

Always Ahead

VTURN A200

- *One-piece slant bed*
- *C-axis and Y-axis available*
- *DDS built-in spindle and subspindle available*
- *Servo turret with high thrust force*
- *Box slideways (X/Z) with high rapid feed 24 m/min*
- *Rotary operation panel*



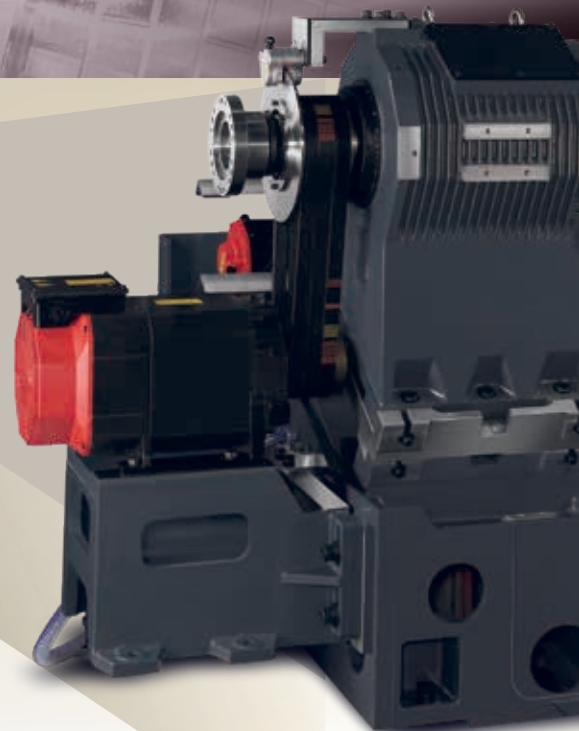
Victor Taichung – an established ISO 9001, 14001 & 45001 company



Ahead of Performance

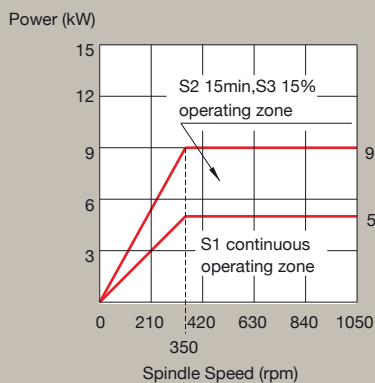
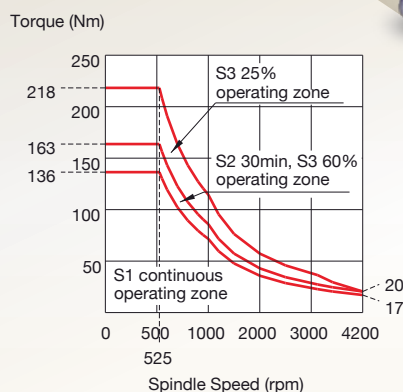
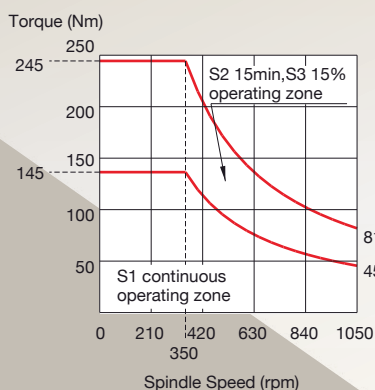
Vturn-A200 Turning Center

- One piece 30° slant bed
- Large swing diameter 720 mm
- 8" Power chuck / 4200 rpm
- Z-axis travel 600 mm
- High thrust force 1583 Nm
- High rapid feed 24/24 m/min (X/Z)
- Shortened belt driven spindle

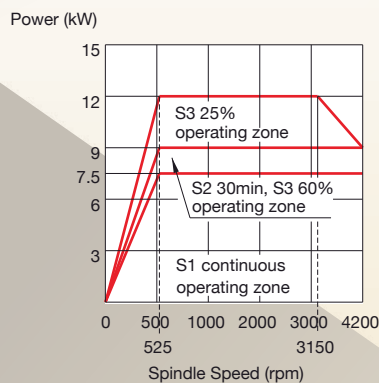


Spindle 12 KW (S3-15%)

- Spindle output 245 Nm (S3-15%)
- Low base speed 350 rpm only
- NN type (roller type) bearings
- Shortened belt length
- Victor Taichung's own spindle



Low winding

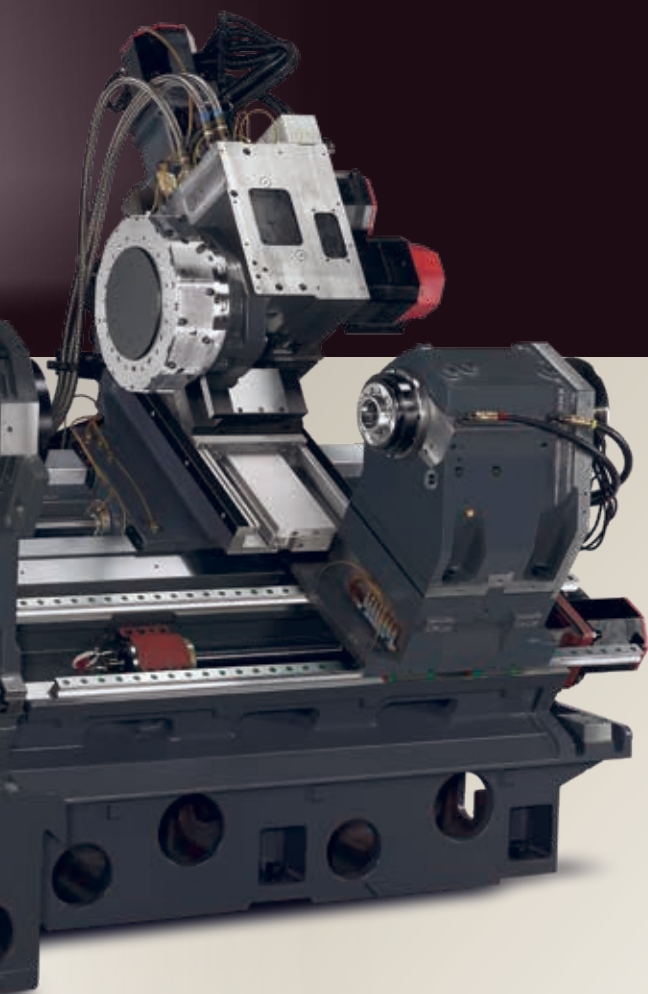


High winding

**Conventional design
with much longer belts**



Fanuc motor αiIP15



Certificated Casting

GA350

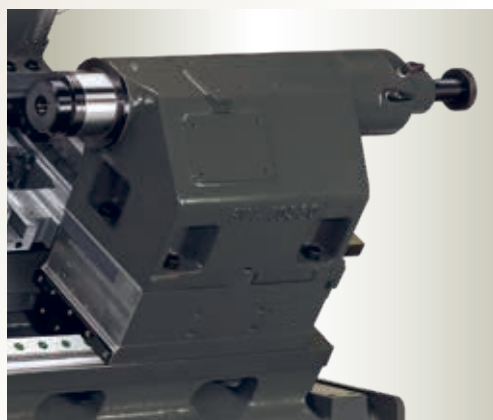
Boxways 65/80 mm (X/Z)

- High rapid feeds 24/24 m/min
- Smooth operation guaranteed
- Victor Taichung's own casting
- Machine weight 6500 kg



Servo Turret 1.0 sec. (adjacent tools)

- Victor Taichung's own turret
- Turret indexing time 1.0 sec (adj.), 1.45 (opposite)
- High thrust (Z-axis) 1583 kgf (15.5 kN)
- Milling turret available (3-piece coupling)



Tailstock MT-4

- Tow along by turret
- Opt. NC tailstock (driven by E-axis motor)
- Opt. Subspindle available to complete a part in one set-up

Ahead of Performance

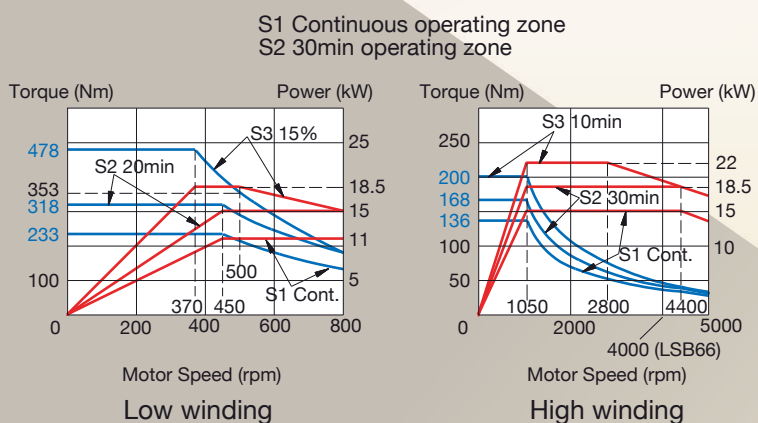
C-axis & Y-axis Application

- Optional C-axis by belt-driven spindle or by built-in spindle
- Belt-driven spindle good for drilling/milling
- Built-in DDS spindle good for contour milling
- Available with subspindle (opt.)

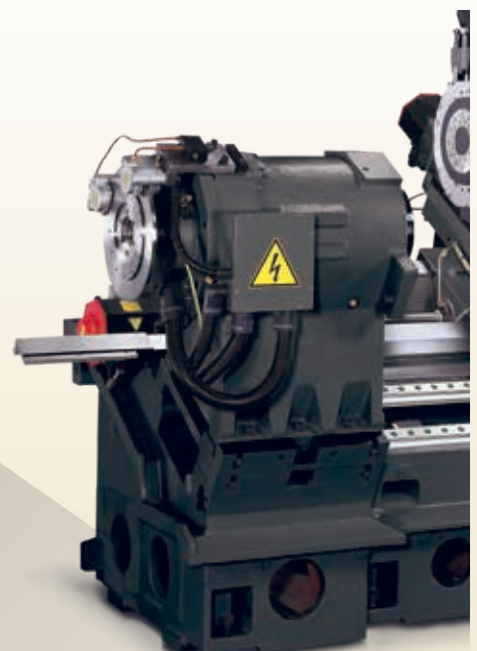


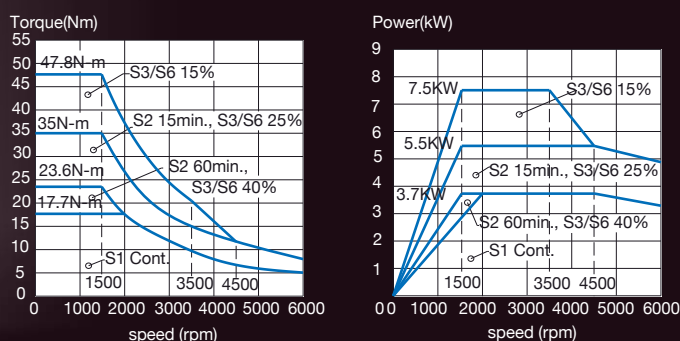
(opt.) DDS Spindle 18.5 KW (S3-15%)

- 5000 rpm / 8" chuck
- Good for contour milling
- Spindle output 478 Nm (S3-15%)
- Low base speed 370 rpm only
- NN type (roller type) bearings



Fanuc Bil 180M/6000





Fanuc β il 3/12000

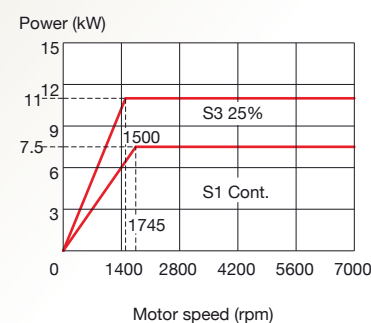
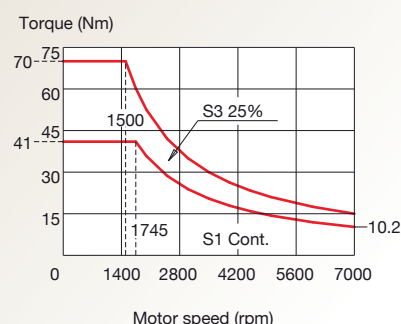
BMT-55 Milling Turret

- 3-piece coupling
- 12 stations live tools (half indexing 24 stations)
- Milling power 7.5 kW (S3-15%) / 4000 rpm (opt. 6000 rpm)



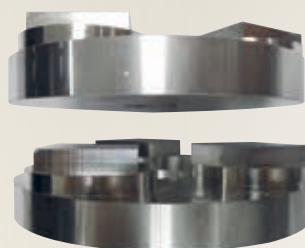
Subspindle 11 KW (S3-25%)

- DDS built-in spindle
- Wide span sits on "roller type" linear motion guideways
- 5" chuck / 7000 rpm
- Part changeover time: 20 sec.



Fanuc Bil 112S/15000

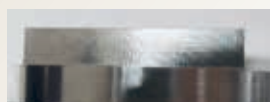
Milling tests on Aluminum parts



Belt-driven spindle



Built-in spindle



High accuracy and repeatability

Spindle type	Spindle acc / deceleration (sec.)	Torque (Nm) (con./30min)	Indexing accuracy (angular positioning)	Repeatability	Squareness	Parallelism	Cp value
Belt-driven	5/4.5	150/245	± 0.05°	± 0.018°	± 0.02mm	± 0.025mm	1.6 (ID) 2.4 (OD)
Built-in	4.7/3.9	172/234.5	± 0.02°	± 0.0018°	± 0.01mm	± 0.01mm	3.0 (ID) 2.4 (OD)

Standard and Options

- Fanuc Oi-TF Plus (type-1) control with 10.4" screen
- Programmable tailstock (MT-4)
- Pressure gauge in front
- Rotary operation panel
- Door moving along LM guideways
- Coolant flush onto Z-axis covers
- Built-in LED light
- Chip conveyor



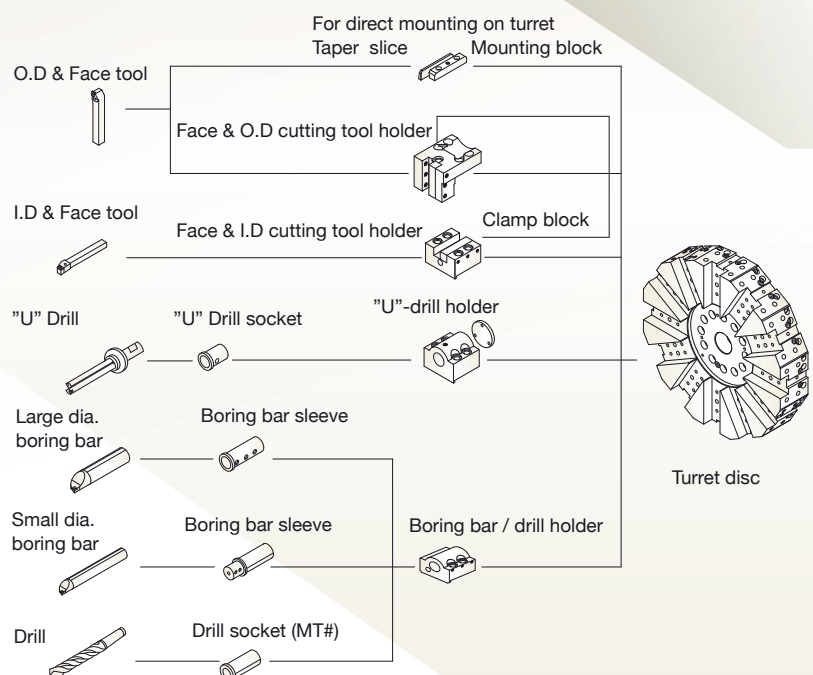
Chip conveyor (std.)

Coolant flush (std.)



Tooling accessories (excl. BMT turret model)

Tools \ Model	Vturn-A200
Tool shank for turret disk	20 mm
Maximum boring bar Dia,	32 mm
Face + OD cutting tool holder	2
Face + ID. cutting tool holder	1
Boring bar holder	
32 mm	6
40 mm	-
50 mm	-
Boring bar sleeve	
8 mm	1
10 mm	2
12 mm	2
16 mm	2
20 mm	2
25 mm	2
32 mm	-
Drill socket	
MT1	Opt.
MT2	1
MT3	Opt.
MT4	-
'U' Drill holder	
32 mm	1
40 mm	-
'U' Drill socket	
20 mm	1
25 mm	1
32 mm	-



VICTOR Taichung's FANUC Oi-TF Plus 10.4" Control (Type I) Specifications

Standard

ITEM/SPECIFICATION

DESCRIPTION

Controlled Axes:

1.	Controlled axes	2 Axes (X, Z)
2.	Simultaneous controlled axes	2 Axes
3.	Least input increment	0.001mm
4.	Least command increment	0.0005mm (X) / 0.001mm (Z)
5.	Command system	Incremental / Absolute
6.	HRV Control	HRV3+
7.	Unexpected disturbance torque detection (AIR-BAG)	Std.
8.	Backlash compensation	Std.
9.	Stored pitch error compensation	Std.

Operation & Program Input:

1.	Input / Output interface	RS-232, PCMCIA Card, USB
2.	Tool offset	99 sets
3.	Sequence number	N5-Digit
4.	Program number	O8-Digit
5.	Program name	31-characters
6.	M code function	M3-digit
7.	S code function	S4-digit
8.	T code function	T4-digit
9.	Positioning	G00
10.	Linear interpolation	G01
11.	Circular interpolation	G02, G03
12.	Programmable data input	G10
13.	Plane selection	G17-G19
14.	Inch / Metric conversion	G20 / G21
15.	Reference position return	G28, G30
16.	Thread cutting	G32, G34
17.	Threading retract	Std.
18.	Tool nose radius compensation	G40-G42
19.	Work piece coordinate system	G52-G59
20.	Macro, Sub program call	G65, M98, M99 (10 folds nested)
21.	Multiple repetitive cycle I & II	G70-G76
22.	Canned cycle for drilling	G80-G89
23.	Canned cycles	G90, G92, G94
24.	Program stop / end	M00-M02 / M30
25.	Rigid tapping (Spindle)	M29
26.	Manual Guide i	Std.
27.	Optional blocks skip 2-9	Std.

Feed Function:

1.	Manual handle feed rate	X1, X10, X100
2.	Rapid traverse rate	F0, 25%, 50%, 100%
3.	Cutting feed rate	0-150%
4.	Spindle override	50-120%
5.	Feed per Minute / Revolution	G98 / G99

Edit Operation:

1.	Part Program Storage Length (in total)	5120m (2MB)
2.	Number of Registerable programs (in total)	1000
3.	Part Program Editing	Std.
4.	Memory card program entry count extension (Max. 1000)	Std.

C Axis Function:

1.	Polar coordinate interpolation	Std. (G112/G113)
2.	Cylindrical interpolation	Std. (G107)
3.	CS contouring control	Std.
4.	Coordinate System Rotation	Std.

OPTIONS

With hardware included

1.	Tool life management	☐
2.	Program restart	☐
3.	Data server (with PCB and CF card 1GB)	☐
4.	Ethernet/IP (to be linked to robot)	☐
5.	PROFIBUS-DP (to be linked to robot)	☐
6.	CC-Link (to be linked to robot)	☐
7.	Fast Ethernet (required for SCADA Web with additional RJ45 port)	☐

Without hardware included

8.	Circular thread cutting (G35, G36)	☐
9.	AICC-1 (G5.1 Q1, 40 blocks)	☐
10.	AICC-2 (G5.1 Q1, 200 blocks)	☐
11.	Helical interpolation (C-axis only)	☐
12.	Arbitrary speed threading	☐

Tool presetter (opt.)



Oil skimmer (opt.)



Part catcher (opt.)



Machine Color Option



 Standard

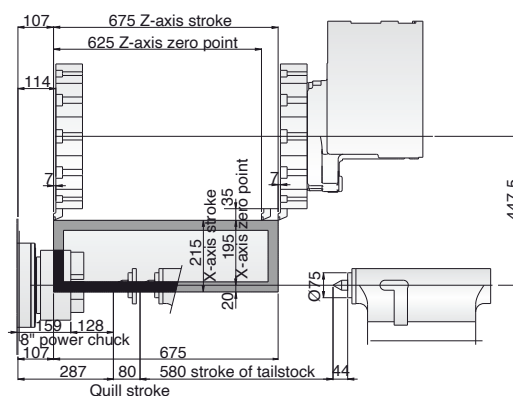
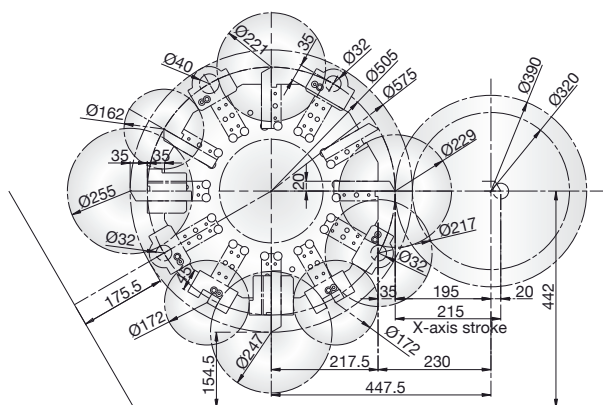


RAL-7024

Interference Chart / Machining Range

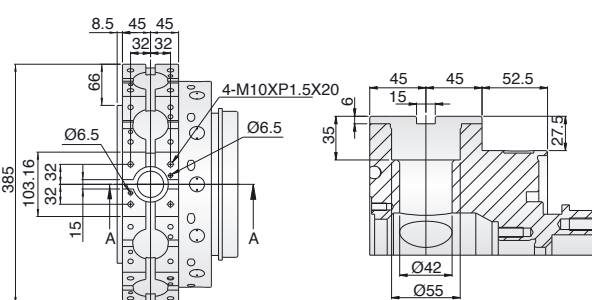
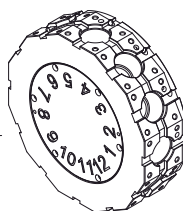
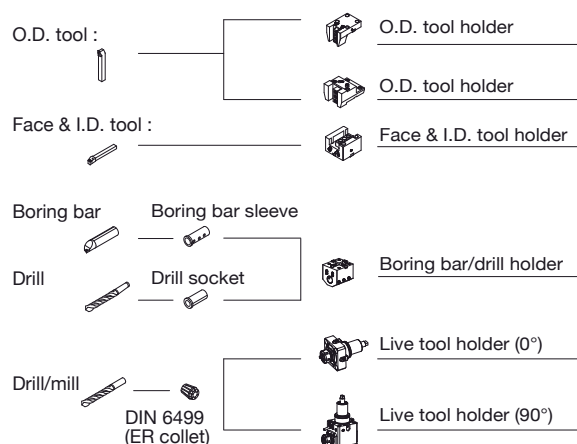


Vturn-A200

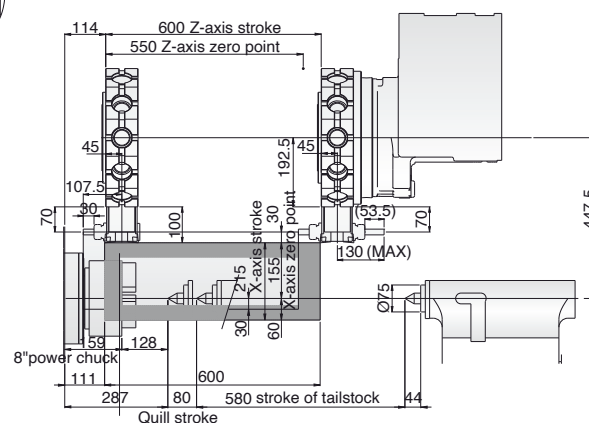


C-axis Application

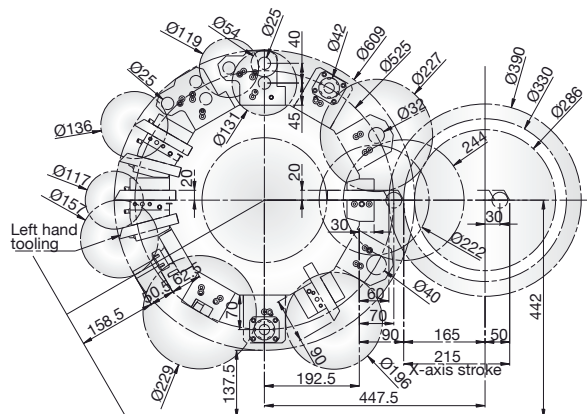
(Bolt Mounted Milling Turret)



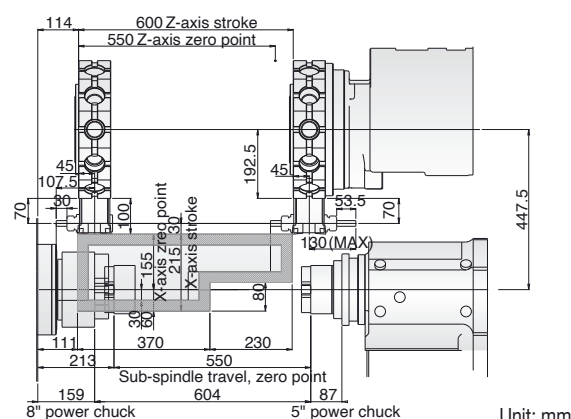
Vturn-A200CM



Vturn-A200(S)CM



Vturn-A200(S)CM



Unit: mm

Vturn-A200Y(S)CM



Machine Layout



Machine Specification

Item \ Model	Unit	Vturn-A200 (SM)	Vturn-A200CM (SCM) Vturn-A200YCM (YSCM)
Capacity	Swing over bed	mm 830 (limited by front door)	830 (limited by front door)
	Swing over carriage	mm 720	720
	Between centers	mm 604	604
	Max. turning dia.	mm 390	390 (390)
	Std. Turning dia.	mm 320	286 (286)
	Bar capacity	mm 52 (opt. 66)	52 (opt. 66)
Axis Feeds	X axis travel	mm 195+20 (160+50)	165+50 (165+50)
	Z axis travel	mm 600	600
	E axis travel (subspindle)	mm - (550)	- (550)
	Y axis travel	mm -	±45
	Rapid feedrate	m/min X/Z: 24/24 (E: 15)	X/Z: 24/24, Y: 10 (E: 15)
	Feed servo motor	KW X: 3, Z: 4 (E: 2.5)	X: 3, Z: 4, Y: 3 (E: 2.5)
	JOG feedrate	mm/min X/Z=0~1260	X/Z=0~1260
	Ballscrew dia. x pitch	mm Ø32×P6 (X), Ø40×P8 (Z) Ø40×P8 (E)	Ø32×P6 (X), Ø40×P8 (Z) Ø32×P6 (Y), Ø40×P8 (E)
Spindle	Max. spindle speed	rpm 4200 (belt-driven)	4200 (belt-driven) Opt. 5000 (built-in)
	Spindle nose (chuck)	Inch A2-6 (8")	A2-6 (8")
	Spindle bore	Mm 62 (opt. 76)	62 (opt. 76)
	Spindle motor (cont./30min)	KW 7.5/9 (αilP15)	7.5/9 (αilP15) opt. 15/18.5 (Bil180M)
	Bearing inside dia.	mm 100 (opt. 110)	100 (opt. 110)
Sub-spindle (E axis)	Max. spindle speed	rpm 7000 (built-in)	7000 (built-in)
	Spindle nose (chuck)	inch A2-5 (5")	A2-5 (5")
	Spindle motor (cont./25%)	KW 7.5/11 (Bil112S)	7.5/11 (Bil112S)
	Bearing Inside dia.	mm 75	75
	Spindle bore	mm 42	42
	Bar capacity	mm 30	30
Turret	No. of tools	no. 12	12
	No. of live tools	no. -	12 (DIN 1809)
	Tool shank size	mm 20 (opt.25)	20
	Max. boring bar dia.	mm 40	BMT-55
	Exchange time (T-T)	sec 0.3	0.3
	Exchange time (including disk up & down)	sec 1.04 (Adjacent) 1.45 (opposite)	1.04 (Adjacent) 1.45 (opposite)
	Milling speed	rpm -	4000 (opt. 6000)
	Milling motor (cont./15%)	KW -	3.7/7.5 (βil3/12000)
Tailstock	Quill diameter	mm 75	75
	Quill taper	MT#4	MT#4
	Quill stroke	mm 80	80
Accuracy	Positioning accuracy (bi-directional)	mm 0.01	0.01
	Repeatability	mm ±0.004	±0.004
Machine	Coolant tank capacity	L. 330	330
	NC controller	Fanuc Oi-TF Plus (10.4")	Oi-TF Plus (10.4")
	Power requirement	KVA 21 (28)	35 (44)
	L×W×H (with chip conveyor)	mm 3882 x 2430 x 2056	3882 x 2430 x 2056 3882 x 2430 x 2286
	Net weight	kg 6500 (6700)	6800 (7000)

* Machine and controller specifications are subject to change without notice.

Standard Accessories:

- Fanuc OiTF Plus (10.4", type-1) control
- Power chuck with soft jaws
- Programmable tailstock
- Chip conveyor with cart
- Fully enclosed splash guarding
- Hand-wheel
- Tool holders (only for standard turret)
- Coolant flush on Z-axis cover
- 3 step warning light
- Fanuc e-book (CD)

Optional Accessories:

- Air conditioner for electrical cabinet
- Manual tool presetter (Renishaw®)
- Auto tool presetter (Renishaw®)
- Parts catcher (swing type)
- KITAGAWA® hydraulic chuck
- Auto door
- Bar feeder interface
- Air blow system
- Higher pressure coolants
- Oil skimmer
- Sub-spindle (direct drive)
- Large spindle bore
- Fanuc manuals
- Hard jaws



THE VICTOR-TAICHUNG COMPANIES

TAIWAN

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- Victor Fortune (PTY) Ltd.
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- Victor (Thailand) Co. Ltd.
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INDONESIA

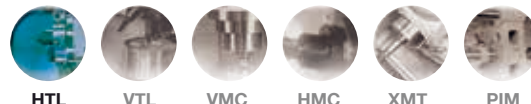
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HTL

VTL

VMC

HMC

XMT

PIM



was also marketed under the brand names **VICTOR** (outside North America) and **FORTUNE** KM1GE21EA