



The casting adopts a unique three-dimensional variable diameter structure, and through finite element analysis, the structure of the machine body is optimized to the greatest extent, and the service life is prolonged.

Double-Arm type tool changer is adopted, manual switch is provided at the front of the machine. 24-position and random-choose-tools reduce the time for tool changer.

Screw nut is designed with double nuts and is pre-pressed (pre-stretched) precisely. It has more rigidity and effectively reduces the thermal expansion phenomenon in use, thus improving the service life and maintaining the accuracy.



High accuracy FANUC servo motor, play the highest processing quality and performance in areas such as concentricity machining and short-time machining

"Big Foot(Base)" design adopted on the column to minimize machine body deformation and improve the overall rigidity and stability of spindle.

Double-layer reinforced work table, box-type slide and close-grained reinforcing rib to improve rigidity and precision

Screw: German Rexroth\Taiwan PMI/HIWIN



Tool Magazine: Taiwan OKADA



BASIC PARAMETER

EM800A	S.A.E.	METRIC
Travel		
X Axis	32"	800 mm
Y Axis	20"	500 mm
Z Axis	20"	500 mm
Spindle Nose to Table	6"-26"	150-650 mm
Spindle Center to Column Guideway	22"	550 mm
Table		

Length	40"	1000 mm
Width	20"	500 mm
T-Slot Width	0.7"	18 mm
T-Slot Center Distance	4"	90 mm
Number of Std T-Slots	5	5
Table Loading capacity	882 LB	400 Kg
Table to the Ground	36"	900 mm
Spindle		
Max Rating	(10/15) hp	(7.5/11) Kw
Max Speed	8000 rpm	8000 rpm
Max Torque	54 ft-lb	72 Nm
Drive Mode	Synchronous Belt Drive	
Taper/Specification	ISO 7/24Taper NO.40	
Feed Rate		
Rapids on X/Y/Z	1890/1890/1890 IPM	48/48/48 m/min
Max Cutting	393.7 IPM	1-10000 mm/min
Min Feed Rate	0.0000394"	0.001 mm
Axis Motors		
Drive Mode for X\Y\Z	Direct Inline Drive	
Servo Motor Speed for X\Y\Z	3000 rpm	
Diameter of Ball Screw for X\Y\Z	ø1.6"	ø40 mm
Ball Screw Pitch for X\Y\Z	0.6"	16 mm
ATC		
Tool Magazine	Vertical Disc Type with Manipulator	
Capacity	24-Tools	
Tool Shank	BT-40	
Shank Bolt	P-40T(45°)	
Max Tool Diameter(full)	ø3.1"	ø80 mm
Max Tool Diameter (no adjacent tools)	ø5.9"	ø150 mm
Max Tool length	11.8"	300 mm
Max Tool Weight	18 LBS	8 Kg
Tool-to-Tool Changing Time	2.5 secs	2.5 secs
Dimension & Power Capacity		
Machine Weight	11023 LBS	5000 Kg
Machine Height	101"	2550 mm
Machine Area (Length*Width)	99"*93"	2500 mm*2350 mm
CP	20 KVA	
Precision		
Positioning Accuracy	0.000197"	0.005 mm
Repeated Positioning Accuracy	0.000118"	0.003 mm
Others		
Air Required	87 ~ 116 psi	6 ~ 8 Bar
Coolant Capacity	40 us gal	180 L
Lubricating Oil Capacity	0.79 us gal	3 L
Control	FANUC Series 0i - MODEL F	

STANDARD CONFIGURATION

CONTENT	QUANTITY	NOTE
FANUC Control	1	
10.4 Inch TFT Color Display	1	
Heat Exchanger for Electric Control Cabinet	1	
Automatic Lubrication Device	1	
Full Frame Protection	1	
Electric Control Cabinet Dustproof Device	1	
Signal Lamp	1	
Rigid Tapping	1	
Cutting Fluid Cooling Device	1	
Spindle Air Curtain Protection	1	
LED Working Lamp	1	
Feet Bolt and Heel Block	6	
Air Blowing Device	1	
Work-box/Kit	1	
Transformer	1	
Triaxial Protective	1	
Safety Switch Device of Door	1	
RS232Communication Interface & CF Card Slot	1	
Cleaning Air Gun Interface	1	
Pneumatic unclamping Button	1	
Detachable Hand Wheel	1	
Oil-Water Separating Device	1	
Open M codes Function	4	
PLC & 4th and 5th axis Function is filled and opened	1	
Water Cooling Side Through	1	
Vertical Disc type Magazine with Manipulator	24	CAM Technology

OPTIONAL CONFIGURATION

CONTENT	QUANTITY	NOTE
Roller Linear Guide Rail for 3 Axis	1	
Water Cooling Center Through	1	20 Bar
Automatic Power Off	1	
Chain Chip Conveyor	1	Standard or Rear Type
Air Conditioner for Electric Cabinet	1	
Water Gun	1	
32-tools Magazine	1	
10000 rpm & 12000 rpm Spindle	1	With Oil Cooling
RENISHAW TRS2	1	
Automatic Door	1	
Air Density Detection	1	
Spray System	1	

MAIN PARTS SUPPLIERS

PART NAME	SPECIFICATION	BRAND
Control	FANUC-0iMF	FANUC
Spindle Motor	BiI8/12000	FANUC
Servo Motor for X/Y/Z	βisC12/βisC12/βis22B	FANUC
X/Y/Z Axis Linear Ball Guide Rail	35mm/35mm/35mm	PMI/HIWIN/REXROTH (P class)
X/Y/Z Axis Ball Screw	ø40mm/ø40mm/ø40mm	HIWIN/PMI (C3 class)
Spindle	BT40-140	KENTURN
Tool Magazine	BT40-24T	OKADA
	Cam Technology	DEX
	Approach Switch	Omron
	Tool Arm	I-Ta
	Magazine Motor	Taiwan Gong Ji
Unclamping Cylinder		HAOCHENG
Coupling Shaft		REACH
Heat Exchanger		DIORT
Electronic Components		SCHNEIDER/OMRON
The power line and encoder line		German LEONI
Cutting Fluid Bump		STAIRS
Bearing for 3 axis	BST30*62	NTN/NSK (P4 Class)
Extensible Cover		HONGWANG
Lubrication Device		BAOTN
Pneumatic Unit		SMC/AIR.TAC
Coolant Pipe		Bear 20 Bar
Assembling Bolt		Taiwan Brand