
- Air sensor
- Electric cabinet air conditioner
- Part probe
- Oil mist collector
- Remote MPG
- Tool probe
- Tool breakage detection
- 4th Axis Turntable
- Automatic door
- Coolant chip flush system
- Chip bucket
- Coolant through Spindles (20/50/70 Bar)
- 48m Three-axis rapid traverse (optional for Siemens control)

SPINDLE POWER/TORQUE

Fanuc – Standard



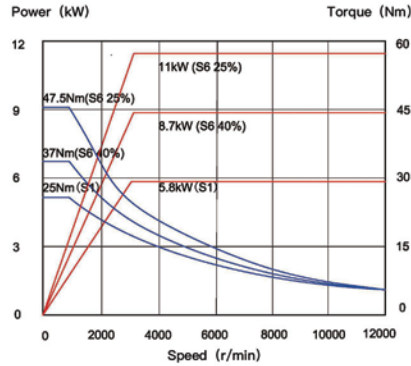
Fanuc –CTS (Optional)



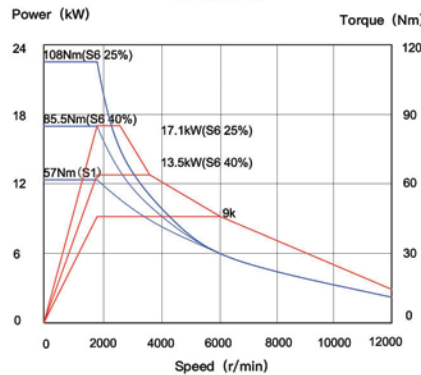
SIEMENS 828D

- Compact operator panel CNC
- 10.4" color display
- Integrated QWERTY keyboard
- Advanced Surface
- Look Ahead
- DSC, Dynamic Servo Control
- Acceleration with jerk limitation
- Tool management, Tool life monitoring and workpiece count
- Tools number on tool list 256
- Part programs on PPU, maximum number 750
- 5MB user memory
- Feed forward control, acceleration-dependent
- Feed forward control, velocity-dependent
- Changeover to axis mode
- Programmable acceleration
- Asynchronous subprograms ASUB
- Execution from storage medium connected to Compact Flash card Interface on the operator panel front
- Programming language DIN 66025 and high-level language expansion
- Simulation in 2D representation
- Polar coordinates programming
- Linear, Circle, Helical interpolation
- Cartesian point-to-point travel PTP
- Leadscrew error compensation
- Free screens
- Ethernet 1 Gbps (Windows Share/Linux/FTP)
- USB 3.0 interface on the front
- Technology cycles for drilling/milling

STANDARD



OPTIONAL



位置	刀号	刀具名称	ST	D	长度	半径	螺距	总长	刀具类型
1	3.0	钻头1	1	120.000	3.000				钻头
2		Outer_large	1	50.000	10.000	7	Q		刀沿
3									
4									
5		Outer_small	1	50.000	2.000	2	Q		刀沿
6									
7		钻头_D08	1	135.000	30.000	6	Q		钻头
8		钻头_D10	1	180.000	5.000	118.0	Q		钻头
9		钻头_D12	1	90.000	6.000	98.0	Q		钻头
10		钻头_D16	1	85.000	4.000	1.000	Q		钻头
11		钻头_D20	1	120.000	4.000		Q		钻头
12		球头铣刀_球头铣刀2	1	120.000	5.000	3	Q		球头铣刀
13		切槽铣刀_1	1	140.000	40.000		Q		切槽铣刀
14		球头铣刀_1	1	122.000	25.000	6	Q		球头铣刀
15		刀头_08	1	90.000	4.000	2	Q		刀头
16		钻头_D08	1	120.000	40.000	4	Q		钻头
17		钻头_D10	1	85.000	6.000	118.0	Q		钻头
18		钻头_D12	1	180.000	5.000	1.000	Q		钻头
19		钻头_D16	2	181.000	5.000	1.000	Q		钻头

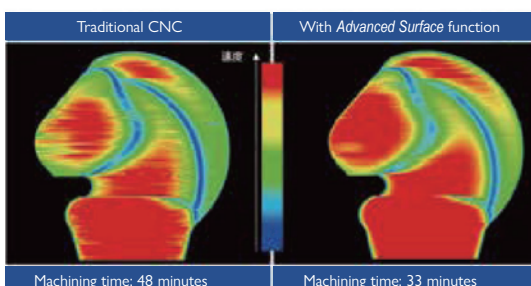
POWERFUL TOOL MANAGEMENT FUNCTION

Innovative tool management function

1. Use icons to display tool types
2. Can manage up to 256 tools
3. Tool life monitoring function, replace tool management function
4. The loading and unloading of knives is more humane

ADVANCED SURFACE: THE CREATOR OF THE PERFECT SURFACE OF THE WORKPIECE

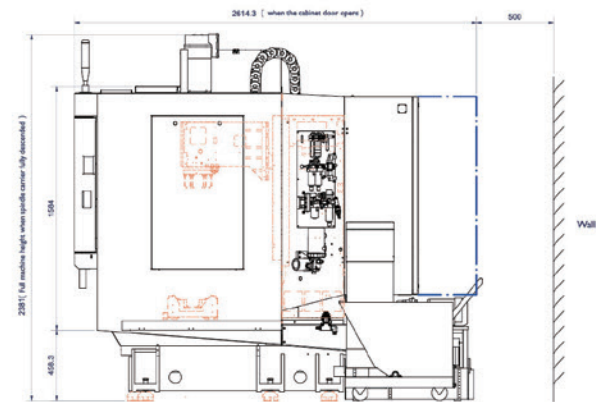
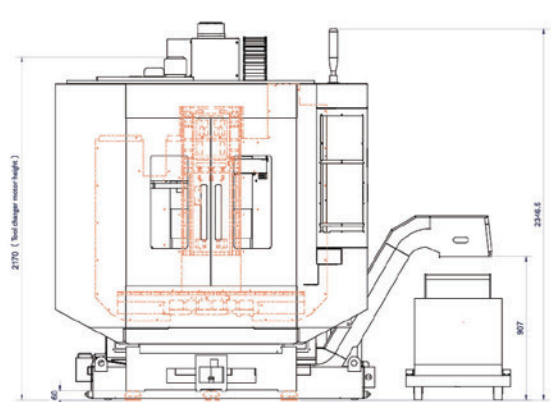
Mold processing has always been one of the most challenging applications to test the performance of CNC systems. With the SINUMERIK 828D with the ""Advanced Surface"" function, this challenge can be fully met. This function is a unique calculation method designed to improve the surface quality of the workpiece while significantly reducing the processing time. The new ""pre-reading"" algorithm comprehensively considers the entire processing path, so as to ensure that the surface of the workpiece is smooth when the mold program is executed for a short period of approximation.



MACHINE SPECIFICATIONS

M8 700

	Fanuc Oi MF Plus	Siemens 828D
Working Area		
X/Y/Z Travel	720 / 410 / 430 mm	
Spindle Nose To Table	150- 580 mm	
Distance From Table To Main Door	150 mm	
Spindle Center to Column	429 mm	
Table		
Length×Width	800 × 400 mm	
Max. Load Capacity	300 kg	
T- slot (Size×Qty×Spacing)	14 mm × 3 × 125 mm	
Spindle		
Taper ISO No.	BBT40	
Power	7.5 kW(Optional 11kW)	13.2 kW
Spindle Max . Speed	12,000 rpm	
Torque	47.8 Nm(Optional 70Nm)	63 Nm
Axis Drivers		
Rapid Traverse Rate (X/Y/Z)	36/36/36 m/min	
Max. Feed Rates	12 m/min	
Servo motor (X/Y/Z)	1.8 / 1.8 / 1.8kW	2.85 / 2.85 / 2.85 kW
Automatic Tool Changer		
Tool Capacity	20 (Mechanical Arm)	
Method Of Tool Selection	Bi - Directional	
Max. Tool Diameter (Full Drum)	80 mm	
Max. Tool Diameter (Adj. Pockets Empty)	150 mm	
Max. Tool Length	260 mm	
Max. Tool Weight	7 kg	
Tool Change Time	T- T: 1.7sec / C- C:3.2 sec	
Coolant System		
Capacity	250 L	
Flow	40 L/min	
Others		
Compressed Air	5~7 bar , 600 L/min	
Power Requirement	20 kW	25 kW
Weight	2930 Kg	
Note: The data is based on printing period level only, and any technology and parameters are subject to change without notice		





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