VictorTaichung

www.tuv.com
TÜVRheinland
ID:0091003197

Vturn -A16 /A20 /A26

Always Ahead

- *High Cpk value*
- *DDS built-in spindle*
- *Victor's own servo turret*
- *Minimal chip build-up*
- *Front removal coolant tank*

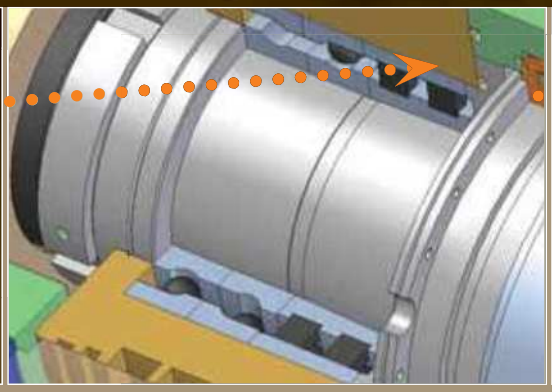
Victor Taichung – an established ISO 9001 & 14001 company

Extreme Rigidity and

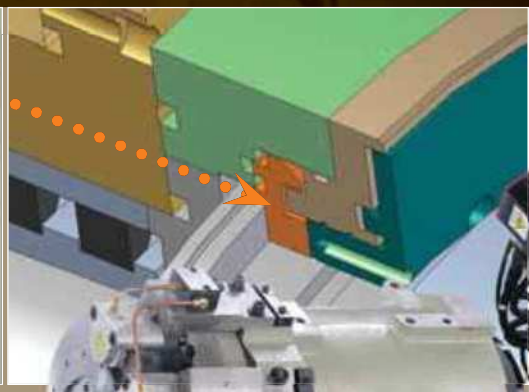
Latest technology built-in spindle (also called DDS- Direct Drive Spindle) is included as standard, Victor Taichung's new A-series lathe features utmost part surface finish quality and highest angular accuracy through her own turret built in-house.

Oil cooling jacket

NN type spindle bearings



4-layer labyrinth design



Direct Drive Spindle (DDS)

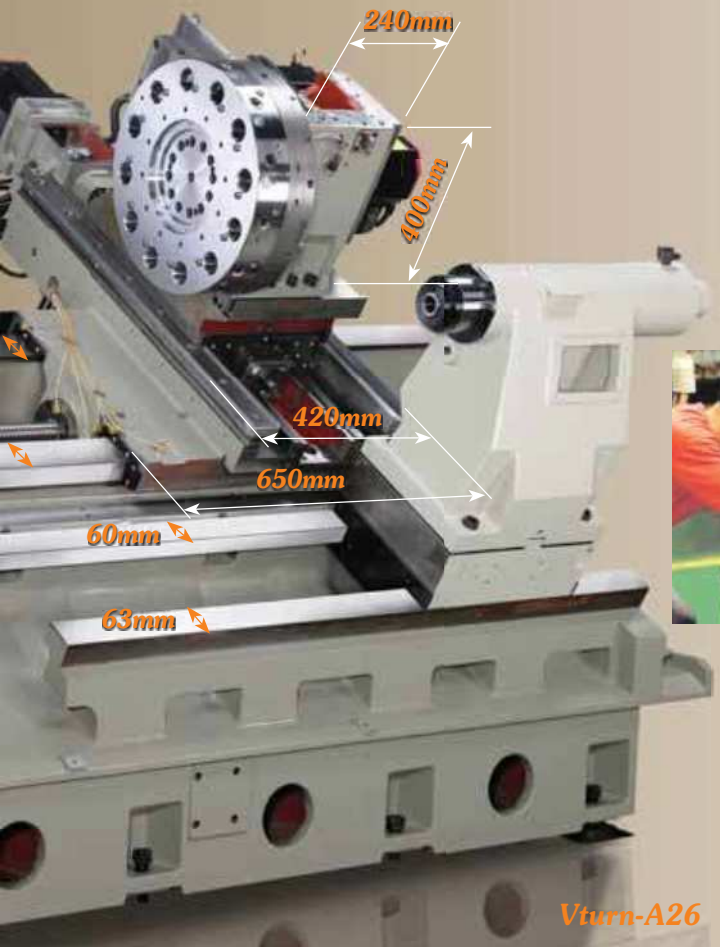
- The spindle motor is integrated inside the headstock to eliminate the vibrations from the belt or gear drives. This improves the spindle run-out and leads to a greater surface finish and roundness. The integral unit has lower inertia than traditional drives to allow faster acceleration time and to improve overall efficiency.
- High Cpk value is guaranteed for consistent high accuracy due to less vibration. Since belt tension adjustment is no longer required so tool service life is prolonged and tool insert costs are lowered. This high accuracy machine can be maintained continuously from machine installation.
- Dual winding spindle motor (similar as a 2-step gearbox installed) offers the extra torque output at low spindle speed than conventional belt-driven spindle.
- Wide span box slide-ways supports this bulky headstock which is circulated by oil cooling jacket to prevent the heat build-up in the motor and to minimize thermal expansion.
- NN type bearing (roller bearing) design increases loading capacity to facilitate heavy cutting and a 4-layer labyrinth cover further protects spindle bearings.
- Spindle oil cooler is included as standard to prolong bearing service life.
- Angular encoder is included as standard for Vturn-A16CV/A20CV/A26CV model to guarantee the machining accuracy ±0.01˚(resolution±0.001˚) for C-axis milling application.

Reliability

VICTOR-TAICHUNG

Servo Driven Turret

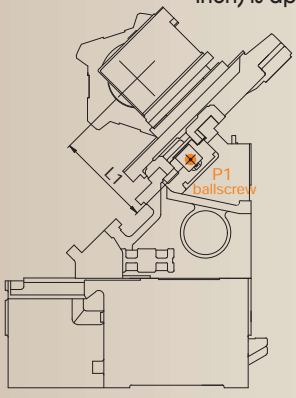
- Fast tool indexing time 0.3 second (T-T).
- Wide carriage supports the heavy turret steadily for reliable and continuous turning.
- 12 station turret (face mounted for CV model).
- Maximum milling speed of 3000 (for CV model) by servo motor maintains a near constant torque output over the complete speed range.
- VDI milling turret with coupling specification DIN-5480 allows quick tool changeover with commercially available VDI tool holders.



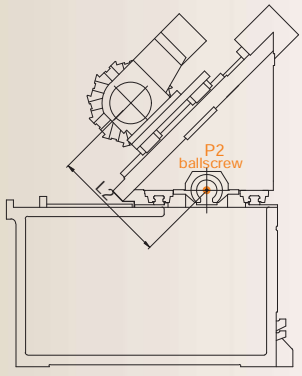
GENUINE SLANT BED by ONE PIECE Casting

- Superior rapid feed rates 24 / 24 m/min on X / Z axes accomplished by increased motor speed & power while maintaining high thrust force for the cutting tool.
- Z-axis ballscrew is mounted on the slant bed (P1) instead of flat machine base (P2) to minimize the distance from ballscrew to tool insert distance and thus assure the cutting stiffness.
- One piece slant bed with homogenous Meehanite® casting distributes stress thru-out structure.
- To ensure perfect alignment in the machine structure the bed is machined in a single set-up on a large five-face machining center.

- Pre-tensioned double anchored ballcrews directly coupled with the servo motors allows heat absorption without displacement.
- Hand scraped wedge structure maintains trapped film of oil between slideway and undercarriage for smooth and even travel.
- Minimum hand-scraping density 16 DPI (Dots Per Inch) is applied on the related moving surfaces.



Genuine



Pseudo (By triangular carriage)

Enhanced Performance and

With more than 55 years of experience on lathe manufacturing, Victor Taichung's Vturn A-series lathes have upgraded the structure rigidity on the headstock, box slideways, turret, carriages and even the coolant and chip disposal to enhance the machine reliability.

Coolant flush onto cover

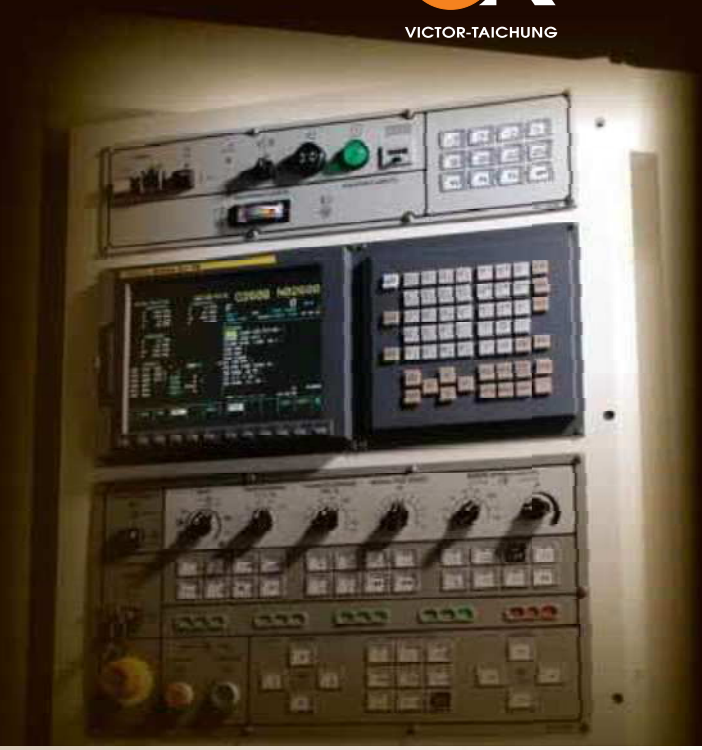
Top view

Minimum chip build-up below chuck

- No box slideways and no covers below the chuck (except sub-spindle models) reduce chips build up inside the machine and reduce the clean-up frequency.
- No cover design also increases available space inside lathe and makes it easy to mount steady rests even after machine installation.
- Coolant flush onto the Z-axis cover further reduces the chip accumulation.
- High volume L-type coolant tank removed from the machine front reduces the heat build-up by coolants to enhance machining accuracy.
- The coolant tank removed from the machine front reduces space floor requirement.

Accuracy

VICTOR-TAICHUNG

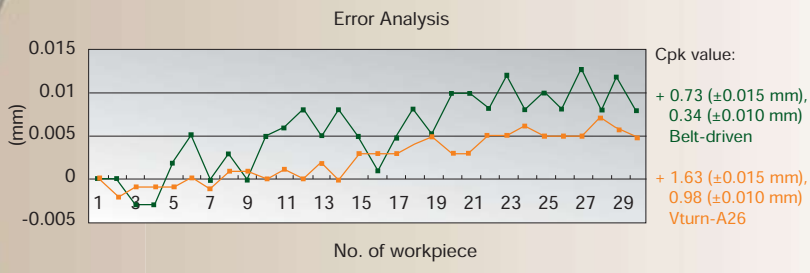


Reliable Fanuc Control System

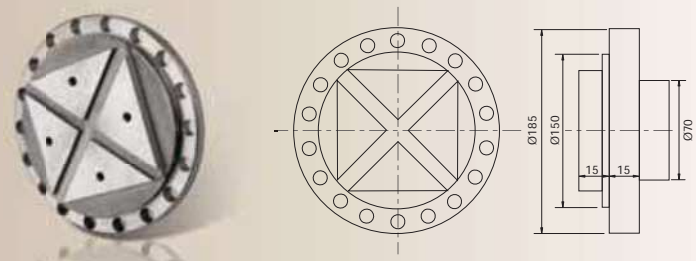
- The proven reliability of Fanuc® 0i-TD controller is combined with Victor's own custom designed PLC to offer the customer an integral control system with utmost reliability.
- Optional 10.4 monitor to enable the conversational function Manual Guide i makes the programming easier.
- Rotary control box for easy operation
- Remote Manual Pulse Generator (hand-wheel) is offered as standard for easy tool calibration.
- Large keypad for easy operation

Always Accurate!

High CPK for consistent accuracy (O.D. turning, Part dia. 30mm, 30 pc's.)



High accuracy and repeatability



	Spindle acc /deceleration (sec.)	Torque (kg.m) (con./30min)	Indexing accuracy (angular positioning)	Repeatability	Squareness	Parallelism	Cp value
Belt-driven	5/4.5	32.1/40.3	±0.05°	±0.018°	±0.02mm	±0.025mm	1.6 (ID) 2.4 (OD)
Built-in Vturn-A26	**4.7/3.9**	**41.7/51.4**	**±0.02°**	**±0.0018°**	**±0.01mm**	**±0.01mm**	**3.0 (ID) 2.4 (OD)**

Standard Accessories

Ergonomic design for safe & easy operation

- **Fully enclosed guarding** with the **chip conveyor** fitted into the machine bed ensures no access to the machine during operation and no coolant leakages
- **High outlet chip conveyor is bolted on the machine bed** for larger space available for the chip collectors
- **Rotary control box** with **big size keypads** facilitates the easy operation
- **Hydraulic gauges on the front** so they can be easily monitored during operation
- **Coolant tank is accessed from the front of the machine** and **High pressure coolant** by Grundfos® SPK2-3 improves the machining quality on part surface. The oil skimmer (option) can be installed on the coolant tank to separate wasted lube oil from coolants.
- **Spindle oil cooler** is included for DDS spindle and **air conditioner for the electrical cabinet** is included to prolong service life for the costly control components

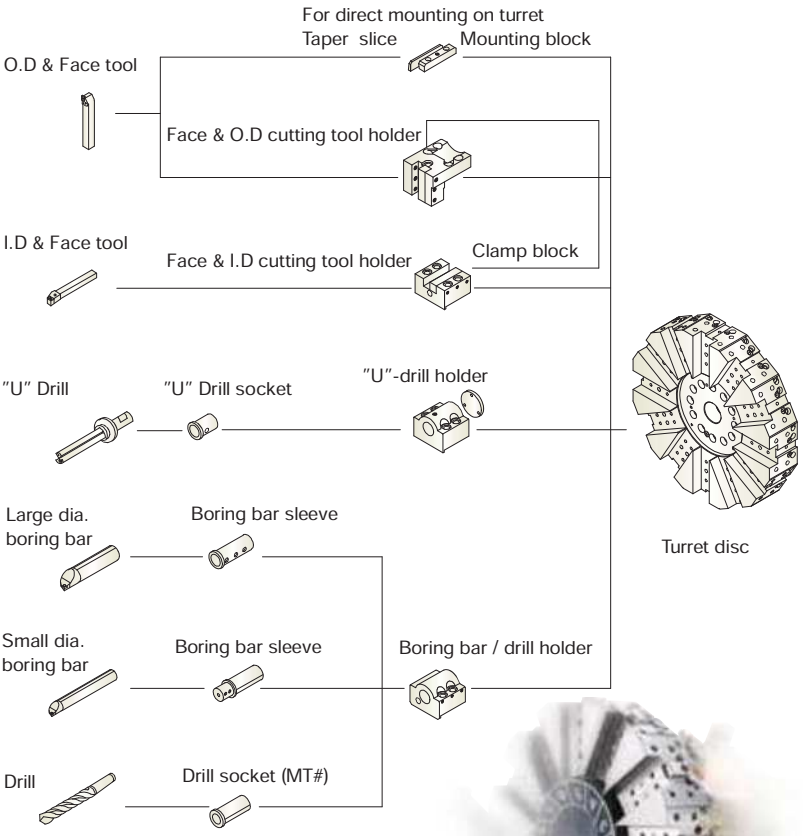
Powerful hydraulic chuck

- Hydraulic 3 jaw hollow chuck is foot operated for safe and easy operation

Fully programmable tailstock

- Heavy body casting to soak up vibrations
- Slideway mounted with hydraulic clamping
- Fully programmable with turret "tow along" for tailstock body

Tooling accessories (excl. VDI turret model)



Tools \ Model	Vturn-A16	Vturn-A20	Vturn-A26
Tool shank for turret disk	20 mm	20 mm	25 mm
Maximum boring bar Dia,	32 mm	32 mm	50 mm
Face + OD cutting tool holder	2	2	2
Face + ID. cutting tool holder	1	1	1
Boring bar holder			
32 mm	6	6	-
40 mm	-	-	6
50 mm	-	-	1
Boring bar sleeve			
8 mm	1	1	1
10 mm	2	2	2
12 mm	2	2	2
16 mm	2	2	2
20 mm	2	2	2
25 mm	2	2	2
32 mm	-	-	2
Drill socket			
MT1	Opt.	Opt.	-
MT2	1	1	1
MT3	Opt.	Opt.	1
MT4	-	-	1
'U' Drill holder			
32 mm	1	1	-
40 mm	-	-	1
'U' Drill socket			
20 mm	1	1	-
25 mm	1	1	1
32 mm	-	-	1

Door Color Options

RAL 2008 (Victor's orange)

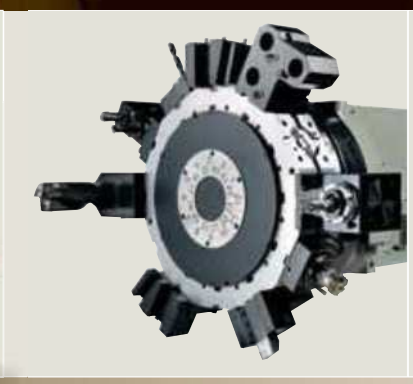
RAL 7024 (Graphite grey)

YCV model

Victor's own star-type turret for milling application

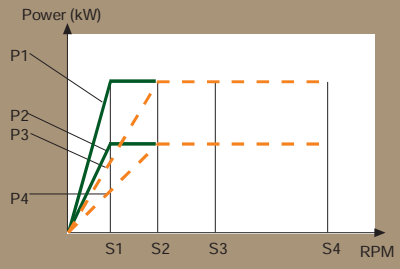
With the 2nd ballscrew inside the turret carriage, YCV model equipped with Victor's own star-type VDI turret implements the milling operation along vertical direction (perpendicular to the X-axis) at a travel ±45mm (Vturn-A16/A20Y) or ±55mm (Vturn-A26Y) in Y-axis. Fanuc αi22is motor is installed Fanuc αi22i motor is installed to offer 4.5 kW/22 Nm milling power up to 4000 rpm along the main spindle and/or sub-spindle.

BMT turret (Bolt Mounted Turret)



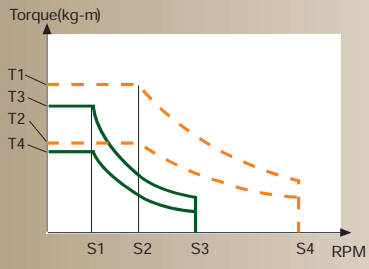
VDI turret.

Spindle Torque Output Diagram



P1 (*30 min. in low winding)
P2 (cont. in low winding)
P3 (*30 min. in high winding)
P4 (cont. in high winding)

S1 (base RPM in low winding)
S2 (base RPM in high winding)
S3 (max. RPM in low winding)
S4 (max. RPM in high winding)



T1 (*30 min. in low winding)
T2 (cont. in low winding)
T3 (*30 min. in high winding)
T4 (cont. in high winding)

S1 (base RPM in low winding)
S2 (base RPM in high winding)
S3 (max. RPM in low winding)
S4 (max. RPM in high winding)

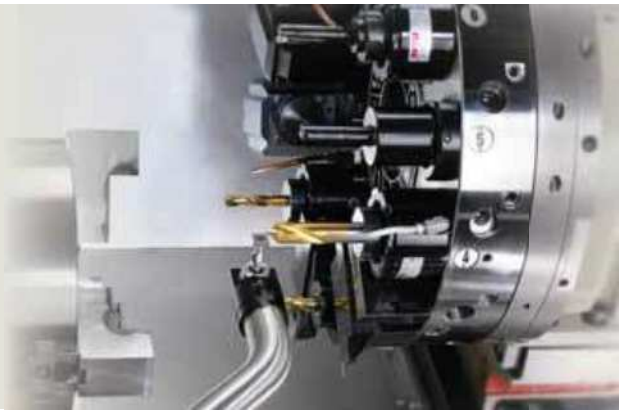
**30 min. may be replaced by 15%, 15 min or 20 min. according to Fanuc technical specification*

Model	Spindle Motor	Base Speed (rpm)		Max. Speed (rpm)	P. _Cont. kW(HP)	P. _(kW)	Tor. _Cont. (kg-m)	Tor. (kg-m)
Vturn-A16	αB160Mi	Low winding	300	900	5.5	7.5 (15%)	17.8	24.3 (15%)
		High winding	850	6000	11	18.5 (15%)	12.6	21.2 (15%)
Vturn-A20	αB180Mi	Low winding	450	800	11	15 (20 min.)	23.8	32.4 (20 min.)
		High winding	800	5000	11	15 (30 min.)	13.3	18.2 (30 min.)
Sub-spindle	αBil 112M	Low winding	1500	6000	10	15 (10 min.)	6.5	9.73 (10 min.)
		High winding	6000	7000	6	7.4 (30 min.)	1.46	1.8 (30 min.)
Vturn-A26	αB200Mi	Low winding	485	900	15	22 (30 min.)	30.1	44.2 (30 min.)
		High winding	900	3500	15	22 (30 min.)	16.2	23.8 (30 min.)
Subspindle	αB160Mi	Low winding	300	900	5.5	7.5 (15%)	17.8	24.3 (15%)
		High winding	850	4500 (opt. 6000)	11	18.5 (15%)	12.6	21.2 (15%)

Optional Accessories

Tool presetter (Renishaw)

- No longer to perform tedious time consuming cuts to determine tool geometry, the operator needs only to touch the tool tip to the tool presetter sensor (Renishaw® repeatable arm with RP3 probe) to get the tool geometries once the reference tool is determined. While not only reducing tool set-up time, manual tool presetter also reduces down time due to tool breakage.
- Manual tool presetter (MTP): Arm is rotated manually.
- Auto tool presetter (ATP): Arm is rotated automatically by programming.



Parts catcher (swing type)

- To enhance the machine's productivity, a parts catcher is available to work in conjunction with bar feed interface.
- This type of fully programmable parts catcher is mounted next to the chuck with a hydraulic actuator to rotate the extending rod bolted with the catching bucket which rests against the door of the machine during machining. This bucket can also catch the part from the sub-spindle.

- Photo for Vturn-A26

Manual / Auto Steady Rest

- The large bar capacity and long bed of Vturn-A26 make this model ideal for long shaft machining.
- No telescopic cover design on the slideways for the tailstock makes it even easier for installing steady rest.
- Victor Taichung can offer cost-effective manual steady rest with manually adjusted rollers or simply mounting block for hydraulic steady rests to suit this job for shaft turning.

Sub-spindle extension

- The sub-spindle allows back side machining to complete the whole machining process in one set-up to minimize part addressing time.
- 5" chuck for Vturn-A16/A20S(C)V and 6" chuck for Vturn-A26S(C)V, the built-in sub-spindle synchronizes with main spindle for quick part changeover at high spindle speed.
- The sub-spindle is driven forward using its own servo-drive, with synchronous rotation between both spindles used to automatically transfer the part. This machine within sub-spindle is fitted with 12 station VDI turret capable of back face machining.

Machine Specifications

Item \ Model		Vturn-A16 (SV) Vturn-A20 (SV)	Vturn-A16CV (SCV) Vturn-A20CV (SCV)	Vturn-A16YCV (YSCV) Vturn-A20YCV (YSCV)
Capacity				
Swing over bed	mm	720 (700 limited by front door)	720 (700 limited by front door)	720 (700 limited by front door)
Swing over carriage	mm	550	550	550
Between centers	mm	630	630	630
Max. turning dia.	mm	390	330	300
Std. Turning dia.	mm	320 (264)	270 (264)	264
Bar capacity	mm	40 52	40 52	40 52
Travels				
X axis stroke	mm	195+25 (165+35)	135+115 (165+35)	150+35
Z axis stroke	mm	600	600	600
B axis stroke (subspindle)	mm	- (550)	- (550)	- (550)
Y axis stroke	mm	-	-	±45
Spindle				
Max. spindle speed	rpm	6000 5000	6000 5000	6000 5000
Spindle nose (chuck)	in	A2-5 (6") A2-6 (8")	A2-5 (6") A2-6 (8")	A2-5 (6") A2-6 (8")
Spindle bore	mm	52 62	52 62	52 62
Bearing inside dia.	mm	90 100	90 100	90 100
Sub-spindle (B-axis)				
Max. spindle speed	rpm	7000	7000	7000
Spindle nose (chuck)	in	A2-5 (5")	A2-5 (5")	A2-5 (5")
Bearing inside diameter	mm	75	75	75
Spindle bore	mm	41	41	41
Bar capacity	mm	33	33	33
Turret				
No. of tools	no.	12	12	12
No. of live tools	no.	-	12 (DIN-5480)	12 (DIN-5480)
Tool shank size	mm	20 (opt. 25)	20 (opt. 25)	20 (opt. 25)
Max. boring bar dia.	mm	32 (VDI-30)	VDI-30	VDI-30
Exchange time (T-T)	sec	0.3	0.3	0.3
Exchange time (including disk up & down)		1.05 (Adjacent) 1.44 (opposite)	1.05 (Adjacent) 1.44 (opposite)	1.05 (Adjacent) 1.44 (opposite)
Milling speed	rpm	-	3000 (4000)	4000
Tailstock				
Quill dia.	mm	75	75	75
Quill taper		MT#4	MT#4	MT#4
Quill stroke	mm	80	80	80
Feedrate				
Rapid feedrate	m/min	X/Z:24/24 (B: 15)	X/Z:24/24 (B:15)	X/Z:24/24 (B:15)
Cutting feedrate	mm/min	X/Z=0~1260	X/Z=0~1260	X/Z=0~1260
Motor				
Spindle motor	kW	B160Mi-5.5/7.5 B180Mi-11/15	B160Mi-5.5/7.5 B180Mi-11/15	B160Mi-5.5/7.5 B180Mi-11/15
Sub-spindle motor	kW	αBil 112M-10/15	αBil 112M-10/15	αBil 112M-10/15
Feed servo motor	kW	X:3, Z:3 (B:3)	X:3, Z:3 (B:3)	X:3, Z:3, Y:3 (B:3)
Milling motor	kW		4.5	4.5
Coolant				
Tank capacity	L	290	290	290
Controller				
FANUC		0i-TD	0i-TD (32i-B)	0i-TD (32i-B)
Machine				
Power requirement	kVA	32.4 (56.2)	37.4 (61.2)	40.7 (64.6)
L × W × H (with chip conveyor)	mm	4248 x 1752 x 1998	4248 x 1752 x 1998	4248 x 1752 x 2258
Net weight	kg	5900 (6200) 6000 (6300)	5900 (6200) 6000 (6300)	6000 (6300) 6400 (6700)

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

Vturn-A26/85 (SV) Vturn-A26/130 (SV)	Vturn-A26/85CV (SCV) Vturn-A26/130CV (SCV)	Vturn-A26/85YCV (YSCV) Vturn-A26/130YCV(YSCV)
900 (800 limited by front door)	900 (800 limited by front door)	900 (800 limited by front door)
700	700	700
910 1360	950 1400	950 1400
420 (381)	351 (381)	381
340 (294.5)	285 (294.5)	294.5
75	75	75
210+50 (190.5+69.5)	142.5+117.5 (190.5+69.5)	190+69.5
850 1300	850 1300	850 1300
- (830) - (1280)	- (830) - (1280)	- (830) - (1280)
-	-	±55
3500	3500	3500
A2-8 (10")	A2-8 (10")	A2-8 (10")
86	86	86
130	130	130
4500 (opt. 6000)	4500 (opt. 6000)	4500 (opt. 6000)
A2-5 (6")	A2-5 (6")	A2-5 (6")
90	90	90
52	52	52
40	40	40
12	12	12
-	12 (DIN-5480)	12 (DIN-5480)
25	25	25
50 (VDI-40)	VDI-40	VDI-40
0.3	0.3	0.3
1.05 (Adjacent) 1.44 (opposite)	1.05 (Adjacent) 1.44 (opposite)	1.05 (Adjacent) 1.44 (opposite)
-	3000 (4000)	4000
110	110	110
MT#5 (opt. MT#4)	MT#5 (opt. MT#4)	MT#5 (opt. MT#4)
100	100	100
X/Z:24/24 (B:15)	X/Z:24/24 (B:15)	X/Z:20/20, Y:7 (B:15)
X/Z=0~1260	X/Z=0~1260	X/Z=0~1260
B200Mi-15/22	B200Mi-15/22	B200Mi-15/22
B160M-5.5/7.5	B160M-5.5/7.5	B160M-5.5/7.5
X:3, Z:4 (B:3)	X:3, Z:4 (B:3)	X:4, Z:4, Y: 4 (B:3)
	4 (4.5)	4.5
360 410	360 410	360 410
0i-TD	0i-TD (32i-B)	0i-TD (32i-B)
50.0 (63.8)	56.3 (70.0)	63.8 (76.3)
4813 x 2100 x 1935 5493 x 2100 x 1935	4813 x 2100 x 1935 (2325) 5493 x 2100 x 1935 (2325)	4813 x 2100 x 2325 5493 x 2100 x 2325
7600 9000	7600 (7800) 9000 (9200)	7700 (7900) 9100 (9300)

VICTOR-TAICHUNG

Standard accessories:

- Hydraulic chuck with soft jaws
- Programmable tailstock
- Chip conveyor with cart
- Air conditioner for electrical cabinet
- Fully enclosed splash guarding
- Hand-wheel (Remote MPG for CV model)
- Tool holders (only for standard turret)
- SHOWA® lubrication pump
- Coolant flush on Z-axis cover
- 3 step warning light

Optional accessories:

- Hard jaws
- Tailstock center
- 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 by Grundfos® pump SPK4-8
- Oil skimmer
- Sub-spindle (direct drive)
- 12"chuck / 3000rpm
- Large spindle bore (75mm for Vturn-A20, 91mm for Vturn-A26)
- Gantry robot system
- Fanuc 0i-TD (10.4") with Manual Guide i
- Fanuc 31i/32i/18i/21i control
- Bolt mounted turret (BMT-55 for Vturn-A16/A20Y, BMT-65 for Vturn-A26Y)

Victor's Fanuc 0i-TD/21i-TB/18i-TB/32i-B Control Specifications

Standard:

ITEM	SPECIFICATION	DESCRIPTION
Controlled Axes:		
1.	Controlled Axes	2 Axes (X, Z)
2.	Simultaneous Controlled Axes	Position/Linear interpolation/Circular interpolation (2/2/2)
3.	Least Input Increment	0.001mm / 0.0001 inch / 0.001 deg.
4.	Least Input Increment 1/10	0.0001mm / 0.00001 inch / 0.0001 deg.
5.	Max. command value	±99999.999mm(±9999.9999in)
6.	Fine Acceleration & Deceleration Control	Std.
7.	HRV Control	Std.
8.	Inch / Metric Conversion	Std.(G20/G21)
9.	Interlock	All Axes / Each Axis / Cutting Block Start
10.	Machine Lock	All Axes / Each Axis
11.	Emergency Stop	Std.
12.	Over-travel	Std.
13.	Stored Stroke Check 1	Std.
14.	Mirror Image	Each Axis
15.	Chamfering on/off	Std.
16.	Follow-up	Std.
17.	Unexpected disturbance torque detection function	Std. (to be used to tool load monitoring)
18.	Position switch (with Victor's own PLC)	Std. (to be used for security)
Operation:		
1.	Automatic Operation	Std.
2.	MDI Operation	MDI B
3.	DNC Operation	Reader / Puncher Interface is Required
4.	DNC Operation with Memory Card	PCMCIA Card Attachment is Required
5.	Program Number Search	Std.
6.	Sequence Number Search	Std.
7.	Sequence number comparison and stop	Std.
8.	Buffer Register	Std.
9.	Dry Run	Std.
10.	Single Block	Std.
11.	JOG Feed	Std.
12.	Manual Reference Position Return	Std.
13.	Manual Handle Feed	1 Unit / Each Path
14.	Manual Handle Feed Rate	X1, X10, X100
Interpolation:		
1.	Positioning	G00
2.	Threading synchronous cutting	Std.
3.	Multiple threading	Std.
4.	Threading retract	Std.
5.	Continuous threading	Std. (G76)
6.	Variable threading	Std. (G34)
7.	Linear Interpolation	G01
8.	Circular Interpolation	G02, G03 (multi-quadrant is possible).
9.	Dwell	G04
10.	Skip Function	G31
11.	Reference Position Return	G28
12.	Reference Position Return Check	G27
13.	2ND Reference Position Return	Std.
Feed:		
1.	Rapid Traverse Rate	Std.
2.	Rapid Traverse Override	F0, 25%, 50%, 100%
3.	Feed Per Minute	G94 (mm / min)
4.	Feed Per Revolution	G95 (mm/rev)
5.	Tangential Speed Constant Control	Std.
6.	Cutting Feed rate Clamp	Std.
7.	Automatic Acceleration / Deceleration	Rapid traverse: linear; Cutting feed: exponential
8.	Rapid traverse bell-shaped acceleration/deceleration	Std. (on 21i/18i only)
9.	Linear accel/deceleration after cutting feed interpolation	Std.
10.	Feed rate Override	0~150%
11.	Jog Override	0~100%
12.	Feed Stop	Std.
Program Input:		
1.	EIA / ISO Automatic Recognition	Std.
2.	Label Skip	Std.
3.	Parity Check	Std.
4.	Control In / Out	Std.
5.	Optional Block Skip	1
6.	Max. Programmable Dimension	±8-Digit
7.	Program Number	O4-Digit
8.	Sequence Number	N5-Digit
9.	Absolute / Incremental Programming	G90/G91
10.	Decimal Point Programming / Pocket Calculator Type Decimal Point Programming	Std.
11.	Input Unit 10 Time Multiply	Std.
12.	Diameter/radius programming	Std.
13.	Plane Selection	G17, G18, G19
14.	Automatic Coordinate System Setting	Std.
15.	Work piece Coordinate System	G52, G53, G54~G59
16.	Direct Drawing Dimension Programming	Std.
17.	G code System A	Std.
18.	Chamfering/corner R	Std.
19.	Programmable Data Input	G10
20.	Sub Program Call	4 folds nested /10 folds nested for 32iB
21.	Custom Macro B	Std.
22.	Canned Cycles	Std.
23.	Multiple Repetitive Cycle	Std. (G70~G76)
24.	Multiple Repetitive Cycle 2 (Pocket profile)	Std. (G70~G76 type II)
25.	Canned Cycle for Drilling	Std.
26.	Program Format	FANUC std. format
27.	Program Stop / Program End	M00 / M01 / M02 / M30
Auxiliary Spindle Speed Function:		
1.	Auxiliary Function Lock	Std.
2.	High Speed M / S / T Interface	Std.
3.	Spindle Speed Function	Std.
4.	Constant Surface Speed Control	Std.
5.	Spindle Override	50~120%
6.	Actual Spindle Speed Output	Std.
7.	1ST Spindle Orientation	Std.
8.	1ST Spindle Output Switching Function	Std.
9.	M Code Function	M3 digit
10.	S Code Function	S5 digit
11.	T Code Function	T2 digit
12.	Rigid Tapping (Spindle)	Std.

Tool Function & Tool Compensation:		
1.	Tool Function	T7+1/T6+2digits
2.	Tool Offset Pairs	±6-digit 64 pairs
3.	Tool Nose Radius Compensation	Std. (G40/G41/G42)
4.	Tool Geometry/wear Compensation	Std.
5.	Number of Tool Offsets (in total)	64 sets
6.	Automatic Tool Offset	Std.
7.	Direct Input of Tool Offset Value Measured B	Std.
Accuracy Compensation:		
1.	Backlash Compensation	Rapid Traverse / Cutting Feed
2.	Stored Pitch Error Compensation	Std.
Edit Operation:		
1.	Part Program Storage Length (in total)	1280m/512kB (0i-D/21i/18i/32iB)
2.	Number of Registerable programs (in total)	400 (0i-D), 400 (21i/18i/32iB).
3.	Part Program Editing	Std.
4.	Program Protect	Std.
5.	Background Editing	Std.
Setting and Display:		
1.	Status Display	Std.
2.	Clock Function	Std.
3.	Current Position Display	Std.
4.	Program Display	Program name 31 characters
5.	Parameter Setting and Display	Std.
6.	Self Diagnosis Function	Std.
7.	Alarm Display	Std.
8.	Alarm History Display	25
9.	Operation History Display	Std.
10.	Help Function	Std.
11.	Run Hour and Parts Count Display	Std.
12.	Actual Cutting Feedrate Display	Std.
13.	Display Spindle Speed and T Code At All Screens	Std.
14.	Dynamic Graphic Display	Std.
15.	Servo Setting Screen	Std.
16.	Display of Hardware and Software Configuration	Std.
17.	Multi-Language Display	Std.
18.	Data Protection Key	Std.
19.	Erase CRT Screen Display	Std.
20.	Spindle Setting Screen	Std.
21.	Color LCD / MDI	8.4" (0i), 10.4" (0i-D*/21i/18i/32iB)
Data Input / Output:		
1.	Reader / Puncher Interface	RS-232 interface
2.	Memory Card Interface	Std.
3.	External Work piece number search	9999
C Axis Function (used on CV/SCV/Y models):		
1.	Control Axes Expansion	Std.
2.	Simultaneously Controlled Axes Expansion	Std.
3.	Coordinate System Rotation	Std.
4.	Rotary Axis Designation	Std.
5.	Rotary Axis Roll-over	Std.
6.	Axis Control by PMC	Std.
7.	Control Axis Detach (for Cf axis)	Std. (used on Vturn only)
8.	Polar Coordinate Interpolation	Std. (G112/G113)
9.	Cylindrical Interpolation	Std. (G107)
10.	CS Contouring Control	Std. (used on VturnII)
11.	Coordinate System Rotation	Std.
12.	Rigid Tapping (C-axis) with Victor's own PMC	Std.
2 Spindle Function (used on SV/SCV/YSCV models):		
1.	Multi Spindle Control	Std.
2.	2 Spindle Orientation	Std.
3.	2 Spindle Output Switching	Std.
4.	Synchronous Control	Std.
5.	Simple Spindle Synchronous Control	Std.

OPTIONS:

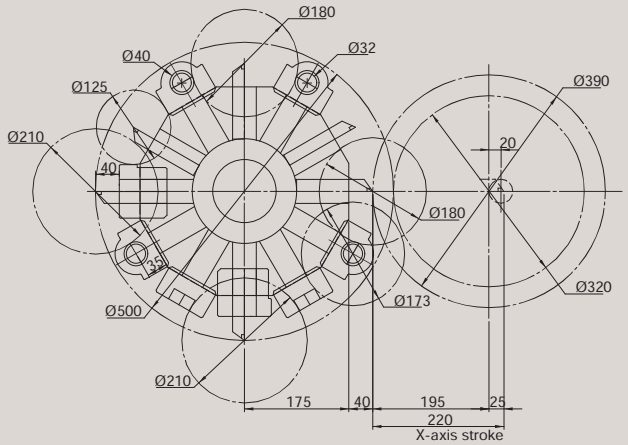
With hardware included:		**0i-D**	**21i**	**18i**	**32iB**
1.	Conversational programming (Manual guide i)*1	☐	Std.	Std.	Std.
2.	Conversational programming (Cap i)	N.A.	☐	☐	N.A.
3.	Date server (with PCB and ATA card)	☐	☐	☐	☐
4.	Embedded Ethernet (10Mbps)	Std.	Std.	Std.	Std.
5.	Fast Ethernet (100Mbps, available in Data server)	☐	☐	☐	☐
6.	Tool life management	☐	☐	☐	☐
7.	Part Program Storage Length 1280mm (in total)	Std.	☐	Std.	☐
8.	Part Program Storage Length 2560mm (in total)	N.A.	N.A.	☐	☐
9.	Program restart (32iB is new type "Quick Program restart")	☐	☐	☐	☐
10.	Optional block skip 2-9 blocks	☐	☐	☐	☐
11.	Polygon turning (by C-axis) with Victor's own PLC	☐	☐	☐	☐
12.	Manual handle feed 2 (2ND MPG)	N.A.	☐	☐	☐
13.	Reader/Puncher interface 2 (2ND RS232 interface)	N.A.	☐	☐	☐
14.	External data input	N.A.	☐	☐	☐
15.	Profibus	☐	☐	☐	☐
16.	USB Device & Operator	☐	N.A.	N.A.	Std.
Without hardware included:					
17.	Program number O8-digit	N.A.	N.A.	☐	☐
18.	Circular thread cutting (G35)	N.A.	N.A.	☐	☐
19.	Circular interpolation by 9-digit R designation	N.A.	N.A.	☐	Std.
20.	Tool offset value 7 digits	Std.	N.A.	☐	Std.
21.	Number of registered program 1000 (in total)	N.A.	N.A.	☐	☐
22.	G code system B/C	N.A.	☐	☐	☐
23.	Type format for FS 15	N.A.	☐	☐	☐
24.	Play back	N.A.	☐	☐	☐
25.	Three-dimensional coordinate conversion	N.A.	☐	☐	☐
26.	Direct input of offset value measured for 2 spindle lathe	N.A.	☐	☐	☐
27.	AI NANO control (G5.1 Q1)	N.A.	☐	☐	☐
28.	JERK control	N.A.	☐	☐	☐
29.	Bell-type acceleration/deceleration before look ahead interpolation N.A.	N.A.	☐	☐	Std.*2
30.	JERK control	N.A.	☐	☐	☐

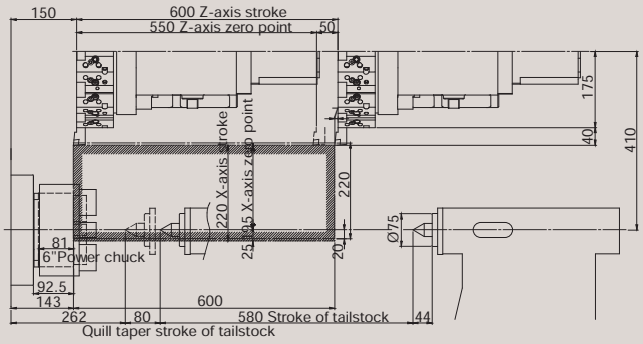
*1. Manual Guide i is available on 0i-D when the monitor is upgraded to 10.4" LCD.
*2. Included in AI NANO control

Technical Drawings

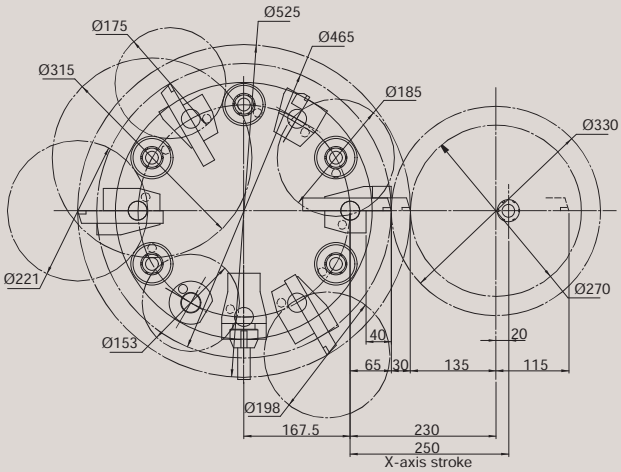
VICTOR-TAICHUNG

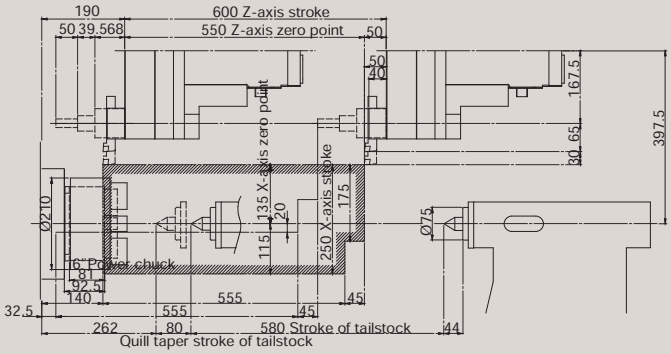
Vturn-A16 with Standard Turret



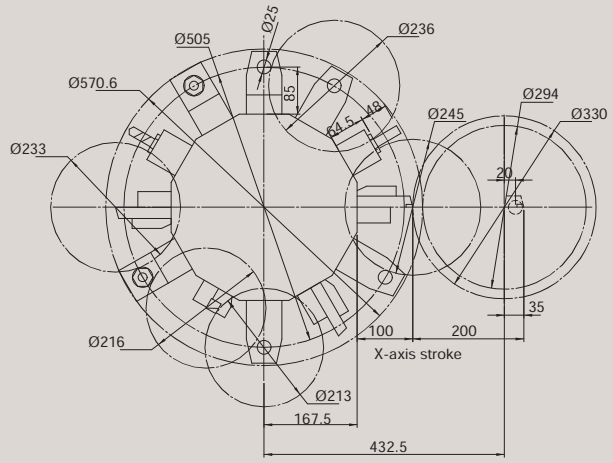


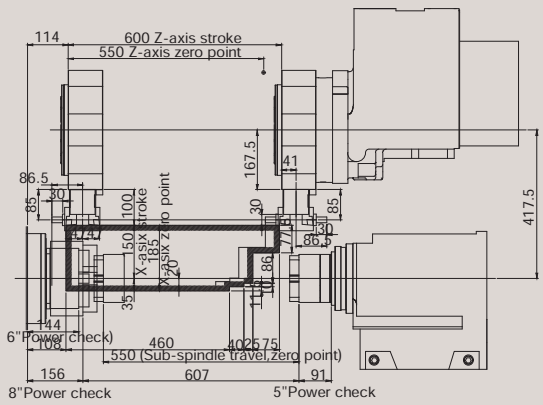
Vturn-A16CV with C-axis and VDI Turret

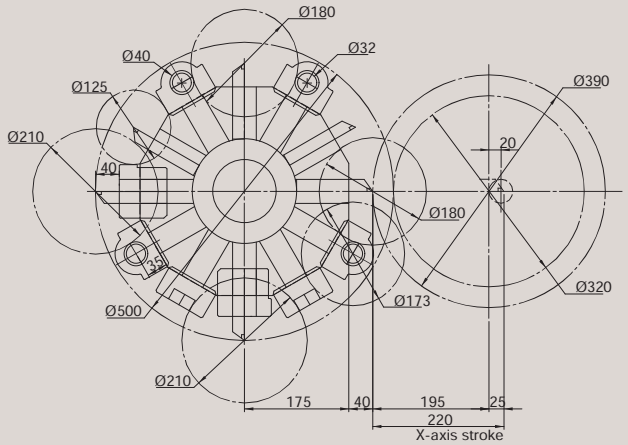


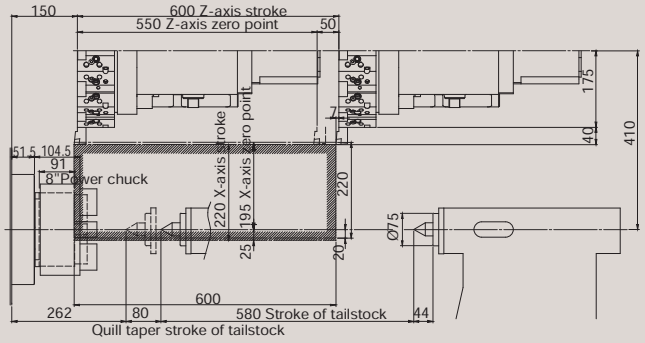


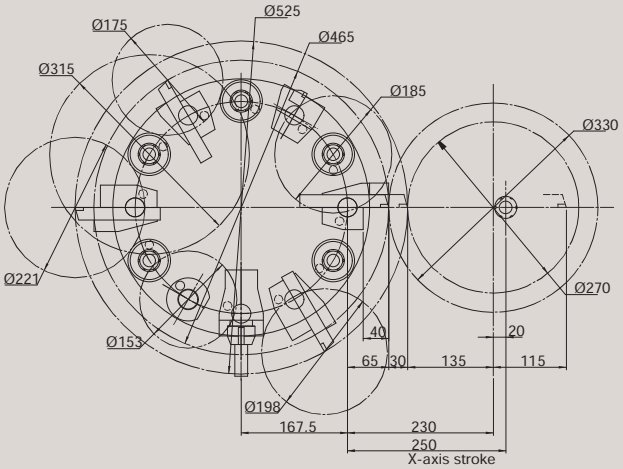
Vturn-A16SCV with Sub-spindle, C-axis and VDI Turret

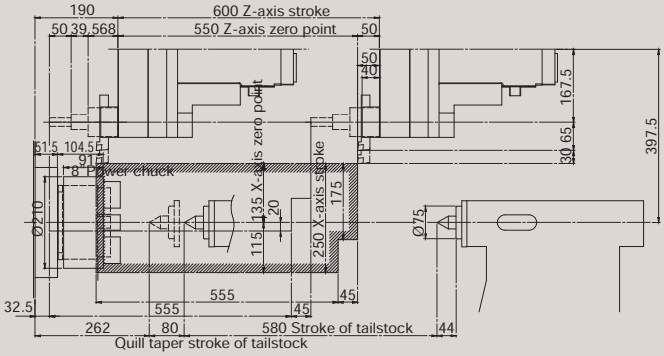


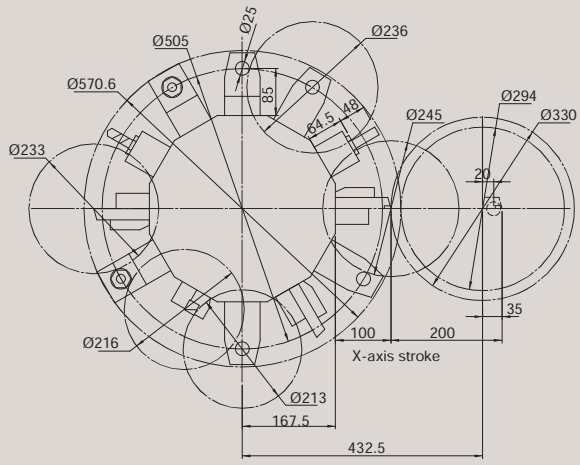


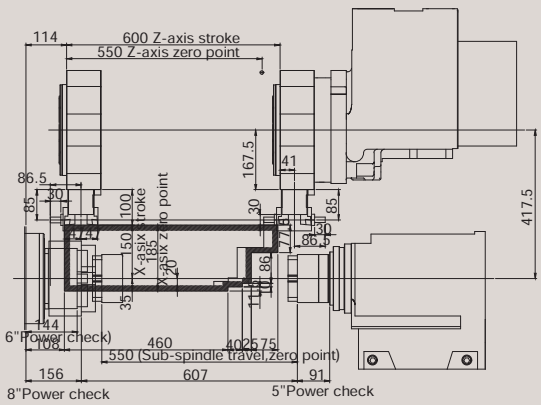

Ø180
Ø40
Ø32
Ø125
Ø390
Ø210
20
40
Ø180
35
Ø320
Ø500
Ø173
Ø210
175
40
195
25
220
X-axis stroke


150
600 Z-axis stroke
550 Z-axis zero point
50
175
410
40
51.5 104.5
91
8"Power chuck
220 X-axis stroke
195 X-axis zero point
220
Ø75
25
20
600
262
80
580 Stroke of tailstock
44
Quill taper stroke of tailstock


Ø175
Ø525
Ø465
Ø315
Ø185
Ø330
Ø221
Ø270
Ø153
40
20
65
30
135
115
Ø198
167.5
230
250
X-axis stroke

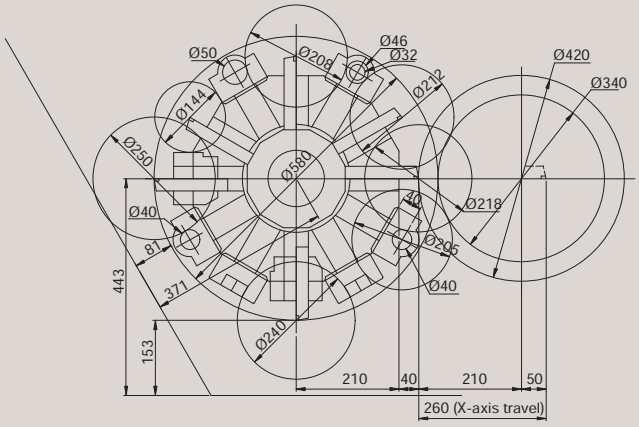

190
600 Z-axis stroke
50 39.568
550 Z-axis zero point
50
50
167.5
30 65
397.5
51.5 104.5
91
8"Power chuck
135 X-axis zero point
250 X-axis stroke
175
Ø210
115
20
Ø75
32.5
555
555
45
45
262
80
580 Stroke of tailstock
44
Quill taper stroke of tailstock

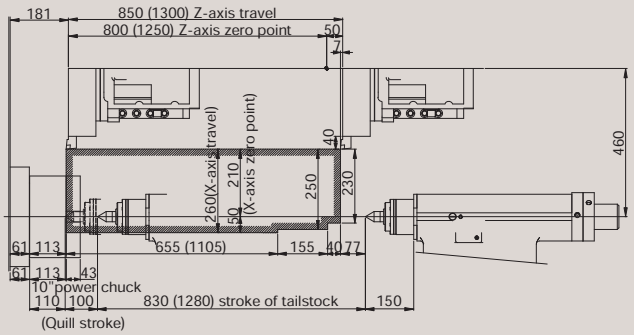

Ø25
Ø505
Ø236
Ø570.6
85
64.5
48
Ø294
Ø245
Ø330
Ø233
20
35
100
200
Ø216
X-axis stroke
Ø213
167.5
432.5


114
600 Z-axis stroke
550 Z-axis zero point
167.5
41
86.5
85
30
100
X-asix stroke
150
185
X-asix zero point
20
30
85
86.5
417.5
35
144
6"Power check)
460
402575
550 (Sub-spindle travel,zero point)
156
607
91
8"Power check
5"Power check

Technical Drawings

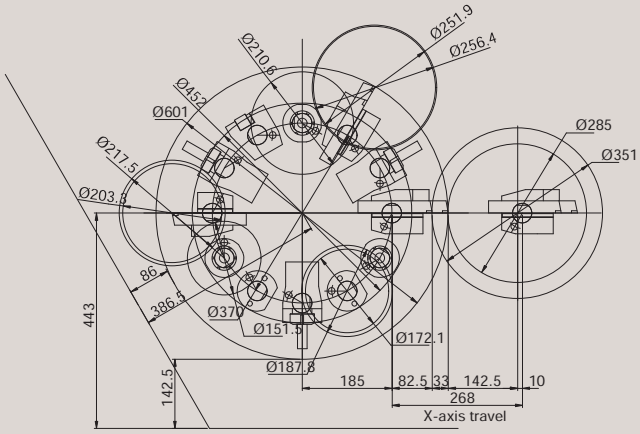
Vturn-A26 with Standard Turret

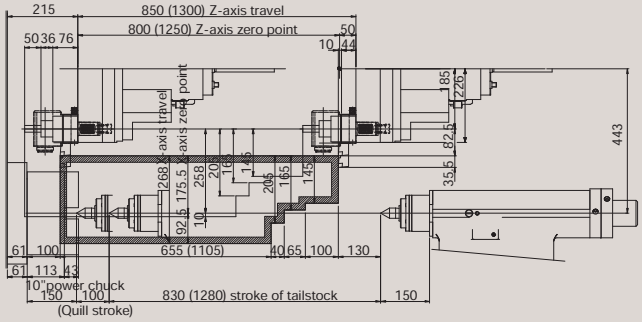




( ) for Vturn-A26/130

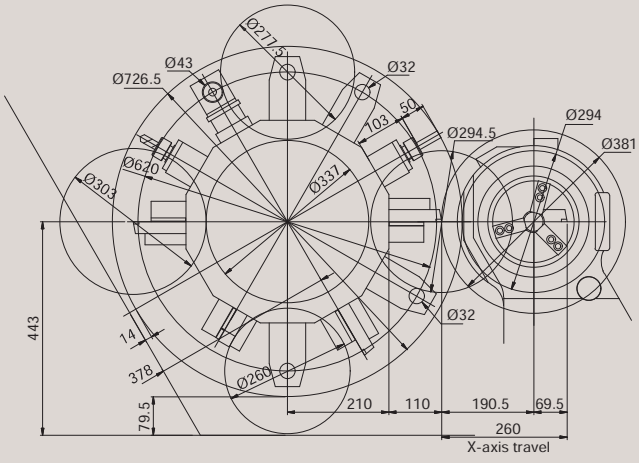
Vturn-A26CV with C-axis & VDI Turret

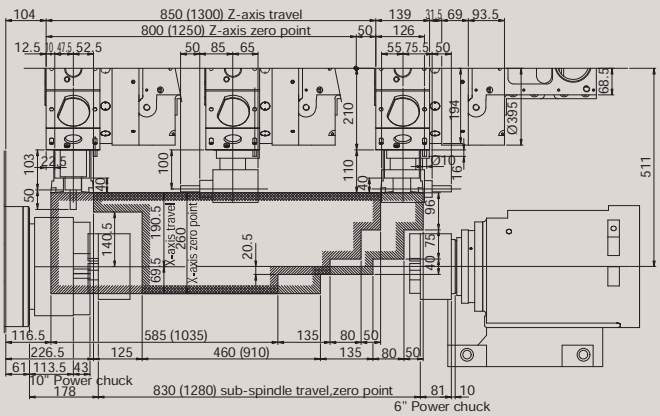




( ) for Vturn-A26/130

Vturn-A26SCV with sub-spindle, C-axis & VDI turret

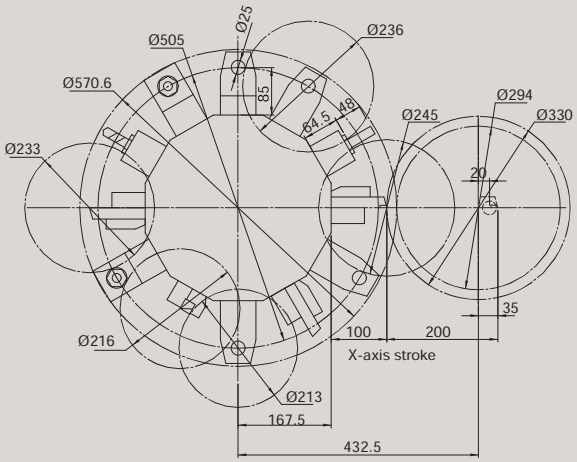


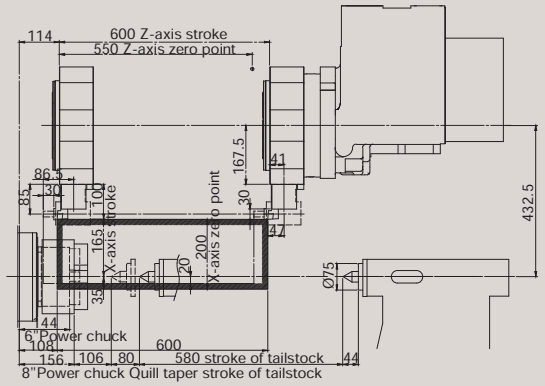


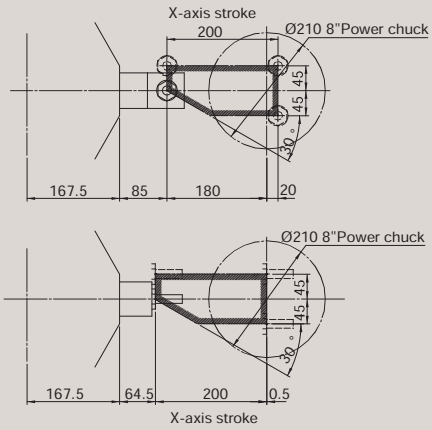
( ) for Vturn-A26/130

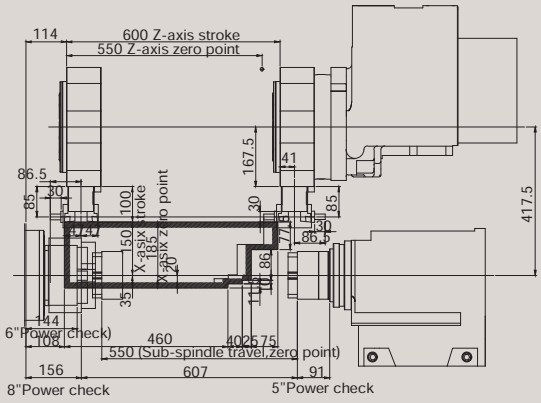
Technical Drawings

Vturn-A16/A20Y(S)CV with Y-axis vertical movement



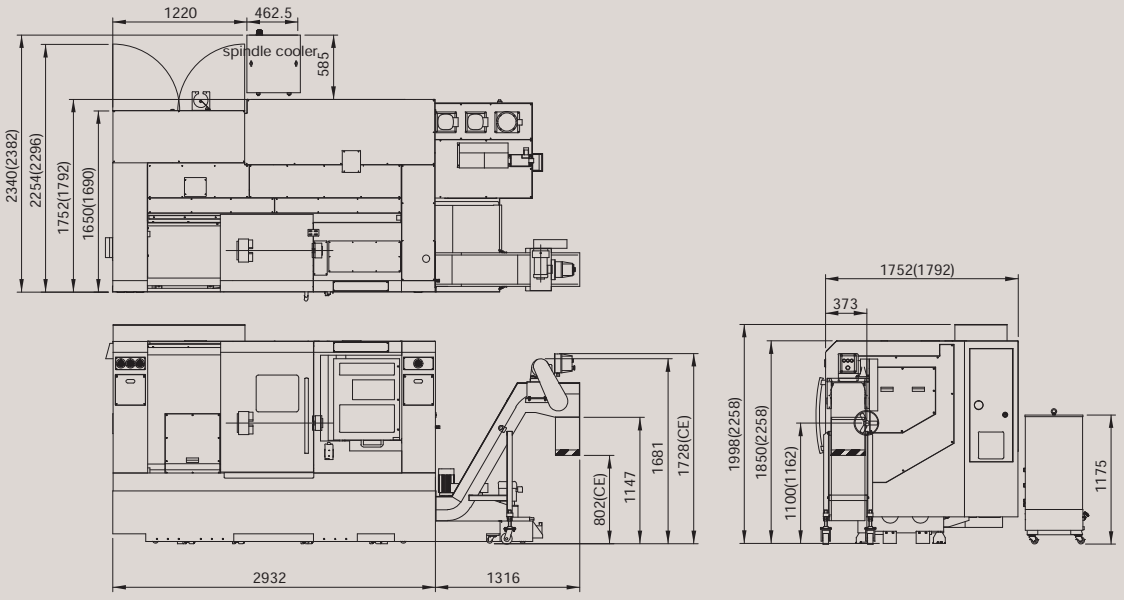






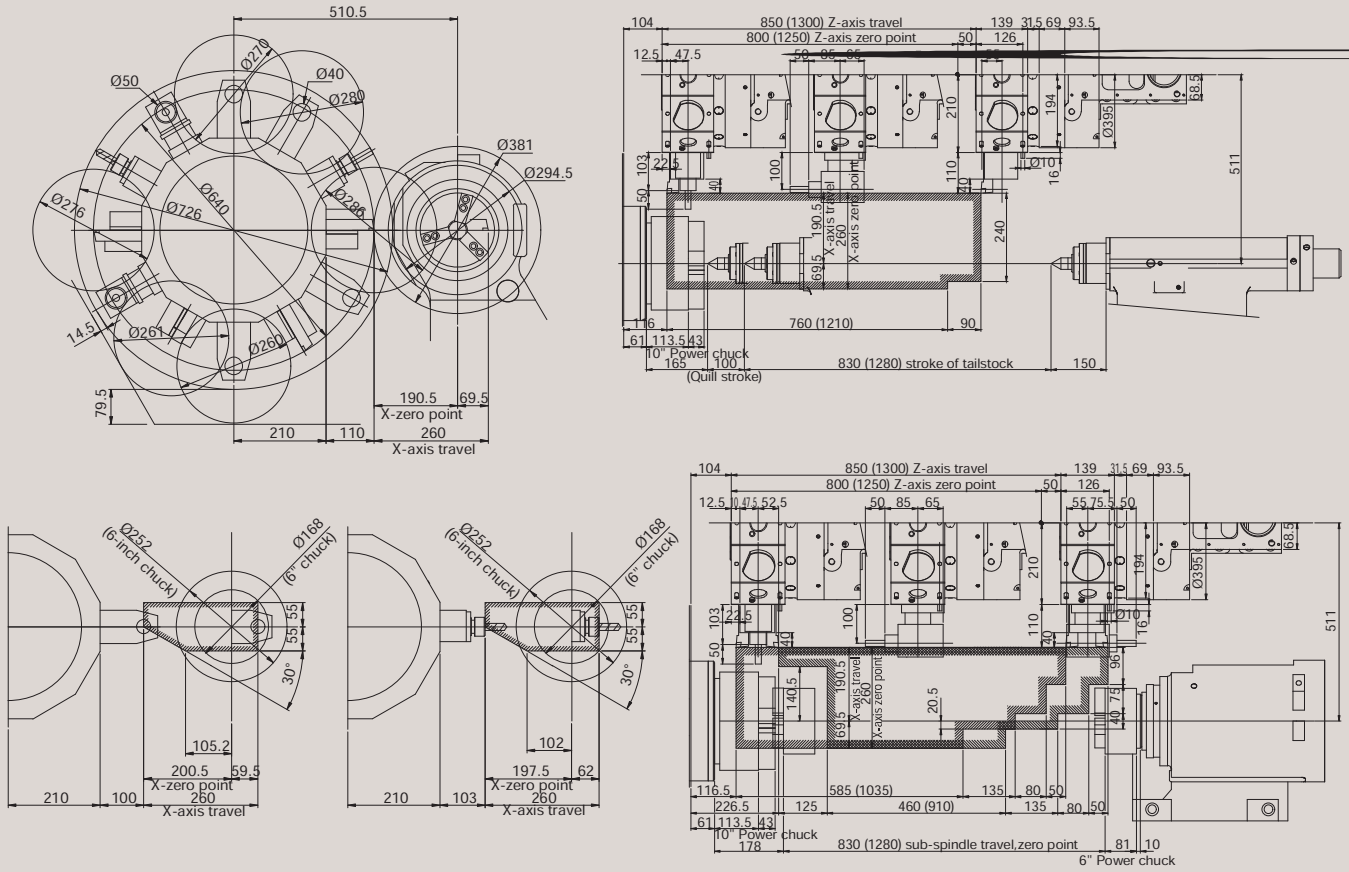
Machine Layout (excl. transformer)

Vturn-A16/A20



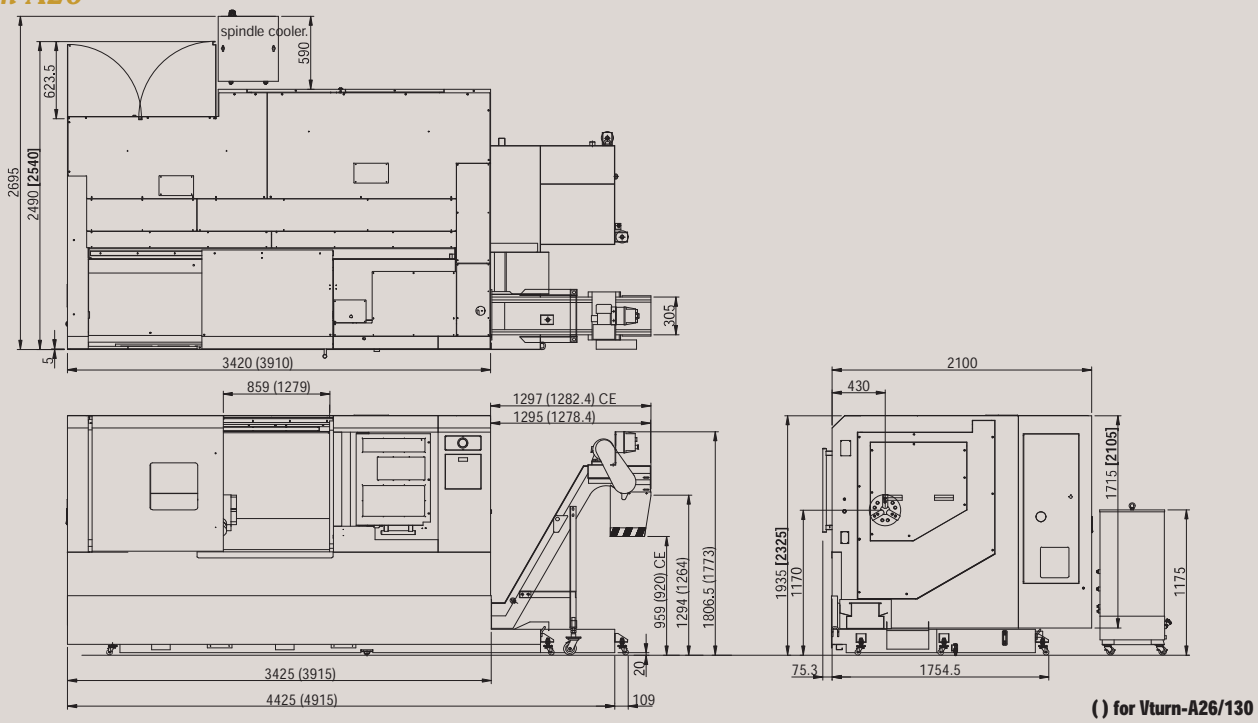
Technical Drawings

Vturn-A26Y(S)CV with Y-axis vertical movement



Machine Layout (excl. transformer)

Vturn-A26



( ) for Vturn-A26/130

VictorTaichung No.1 Quality machine tool builder from Taiwan

Quality Meehanite Castings-The backbone of VICTOR TAICHUNG machines.

Being both ISO 9001 approved and a Meehanite cast member, our foundry produces over 1000 tons of castings a month for both our own use and export to Japan.

Modern machining facilities-65% of components manufactured in house.

To ensure greater control over the quality of our machined parts, VICTOR TAICHUNG has introduced 3 giant 5-side machining centers, 1 CIM line for sheet metal manufacturing and 2 complete FMS lines developed in house.

Striving for the Future-The development of Factory automation.

The design and production of complete machining turnkey system, from the single lathe & gantry robot cell to completely automated factory lines, ensures VICTOR TAICHUNG is ready to meet the demands of tomorrow.

Vturn-A20 with gantry robot

Vturn-V24W for wheel turning

Vturn-V560 vertical lathe

VictorTaichung profile:
Sales turnover: USD 230 mil's (in 2011)*
No. of employees: 1091
*Exchange rate: 1 USD=30 TWD.

HTL VTL VMC HMC XMT PIM

THE VICTOR-TAICHUNG COMPANIES

TAIWAN
http://www.or.com.tw
E-mail :info@mail.or.com.tw
Victor Taichung Machinery Works Co., Ltd.
Headquarters:
266, Sec.3 Taichung Kan Rd.
Taichung,Taiwan, R.O.C.
TEL : 886-4-23592101
FAX : 886-4-23592943
Overseas Marketing Division:
TEL : 886-4-23580701
FAX : 886-4-23584541

UK
Victor CNC (UK) Ltd.
TEL : 44-1-706-648485
FAX : 44-1-706-648483

FRANCE
Victor France
TEL : 33-1-64772000
FAX : 33-1-64772063

GERMANY
Victor GmbH
TEL : 49-2261-478434
FAX : 49-2261-478327

MALAYSIA
Victor Machinery (M) SDN. BHD.
TEL : 60-3-56337180
FAX : 60-3-56337191

THAILAND
Victor (Thailand) Co. Ltd.
TEL : 66-2-9263735
FAX : 66-2-9032373

INDONESIA
PT. Victor Machinery Indonesia
TEL : +62-21-88958504
FAX : +62-21-88958513

USA
Fortune International Inc.
TEL : 1-732-2140700
FAX : 1-732-2140701

SOUTH AFRICA
Victor Fortune (PTY) Ltd.
TEL : 27-11-3923800
FAX : 27-11-3923899

CHINA
Jianrong Precision Machinery (Shanghai)
TEL : 86-21-59768018
FAX : 86-21-59768008

VictorTaichung was also marketed under the brand names VICTOR (outside North America) and FORTUNE HV1GE12EH

12021603 Macris, TEL: 04-24733326