



Sharp Industries, Inc.

3501 Challenger Street
Torrance, CA 90503

Tel 310-370-5990 Fax 310-542-6162

Email: info@sharp-industries.com

Parts: parts@sharp-industries.com

Sales: sales@sharp-industries.com

Support: support@sharp-industries.com

www.sharp-industries.com

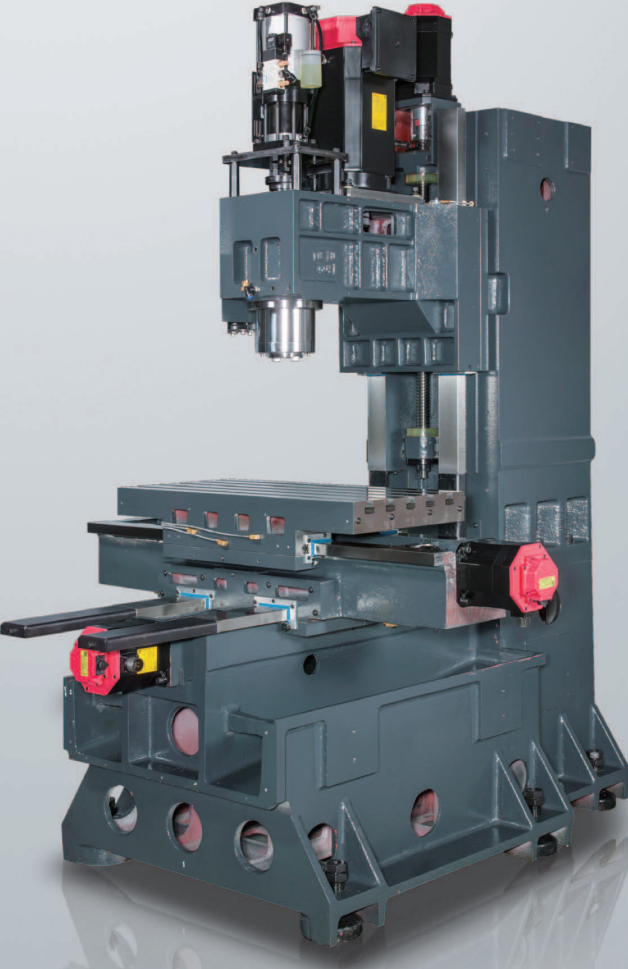


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VERTICAL MACHINING CENTER SHARP SV BOX WAYS SERIES



MODEL SV-2414S, SV-2414SE, SV-2414SX



Model SV-2414SX



- Small foot print
- Hardened and ground box ways
- Fanuc or Siemens control and drives

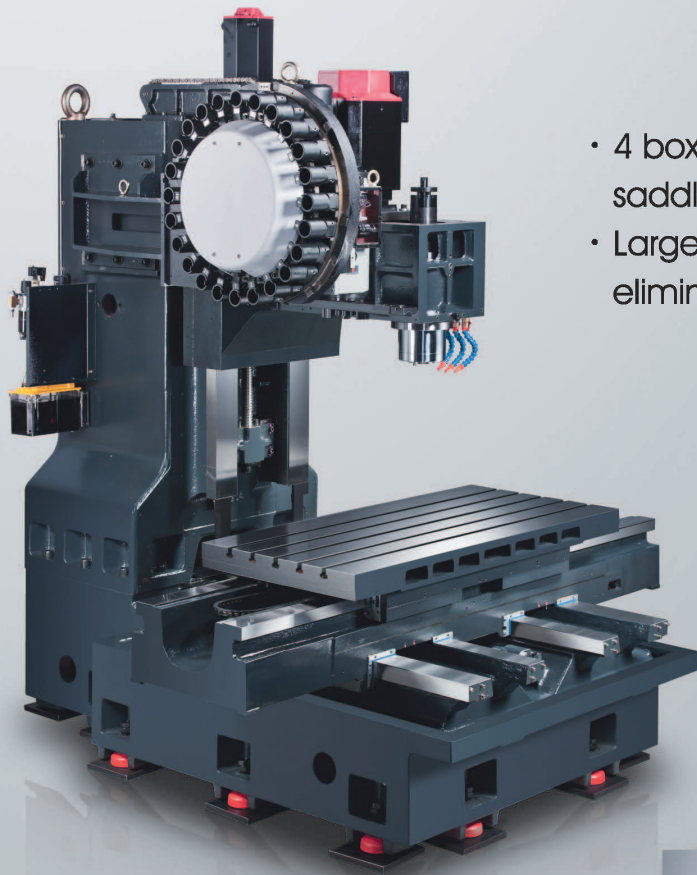
MODEL	SV-2414S-M	SV-2414SE-M	SV-2414SX-M	SV-2414S-F	SV-2414SE-F	SV-2414SX-F
X, Y, Z travel	24" x 14" x 18.1"					
Table size	28.0" x 13.8"					
Spindle speed (rpm)	10,000					
ATC	Carousel		Side Mount	Carousel		Side Mount
Magazine capacity	10	10 / 16	24	10	10 / 16	24
Control	Siemens 828D 240.2	Siemens 828D 260.2	Siemens 828D 260.2	Oi-mate-MD	Oi-MD	Oi-MD

• Specifications subject to change without notice.

Model	units	SV-2414S-M	SV-2414SE-M	SV-2414SX-M	SV-2414S-F	SV-2414SE-F	SV-2414SX-F		
Control		Siemens 828D 240.2	Siemens 828D 260.2	Siemens 828D 260.2	Oi-mate-MD	Oi-MD	Oi-MD		
Screen size		8.4" LCD	10.4" LCD		8.4" LCD				
Guideways type		Box Way							
Travel									
X axis travel	inch (mm)	24.0 (610)							
Y axis travel	inch (mm)	14.0 (356)							
Z axis travel	inch (mm)	18.1 (460)							
Spindle nose to table	inch (mm)	3.1 - 20.94 (78.8 – 530)							
Spindle center to column	inch (mm)	16.9 (430)							
Table									
Table area	inch (mm)	28.0 x 13.8 (710 x 350)							
Max. work piece weight	lb.(kg)	770 (350)							
Spindle									
Speed	RPM	10,000							
Taper		CAT40							
Driving type		Belt Drive							
Feed rate									
Rapid traverse	ipm (mm/min)	X/Y/Z : 590.6 (15,000)							
Cutting feed rate	ipm (mm/min)	0.04 - 393.7 (1 – 10,000)							
Motor									
Spindle motor (cont/30 min)	hp (kw)	9.3/10.7 (7/8)			7.3/10 (5.5/7.5)				
Automatic tool changer									
Magazine type		Carousel			Side Mount	Carousel		Side Mount	
Magazine capacity		10	10	(16)	24	10	10	(16)	24
Method of tool selection		Set tool number			Random	Set tool number		Random	
Max. tool diameter	inch (mm)	3.9 (120)		3.7 (93)	3.0 (76.2)	3.9 (120)		3.7 (93)	3.0 (76.2)
Without adjacent tool	inch (mm)	9 (229)		7.2 (183)	5 (127)	9 (229)		7.2 (183)	5 (127)
Max. tool length	inch (mm)	13.8 (350)		13.8 (350)	12.0 (304.8)	13.8 (350)		13.8 (350)	12.0 (304.8)
Max. tool weight	lb.(kg)	15.4 (7)		15.4 (7)	15.4 (7)	15.4 (7)		15.4 (7)	15.4 (7)
Tool change time (tool to tool)	sec	7			2.7	7		2.7	
Tool change time (chip to chip)	sec	8			6	8		6	
Air blast when making tool change		Standard							
Accuracy									
Positioning accuracy*	+/- inch (mm)	±0.00016 / 0.004							
Repeatability accuracy*	+/- inch (mm)	±0.00012 / 0.003							
Machine size									
Width (w/o chip conveyor)	inch (mm)	72.8 (1,850)		78.7 (2,000)		72.8 (1,850)		78.7 (2,000)	
Depth (w/o chip conveyor)	inch (mm)	85.0 (2,160)		85.0 (2,160)		85.0 (2,160)		85.0 (2,160)	
Height	inch (mm)	91.5 (2,325)							
Weight	lb.(kg)	7,260 (3300)							
Door opening	inch (mm)	25.0 (635)							
Coolant system									
Number of flood coolant nozzles		2							
Coolant tank capacity	gal (L)	42 (160)							
Chip pan		Standard							
Air blower nozzle (for cutting dry)		1							
Power requirements									
Electrical	Voltage/ Hz	220V (with transformer) 3 Phase /20 KVA/ 60 Hz			220V 3 Phase /20 KVA/ 60 Hz				
Air		6 CFM @ 88psi							

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MODEL SV-4328ST,SV-4328SX,SV-5128ST,SV-5128SX



- 4 box way construction for additional support of saddle and table
- Largest Y travel (27.6") in this class of machine, eliminate extra set up for longer cuts



- Large removable side door for easy load and unload long workpiece.

MODEL	SV-4328ST	SV-4328SX	SV-5128ST	SV-5128SX
X, Y, Z travel	43.3" x 27.6" x 24"		51.2" x 27.56" x 27.8"	
Table size	51.2" x 25.6"		59" x 25.6"	
Spindle speed (rpm)	10,000 (steel)	12,000 (Ceramic)	10,000 (steel)	12,000 (Ceramic)
ATC	24 tools			
Motor (cont./30 min)	20/25 HP			
Wt.	15,840 lbs	15,840 lbs	17,600 lbs	17,600 lbs

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Specifications		SV-4328ST		SV-4328SX		SV-5128ST		SV-5128SX	
Work Capacity									
X axis travel	inch (mm)	43.3 (1100)				51.2 (1300)			
Y axis travel	inch (mm)	27.6 (700)				27.56 (700)			
Z axis travel	inch (mm)	24 (610)				27.95 (710)			
Spindle nose to table	inch (mm)	5.1 ~ 29.1 (130 ~ 740)				5.1 ~ 33 (130 ~ 840)			
Spindle center to column	inch (mm)	28.7 (730)				28.7 (730)			
Worktable									
Table area	inch (mm)	51.2 x 25.6 (1300 x 650)				59 x 25.6 (1500 x 650)			
Floor to table	inch (mm)	33.5 (850)				33.5 (850)			
Max. workpiece weight	lb. (kg)	2200 (1000)				2200 (1000)			
T-Slot (Number x Width x Pitch)		5 x 0.7 x 3.9 (5 x 18 x 100)				5 x 0.7 x 3.9 (5 x 18 x 100)			
Spindle									
Spindle taper		CAT-40				CAT-40			
Spindle speed (max)	rpm	10,000 (steel, bearings)		12,000 (ceramic bearings)		10,000 (steel, bearings)		12,000 (ceramic bearings)	
Spindle motor: cont. / 30 min	hp (kw)	20 / 25 (15 / 18.5)				20 / 25 (15 / 18.5)			
Spindle torque: 30 minute rating	ft-lb. (nm)	86.8 (117.7) @1500 rpm		72 (97.5) @1500 rpm		86.8 (117.7) @1500 rpm		72 (97.5) @1500 rpm	
Transmission		Belt				Belt			
Automatic Tool Changer									
ATC type		Arm Type				Arm Type			
Magazine capacity		24				24			
Max. tool diameter	inch (mm)	2.99 (76)				2.99 (76)			
Without adjacent tool	inch (mm)	5.9 (150)				5.9 (150)			
Max. tool length	inch (mm)	11.8 (300)				11.8 (300)			
Max. tool weight	lb. (kg)	15.4 (7)				15.4 (7)			
Tool change time (tool to tool)		4.6 sec				4.6 sec			
Tool change time (chip to chip)		6 sec				6 sec			
Method of tool selection		Random				Random			
Motion									
Rapid traverse	ipm (mm/min)	X/Y: 945 (24,000), Z: 590 (15,000)				X/Y: 945 (24,000), Z: 590 (15,000)			
Cutting feed rate	ipm (mm/min)	0.04 ~ 393.7 (1 ~ 10,000)				0.04 ~ 393.7 (1 ~ 10,000)			
Transmission		Direct Drive				Direct Drive			
Feed motor (Fanuc)	lb. (kgf)	X/Y: 8.5 (12), Z: 16 (22)				X/Y: 8.5 (12), Z: 16 (22)			
Positioning accuracy*	inch (mm)	0.0002 (+/-0.005)				0.0002 (+/-0.005)			
Repeatability accuracy*	inch (mm)	0.0001 (+/-0.003)				0.0001 (+/-0.003)			
Coolant System									
Coolant tank capacity	gal (L)	132 (500)				132 (500)			
Flood coolant flow volume	gal/min (L/min)	28 (105)				28 (105)			
Number of flood coolant nozzles		3				3			
Machine Size									
Floor space (w/o chip conveyor)	inch (mm)	W:114 (2900) x D:114 (2895)				W:126 (3200) x D:111 (2825)			
Height	inch (mm)	122 (3100)				122 (3100)			
Approx. Weight	lb. (kg)	15,840 (7,200)				17,600 (8,000)			
Door opening	inch (mm)	47.64 (1210)				47.64 (1210)			
Power Requirements									
Electrical	220V / 60 Hz	3 Phase / 30 KVA				3 Phase / 30 KVA			
Air		6 CFM @ 88 psi				6 CFM @ 88 psi			

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MODEL SV-6332SX



MODEL	SV-6332SX
X, Y, Z travel	63" x 31.5" x 31.5"
Table size	70.8" x 33"
Spindle speed (rpm)	12,000 (ceramic bearings)
Spindle Taper	CAT-40
ATC	30 Tools
Motor (cont./30 min)	20/25 HP
Wt.	33,000 lbs

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Specifications		SV-6332SX
Work Capacity		
X axis travel	inch (mm)	63 (1600)
Y axis travel	inch (mm)	31.5 (800)
Z axis travel	inch (mm)	31.5 (800)
Spindle nose to table	inch (mm)	7.8 — 39.3 (200 - 1000)
Spindle center to column	inch (mm)	34.2 (870)
Worktable		
Table area	inch (mm)	70.8 x 33 (1800 x 840)
Floor to table	inch (mm)	36.4 (925)
Max. workpiece weight	lb. (kg)	4840 (2200)
T-Slot (Number x Width x Pitch)		5 x 0.86 x 5.9 (5 x 22 x 150)
Spindle		
Spindle taper		CAT-40
Spindle speed	rpm	12,000 (ceramic bearings)
Spindle motor: cont. / 30 min	hp (kw)	20 / 25 (15 / 18.5)
Spindle torque: 30 minute rating	ft-lb. (nm)	72 (97.5) @ 1500 rpm
Transmission		Belt
Automatic Tool Changer		
ATC type		Arm Type
Magazine capacity		30
Max. tool diameter	inch (mm)	3.0 (76)
Without adjacent tool	inch (mm)	5.9 (150)
Max. tool length	inch (mm)	11.8 (300)
Max. tool weight	lb. (kg)	15.4 (7)
Tool change time (tool to tool)		1.5 sec
Tool change time (chip to chip)		2.4 sec
Method of tool selection		Random
Motion		
Rapid traverse	ipm (mm/min)	X/Y: 590 (15,000), Z: 472 (12,000)
Cutting feed rate	ipm (mm/min)	0.04 - 393.7 (1 - 10,000)
Transmission		Direct drive
Ball screw diameter / pitch	inch (mm)	1.97 / 0.4 (50 / 10)
Feed motor (Fanuc)	ft/lb. (nm)	X/Y/Z: 16 (22) / 22 (30) / 16 (22)
Max. thrust (30 minutes)	lb. (kgf)	X/Y/Z: 7167 (3251)
Positioning accuracy*	inch (mm)	+/- 0.0002 (0.005)
Repeatability accuracy*	inch (mm)	+/- 0.0001 (0.003)
Coolant System		
Coolant tank capacity	gal (L)	132 (500)
Flood Coolant Flow Volume	gal/min (L/min)	28 (105)
Number of Flood Coolant Nozzles		3
Coolant through spindle prep	20 bar	
Machine Size		
Floor space (w/o chip conveyor)	inch (mm)	W: 173.2 (4400) x D: 135 (3428)
Height	inch (mm)	130.3 (3310)
Approx. Weight	lb. (kg)	33,000 (15,000)
Door opening	inch (mm)	70.8 (1800)
Power Requirements		
Electrical	220V / 60 Hz	3 Phase / 35 KVA
Air		5 CFM @ 100 psl

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