# TR-56S

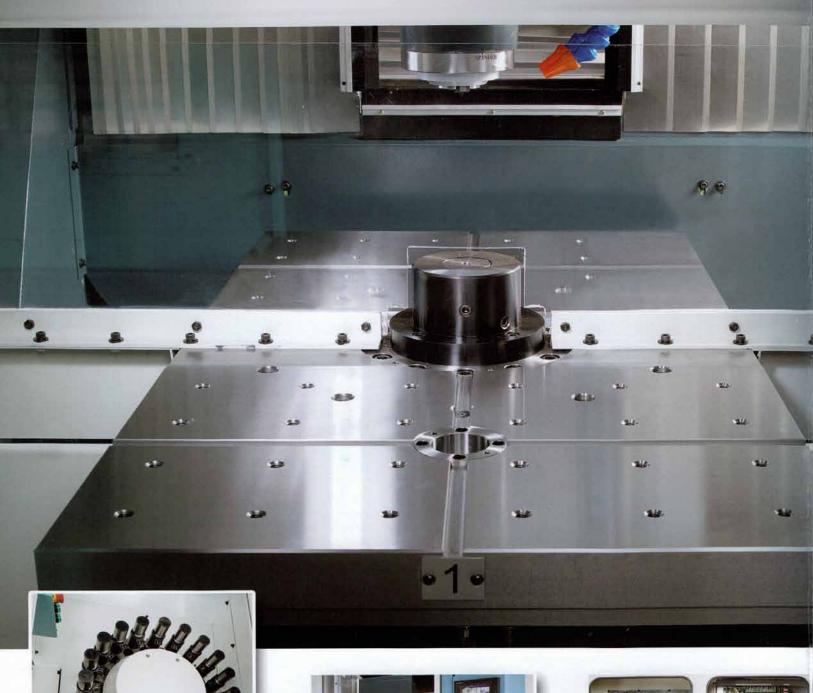
A New Standard of High Speed High Precision Machining



- Standard spindle speed 10,000 rpm (BT#30) 8,000 rpm (BT#40)
- Three axes rapid traverse 48/48/48 m/min
- High speed tool change (tool to tool)
   1.6 seconds (#30), 1.8 seconds (#40)
- Rigid tapping 4,000 rpm (BT#30) 3,000 rpm (BT#40)

• Spindle tapper BT#30, BT#40

· Direct-drive spindle



# Efficient Magazine

 Standard loading capacity of the magazine is 24 tools. For BT#30 tool shank, the loading capacity is 20 tools.
 The use of hydraulic tool releasing system features high stability. Tool change is quickly accomplished with smooth tool change motion.



# Control Panel User-friendly Operational Control!

- The control panel design meets human engineering theorem and CE regulations, and is easy to operate.
- A separated control panel is provided between working area and magazine operation area for added convenience of operation.



## Standard Fully-sealed Electric Cabinet

 In compliance with CE standards, the electric cabinet is equipped with rubber fitting around the opening such design ensures consistent conditions within the electric cabinet so that extend lifetime of the electric components.

# Perfect Structure Design! High Speed without Vibration!

# Three Axes Roller Linear Ways Extra Smooth Movement! Maximum Stability!

- All structural parts are manufactured from Meehanite cast iron with thorough stress relief. This features outstanding of structure without deformation.
- Three axes slideways are equipped with HIWIN roller type linear guide ways.
- Traveling column, oversized base and light moving parts permit high speed travel without vibration.
- Stable automatic pallet change. Fully traveling column on 3 axes. Onepiece constructed oversized base provides extra large span between slideways, Ensuring extremely smooth movement of Y-axis. X-axis acceleration / deceleration is over 1G without vibration.
- The increased height of moving parts shortens the distance from the spindle nose to blocks on 3 axes linear ways. This results in optimal rigidity during cutting.



## Precise, Fast Pallet Change

- The high precision pallet change is achieved through a 3-piece coupling positioning mechanism.
- The pallet change is fully electric driven combined with cam indexing. Pallet change is quickly accomplished in only 4 seconds with maximum stability.
- The machine is provided with a rotary cylinder. Each working area can be equipped with one set of air system (hydraulic system optional) for mounting jig.



## High Speed, High Precision Spindle

- Choice of BT#30 and BT#40 spindles, Each model is mounted with a direct-drive spindle, featuring low noise, low vibration and high performance.
- Choice of spindle speed from 10,000 rpm to 24,000 rpm to meet various cutting requirements.
- Available to use spindle motor with extra low inertia for minimum acceleration / deceleration time. Spindle running from 0 to 15,000 rpm only needs 0.65 seconds, significantly increasing tapping efficiency.

#### MACHINE SPECIFICATIONS

			Unit	TR-56S	TR-563S
Axis	X-axis		mm	560	
	Y-axis		mm	400	
	Z-axis		mm	400	
	Spindle Nose to Working Table		mm	150 -	- 550
Working Table	Table Area		mm	600 x 425 x 2PCS	
	Max. Load		kgs	200 x 2PCS	
	T Slots		mm	M12	
Spindle	Spindle Speed		rpm	8000	10000
	Max. Tapping Speed		rpm	3000	4000
	Spindle Taper			7/24 NO 40	7/24 NO 30
	Transmission			Direct Drive	
Traverse	Rapid Traverse (GOO)		m/min	48 / 48 / 48	
	Machining Speed (GO1)		mm/min	10000	
	Tool Shank			BT#40	BT#30
	ATC			Arm-type	
	ATC Magazine Capacity 24	24+1	20+1		
Magazine	Max. Tool Ler	ngth	mm	56 40 40 150 ~ 600 x 42 200 x M' 8000 3000 7/24 NO 40 Direct 48 / 4 100 8T#40 Arm- 24+1 250 80 4 1.8 2.2	200
wayazine	Max. Tool Dia	meter	mm		80
	Max. Tool We	eight	kgs		3
	Tool Change	TOOL TO TOOL	sec	1.8	1,6
	Time	CHIP TO CHIP	sec	2.2	2.0
Motor	X-axis		kw	2.3	
	Y-axis		kw	2.3	
	Z-axis		kw	3.0	
	Spindle		kw	7.5 / 5.5	3.7 / 2.2
Dimonaiona	WxDxH		mm	2320x3328x2617	2185x3328x2617
Dimensions	N.W.		kgs	5500	5300

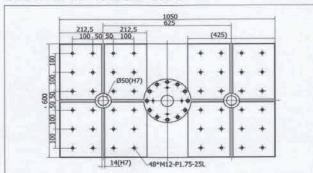
#### STANDARD ACCESSORIES

- Spindle air blow device.
- Double PL lights for working area and parts change
- Tool coolant system and big flow chip flushing system.
   Pressure detected automatic lubrication system and precision lubrication oil filter.
- · LED high brightness dual-color alarm light.
- · One-piece double layer heat isolated electric cabinet includes heat exchanger.
- · Tool kits and tools.
- Table with twin working area.
- Pneumatic type table distributor. Each working area is equipped with one set of air circuit.

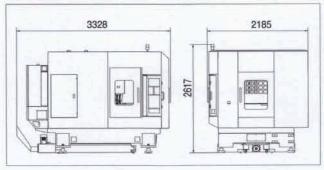
#### **OPTIOAL ACCESSORIES**

- High speed spindle BT#40, 15000 rpm. BT#30, 24000 rpm.
- Extra low inertia spindle motor.
- · Increase motor power.
- High pressure coolant through spindle (20 BAR)
- · Automatic tool length measurement with breaking
- 4th axis rotary table (for both working tables also).
- Thermal compensation system.
- Transformer, regulator.

#### **WORKING TABLE SIZE**



#### DIMENSIONS



#### CONTROL SPECIFICATIONS

	Mits	Fanuc		
	M70-VA	M70-VB	Oi-MD(B)	
CPU	64 bit		32 bit	
Max. controlled axes	8	5	5	
Max. simultaneous axes	4	4	4	
Program storage length	25	128K		
Macro variables common	400	400	400	
Tool offset sets	200	200	200	
Conversational programming	0	0	0	
Multi-language display		0		
Memory card front-loading		0		
Ethernet		0		
High speed and accuracy machining code	G05 P10000	G05.1 Q1	G05.1 Q1	
RS-232 interface		0		
Program route simulation		0		
Handwheel feed program simulation	(	X		
Program buffer correction		)	X	

O:Standard X:None

Agent:		