

SPECIFICATIONS:

Model	SDC-8045-F		SDC-8045A-F	
<b>Travel</b>				
X-Axis	80.7" (2050 mm)			
Y-Axis	45.27" (1150 mm)			
Z-Axis	27.55" (700 mm)			
Spindle nose to table	7.87 ~ 35.43" (200~900mm)			
<b>Table</b>				
Table size	86.61 x 39.97" (2200mm x 1000mm)			
Floor to table	32.67" (830 mm)			
Max. table loading capacity	6600 Lbs (3000 kgs)			
T-slot (no x Width x Pitch)	6 x 0.86" x 6.29" (6 x 22mm x 160 mm)			
Distance between columns	47.2" (1200 mm)			
<b>Feed system</b>				
Rapid traverse speed	XYZ: 30 / 30 / 16 M/min			
Feed motor(FANUC)	X/: Alpha 30-3000i Y/Z: Alpha 22-3000i			
Ball screw diameter & pitch	X: 2.48/0.47" (63mm/12mm) Y: 1.57/0.39" (40mm/10mm) Z: 2/0.39" (50mm/10mm)			
Cutting feedrate	0.04 - 393.7 inc/min			
Type of transmission	Direct Drive			
<b>Spindle</b>				
Type of tool shank	CAT40		CAT50	
Max. spindle speed	10,000 rpm		10,000 rpm	
Spindle motor	25 HP		35 HP	
Type of transmissiop	Direct Drive		Direct Drive / ZFGear Box (Op)	
<b>ATC</b>				
Tool storage capacity	30 / (Op) 40 / 60T	(Op) 90 / 120T	32 / (Op) 40 / 60T	(Op) 90 / 120T
ATC type	Armless type			
Max. tool diameter	2.99" (76 mm)	3.54" (90 mm)	5" (127 mm)	5" (127 mm)
Without adjacent tool	5" (127 mm)	7.08" (180 mm)	8.97" (228 mm)	8.97" (228 mm)
Max. tool length	13.77" (350 mm)	13.77" (350 mm)	15.74/15.74/13.77" (400/400/350 mm)	15.74" (400 mm)
Max. tool weight	15.43Lbs (7 kg)	15.43Lbs (7 kg)	33.06Lbs (15 kg)	33.06Lbs (15 kg)
Tool changing time (Tool to Tool)	2.5 sec	1.6 sec	3.5 sec	3.57 sec
Tool changing time (Chip to Chip)	5.5 sec	9.6 sec	6.8sec	11.57 sec
Method of tool selection	Random selection bi-directional magazine rotation			
Tool display	Yes			
Special tool management	Yes			
<b>Coolant system</b>				
Coolant tank size	600 L			
Coolant capacity	105 L / min			
Chip Flush capacity	screw type			
<b>Machine size</b>				
Machine height	137" (3481 mm)			
Floor space	230.9x136.7" (5865x3474 mm)	230.9x136.7" (5865x3474 mm)	230.9x136.7" (5865x3474 mm)	270.2x136.7" (6865x3474 mm)
weight	8845Lbs (19500 kgs)	10406Lbs (22942 kgs)	10029Lbs (22110 kgs)	10732Lbs (23600 kgs)
<b>Power source</b>				
Electrical power supply	60 KVA/3PH/220V 50/60HZ			
Compressed air supply	6.0 kgf/cm <sup>2</sup> (85psi) (0.6MPa)			
<b>Controller</b>				
	FANUC / HEIDENHAIN / SIEMENS			

\* Power Foundation and environmental controls are required.  
\*\*Specification is subject to change without further notice.

# SHARP

PRECISION MACHINE TOOLS



## SDC-8045

### Double Column Vertical Machining Center



**Sharp Industries, Inc.**  
3501 Challenger Street Torrance, CA 90503  
Tel: 310-370-5990 Fax: 310-542-6162  
Email: info@sharp-industries.com  
Website: www.sharp-industries.com

Parts: parts@sharp-industries.com  
Sales: sales@sharp-industries.com  
Support: support@sharp-industries.com



# SDC-8045-F / SDC-8045A-F

## Double Column Vertical Machining Center

- Heavy-duty cutting performance.
- Excellent and stable accuracy.
- User-friendly ergonomic design.
- High precision and rigidity.
- Wider door open range.
- High efficiency.
- Fully enclosed splashguard.

### Optimal Double Column Design Tough! Rugged! Stable!

- ▶ Meehanite cast iron for all structural parts.
- ▶ Double column design features exceptional stability during heavy cutting.
- ▶ Enlarged saddle and rigid head structure.
- ▶ Linear ways on 3 axes.
- ▶ Two chip augers are equipped at both sides of base.



▶ FANUC Oi-MF CNC with 10.4" color LCD screen mounted on versatile pendant operating panel.



**LARGE PRELOADED HIGH PRECISION BALLSCREWS**  
 ▶ Double nut C3 class precision ball screws are used on all three axes.  
 ▶ Direct drive from servo motor to ball screw.  
 ▶ Ball screws diameter: X:63mm / Y: 40mm / Z: 50mm.  
 ▶ Rapid traverse speed X,Y: 1181 ipm (30M/min), Z: 630 ipm (16M/min)  
 ▶ Table size :86.6" x 40" (2200 x 1100 mm)  
 ▶ Maximum table load : 6,600 lbs (3,000 kg)  
 ▶ One-piece base with two slots for chip auger at both sides minimizes cleaning time.



**TRIPLE GUIDEWAYS FOR Y AXIS MOVEMENT**  
 ▶ 2 roller type linear guideways are on the face of bridge, and the 3rd is located on the top to offer excellent holding of headstock.



**FULLY SUPPORTED TABLE AND VERTICAL HEAD**  
 ▶ The extra long saddle with 3 guideways fully support the table. The vertical head runs on 6 roller packs (3 on each side of linear guideway) offers high rigidity to spindle movement.



**ELECTRICAL COMPONENTS ARRANGED IN MODULAR DESIGN FOR EASY MAINTENANCE**



**COOLANT GUN**



**TOOL MAGAZINE EFFICIENT DESIGN**  
 ▶ Loading and un-loading tools can be done during machining. Tool change or tool selection will not be executed while door open for safety consideration.



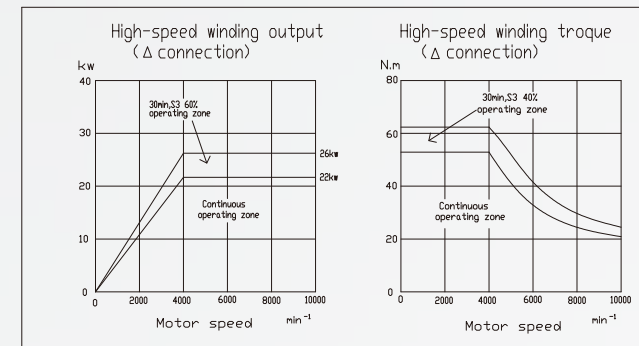
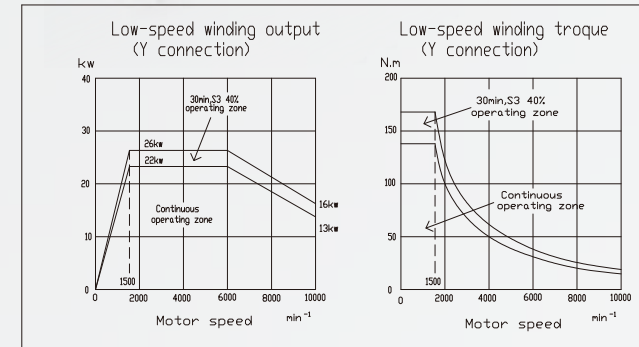
**WINDOW DEFOGGER DEVICE**  
 ▶ The viewing window can get rid of coolant/cutting fluid that splash on the glass and allow clear view of the machining process. This facilitates the monitoring of the machine operation.

### STANDARD SPINDLE

- ▶ Easy for after service.
- ▶ High accuracy.
- ▶ Cool jet around spindle.



● Model α T22/10000i (1:1)

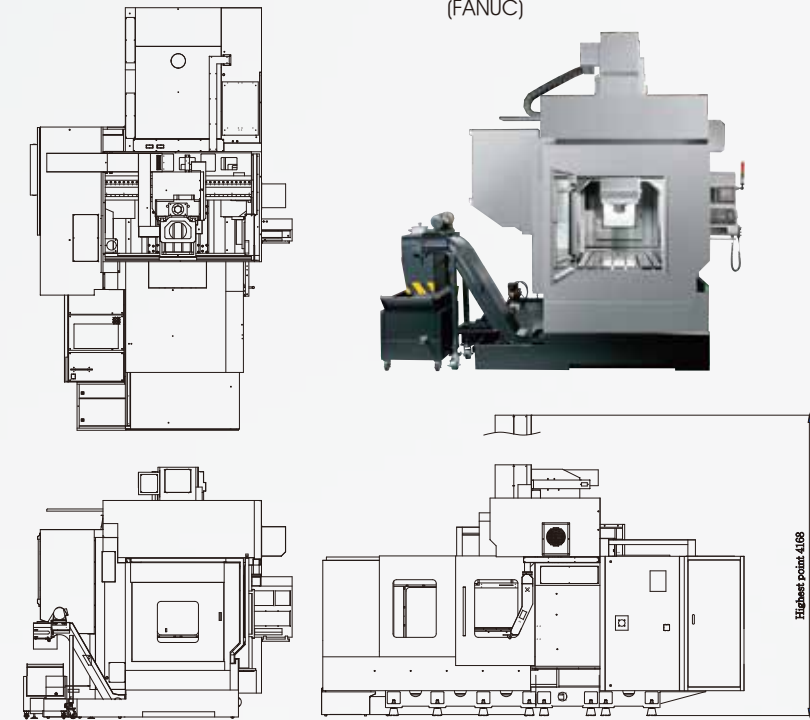


### STANDARD ACCESSORIES

- ▶ #40 taper, 30T ATC, 25 HP motor (SDC-8045-F)
- ▶ #50 taper, 32 T ATC, 35 HP motor (SDC-8045A-F)
- ▶ Spindle chiller
- ▶ Automatic lubrication system
- ▶ Spiral & flat type chip conveyor
- ▶ Heidenhain 3-Axis rotary table
- ▶ Portable electronic handwheel (FANUC)
- ▶ Working light
- ▶ Alarm light
- ▶ Fully enclosed splash guard
- ▶ Coolant gun (control by panel)
- ▶ 10,000 rpm spindle (Direct drive)
- ▶ Spindle coolant system

### OPTIONAL ACCESSORIES

- ▶ Arm type ATC 40/60 Tools
- ▶ (#40) 15,000 rpm spindle (Direct drive) / 20,000 rpm spindle (Built-in)
- ▶ (#50) 6,000 rpm spindle (ZF Gear Box)
- ▶ Bigger spindle motor
- ▶ Coolant through spindle system
- ▶ Spindle air blow
- ▶ 4th or 4+5th axis rotary table
- ▶ Working piece measurement system
- ▶ Tool length measurement system
- ▶ Heat exchanger on electrical cabinet
- ▶ Vacuum dust collector
- ▶ Power transformer
- ▶ CE (Safety door interlock)
- ▶ Air gun
- ▶ Window defogger
- ▶ Rapper filter system
- ▶ Mist collection system
- ▶ Spindle temperature compensation (FANUC)



Height point 4168