

# SE Y Series

SE2200YA/LYA/LSYA | SE2200Y/LY/LSY

HYUNDAI WIA Y-Axis Turning Center

# Technical Leader

The CNC Turning Center SE-Y Series, designed with HYUNDAI WIA's engineering expertise to maximize productivity by enhancing rigidity and accuracy of machining.

ITEM	Main Chuck		Sub Chuck	Bed (Z-Axis Travel)		Mill Turret	Tail Stock
	6"	8"	5"	340mm (26.8")	560mm (32.7")	BMT45	MT#4
SE2200YA	●			●		●	○
SE2200LYA	●				●	●	●
SE2200LSYA	●		●		●	●	
SE2200Y		●		●		●	○
SE2200LY		●			●	●	●
SE2200LSY		●	●		●	●	

● : Standard ○ : Option

# SE Y Series

Excellent Machining Performance, Y-axis CNC Turning Center

- 30° slanted one-piece bed structure with high rigidity
- Stabilized unit structure to minimize thermal displacement
- Integrated processing through synchronized control of Main/Sub spindle
- Multi-tasking operation with wedge type Y-axis BMT45 turret
- Excellent rapid traverse rate (X/Y/Z) : 30/10/36 m/min (1,181/394/1,417 ipm)
- Ergonomic design for convenient access to chuck and tool



# Y-AXIS TURNING CENTER



# APPLICATIONS & PARTS

WORM SHAFT



## Reduced machining time by multi-tasking operation

SE-Y Series with Y-axis makes it possible to work high-valued product with integrated processing using sub spindle and various rotary tools in short time.

WHEEL  
HUB



COOLING  
ADAPTER



HUB  
SHAFT



DRIVE  
GEAR



# 01 BASIC STRUCTURE

Which Can Cover All Machining Process with Only One Initial Setting

## Mill Turret

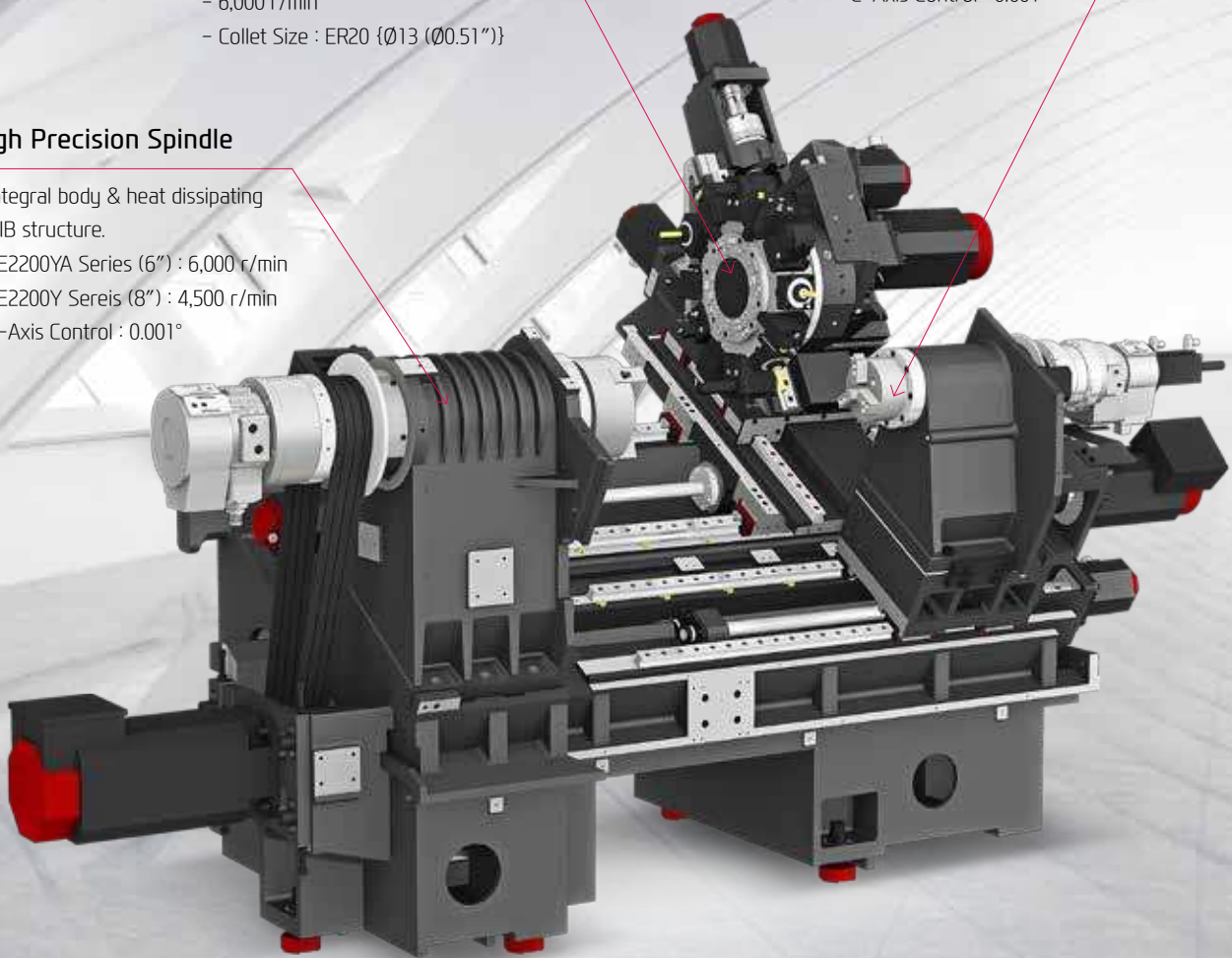
- BMT45 (12 [24] Station)
- 6,000 r/min
- Collet Size : ER20 {Ø13 (Ø0.51")}

## Sub Spindle

- 5" / 6,000 r/min
- C-Axis Control : 0.001°

## High Precision Spindle

- Integral body & heat dissipating RIB structure.
- SE2200YA Series (6") : 6,000 r/min
- SE2200Y Series (8") : 4,500 r/min
- C-Axis Control : 0.001°



## Hydraulic NC Tail Stock with Positioning Control (Std. 'L')

The NC tail stock applied to SE2200 series is available to travel separately from the turret so as to achieve "increase in convenience of use" and "shortening of cycle time".

# REDUCTION OF NON-CUTTING TIME BY FAST RAPID SPEED

## ALL-IN-ONE TYPE OF BED

### Optimal Structural Analysis

Structural analysis was applied to the design of the machine to increase the tool post body and reduce the machine's height so as to maintain the bed's dynamic rigidity even during high-speed machining.

In addition, the SE-Y Series bed slope is pitched at 30 degrees to ensure more stable machining.



### Floor Space (L×W)

SE2200YA	SE2200Y	SE2200LYA/LSYA/LY/LSY
2,210×1,730 mm (87"×68.1")	2,280×1,730 mm (89.8"×68.1")	2,960×1,730 mm (116.5"×68.1")

## GUIDEWAY

### High-Speed Roller LM Guideway

Linear roller guideways are applied to reduce non-cutting time and bring high rigidity.

### Rapid Traverse Rate (X/Z)

30/10/36 m/min (1,181/394/1,417 ipm)

### Travel (X/Y/Z)

SE2200YA/Y

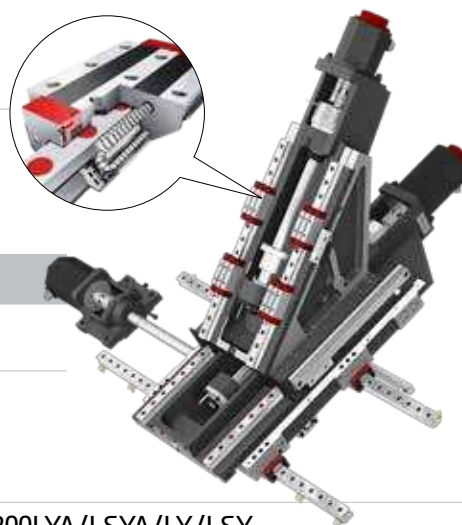
210/110/340 mm

(8.3"/4.3"/13.4")

SE2200LYA/LSYA/LY/LSY

210/110/560 mm

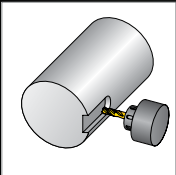
(8.3"/4.3"/22")



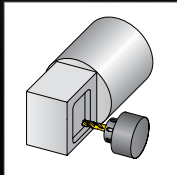
# 02 Y-AXIS FUNCTION

The Y-Axis Function, Cutting for Complex Shaped Work-piece

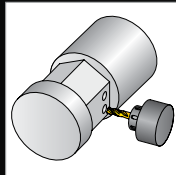
## HIGH PERFORMANCE Y-AXIS



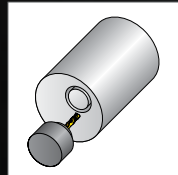
Keyway Milling



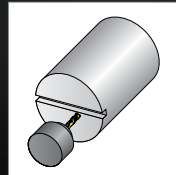
Multi-sided machining



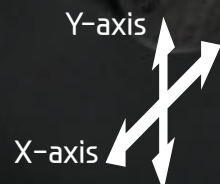
Eccentric hole machining



X+Y axis circular interpolation



Fine Grooving





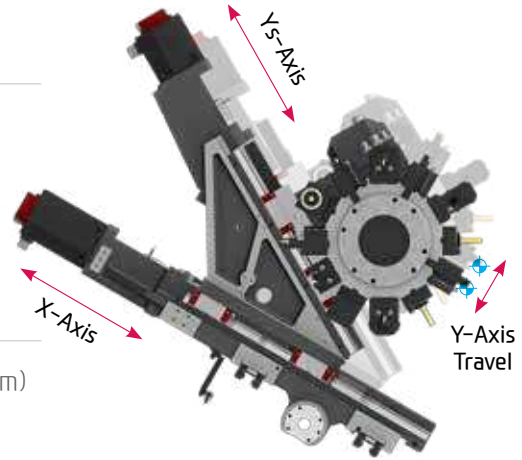
# MACHINING PROCESS WITH ONLY ONE INITIAL SETTING

## Y-AXIS

### Wedge Type Y-Axis Structure

The SE-Y Series is designed with a wedge type Y-axis that is transferred by the simultaneous operation of the Ys-axis and the X-axis.

In addition, excellent rigidity makes it possible to perform superb quality when machining a high-accuracy machining.



- Y-axis Rapid Traverse Rate : **10** m/min (394 ipm)
- Y-axis Travel : **110 {±55}** mm (4.3")

### MACHINING CAPABILITY

HYUNDAI WIA is doing its best to get the world-top class quality, productivity and technology for meeting the global customers' needs through its full R&D investment.

End Mill (Material : SM45C)	
Tool Dia.	Ø12 mm
Spindle rpm	750 r/min
Forwarding speed	188 mm/min
Cutting speed	29 m/min
Machining depth	14 mm

Drill (Material : SM45C)	
Tool Dia.	Ø13 mm
Spindle rpm	2,540 r/min
Forwarding speed	432 mm/min
Cutting speed	104 m/min

O.D Turning (Material : SM45C)	
Machining Dia.	Ø88 mm
Machining depth	4 mm
Spindle rpm	856 r/min
Cutting speed	215 m/min
Forwarding speed	0.5 mm/rev
Chip discharging amount	430 cc/min

U-Drill (Material : SM45C)	
Tool Dia.	Ø60 mm
Spindle rpm	1,011 r/min
Forwarding speed	177 mm/min
Cutting speed	191 m/min
Chip discharging amount	500 cc/min

Tap (Material : SM45C)	
Tap spec.×Pitch	M14×P2.0
Spindle rpm	600 r/min
Forwarding speed	2 mm/rev
Cutting speed	23 m/min

❖ The above result might be different by types of processing circumstances.

# 03 HIGH PRECISION SPINDLE

Long Lasting, High Accuracy & Excellent Performance CNC Turning Center

## Spindle Specifications

ITEM	Spindle Speed	Motor (Max./Cont.)	Torque (Max.)	Driving Method
6" Spindle	6,000 rpm (FANUC)	15/11 kW (20/15 HP)	127 N·m	Belt
	6,000 rpm (iTROL)	13.5/9 kW (18/12 HP)	114.5 N·m	
8" Spindle	4,500 rpm (FANUC)	15/11 kW (20/15 HP)	167 N·m	
	4,500 rpm (iTROL)	13.5/9 kW (18/12 HP)	150.3 N·m	
Sub Spindle	6,000 rpm (FANUC)	7.5/3.7 kW (10/5 HP)	63.6 N·m	
	6,000 rpm (iTROL)	7.4/4.9 kW (9.9/6.6 HP)	47 N·m	

# HEAVY DUTY CUTTING & HIGH ACCURACY

## MAIN SPINDLE

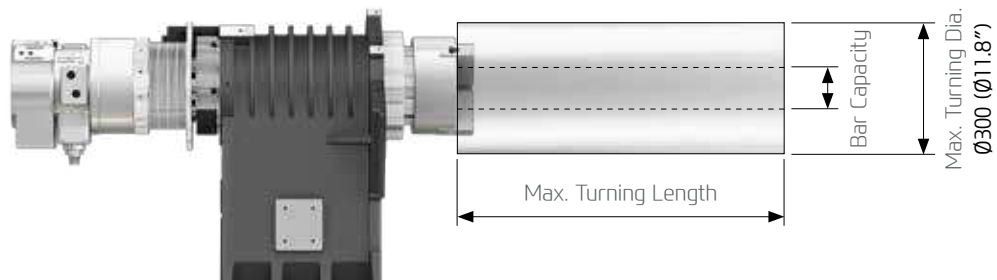
### Spindle for Heavy Cutting

The main spindle is designed with the same structure often found in larger sized machines. The combination of double cylindrical roller bearings and angular contact ball bearings leads to excellent heavy duty cutting performance.

Also, machining performance is enhanced by **applying ribstar belt** to minimize noise and belt slipping problems. The spindle is designed with a **labyrinth structure** to minimize possible bearing damage from coolant and to improve machining stability.

### C-Axis Control

C-axis of SE-Y Series can be controlled to 0.001° which makes it possible to process various shapes.



Max. Turning Length	Standard Bed	Long Type Bed	Bar Capacity
6 inch Spindle	309 mm (12.2")	529 mm (20.8")	Ø51 mm (Ø2")
8 inch Spindle	288 mm (11.3")	508 mm (20")	Ø65 mm (Ø2.6")

## SUB SPINDLE ('SY' Type)

The Belt-type sub spindle is designed to minimize thermal displacement during the continuous machining, offering from the heavy-duty cutting to the high-speed machining. When the main spindle cutting is completed, the sub spindle rotation is synchronized with the main spindle allowing the workpiece to be transferred to the sub spindle, and machining can begin on the back side of the workpiece.



SE-Y SERIES

# 04 BMT TURRET

High speed, High Accuracy, Highly Reliable Servo Turret



# VARIOUS DRIVEN PRECISION BMT TOOL HOLDERS

## TURRET

### Mill Turret (BMT45)

The BMT turret secures the tool with four bolts and key on the tool mounting surface of the turret, making it possible to powerfully fix the tool, ensuring high reliability in rigidity and precision.

- Speed (rpm) : 6,000 r/min
- Collet Size : ER20 / Ø13 (Ø0.51")
- Indexing Time : 0.15 sec



STRAIGHT MILLING HEAD



ANGULAR MILLING HEAD



### Mill Tool Holder

Machining capability has increased with the addition of straight milling head tool holder.

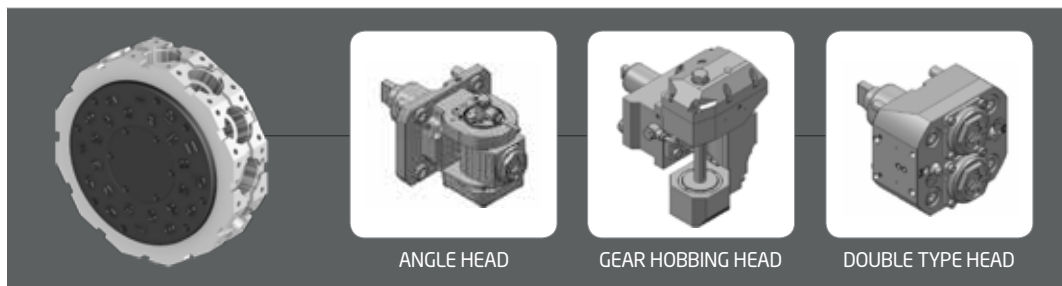
### Increased Rotating Tools

Straight and angular milling haed 1ea > 2ea, respectively

## SPECIAL TOOL

**OPTION**

With the Y-axis, the SE-Y Series can process high value-added products using a variety of rotating tools. In particular, there is a multi-holder for attaching a variety of tools to one holder, and an eccentric rotary tool for handling eccentric parts without additional axis travel, which can realize integration of process with one machine.



ANGLE HEAD

GEAR HOBBING HEAD

DOUBLE TYPE HEAD

❖ Consultation needed when ordering these options.

# 05 USER CONVENIENCE

Various Devices for User Friendly

## BAR FEEDER SYSTEM

### Bar Feeder

Bar feeder system enables automation which leads to efficiency improvement.

Long Type	: 3 m (118.1")	Short Type	: 1.5 m (59.1")
Bar Capacity	: Ø42 (1.7")	Bar Capacity	: Ø65 (2.6")



#### Parts Catcher

An optional parts catcher collects finished parts without the need to open the door, adding productivity, especially when a bar feeder is attached.



#### Auto Door

Using M-code, the doors can be automatically opened and closed which brings productivity and convenience for automation.



#### Parts Conveyor

The parts conveyor transfers the finished workpiece unloaded by the parts catcher for user convenience.



#### Auto Shutter

Using auto shutter, automation system with gantry loader is possible without opening the machine's door.

## HIGH PRECISION SYSTEM



### Automatic Q-Setter

Cutting tools are calibrated quickly and accurately with the addition of a q-setter. Each tool tip is touched off manually using a sensor that inputs the position automatically.



### Linear Scale

Linear scales increase positioning accuracy and reduce distortion caused by thermal growth, thus ensuring a more accurate finished part



### Work Probe

Workpiece coordinate values can be set automatically using the optional spindle probe.

Optional

## CHIP DISPOSAL SOLUTION

### Chip Conveyor

Timely and effective disposal of chips will enhance productivity as well as the working environment.



Hinge	Chip Type : Roughing Chip, Long Chip, Chip complex	Material : SS41, 45C, Cast Steel	Front-Right Direction
	Highly efficient when disposing a lot of chips. Capable of handling stringy chips..		
Scraper	Chip Type : Finely broken chip blown out	Material : cast Iron, Nonferrous	
	Convenient for shortly cut chips.		
❖ Screw	Chip Type : The lower portion of micro-chips	Material : Steel, Casting	
	Compresses and ejects chips to reduce chip Trouble.		
❖ Drum Filter	Chip Type : Powder, Micro Chip	Material : AL	
	Advantageous in precision, as the chips do not flow in to the coolant nozzle.		

❖ When ordering a screw or drum filter chip conveyor, prior consult with hyundai wia's sales person.

## COOLANT UNIT & ECO SYSTEM



Standard Coolant (Nozzle)



Chuck Coolant (Upper Chuck)



Chuck Air Blow (Upper Chuck)



Air Gun



### Grease Lubrication Device

- PLC control allows for timely supply of extremely small amount of grease
- System alarm (low level, line blockage)
- Oil skimmer is unnecessary
- Up to 60% reduction of annual maintenance costs compared to ordinary lubricant oil

# 06 HYUNDAI WIA FANUC – SMART PLUS

The Compatible All-round Control



**15" Touch-type Monitor as a standard**

	Fast Cycle Time Technology
Smart Machine Control	Fine Surface Technology
	Smart Servo Control Technology
Conversational Program	SmartGuide-i
i-HMI	Machining-aid Function
Part Program Storage	5120M (2MB)
No. of Registerable Programs	1000 EA





# SMART SOFTWARE



## Dialogue Program (Smart Guide-i)

This software offers the maximum user convenience through dialogue manipulation from setup to processing. This includes writing processing programs and simulation checks.

## Convenience Function S/W



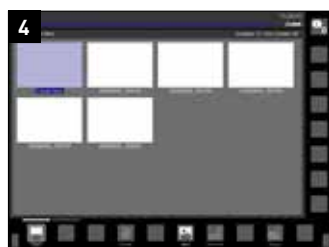
**1. Thermal Displacement Compensation (HW-TDC) OPTION**  
This software improves processing precision by minimizing thermal deformation from changes in external environments and machining.

**2. Machine Guidance (HW-MCG)**  
This software offers various user convenience functions such as tool manipulation, maintenance, tool monitoring, and a pop-up/status

**3. LAUNCHER**  
This software offers shortcuts for quick access to specialized features and frequently used features.

**4. Tool Monitoring (HW-TM) OPTION**  
This tool status monitoring software monitors and protects workpiece, tools, and equipment through real-time monitoring of the motor load from machining.

## Machining Support S/W



**1. Premium Tool Operation**  
This software offers premium graphic functions for more intuitive tool operation.

**2. Manual Viewer**  
This software enables users to view electronic manuals right from the tool.

**3. Scheduling**  
This software enables viewing/setting up directly from the tool. This allows such actions as managing customer's tool schedules and schedule notification.

**4. Operation Memo**  
This software is capable of managing customer notes such as tool information and issues.

# SPECIFICATIONS

## Standard & Optional

Spindle		SE2200YA	SE2200LYA	SE2200LSYA
Main Spindle	6"	●	●	●
Hollow Chuck 3 Jaw	8"	-	-	-
Main Spindle	6"	○	○	○
Solid Chuck 3 Jaw	8"	-	-	-
Sub Spindle	5"	-	-	●
Hollow Chuck 3 Jaw				
Sub Spindle	5"	-	-	○
Solid Chuck 3 Jaw				
Standard Soft Jaw (1set)		●	●	●
Chuck Clamp Foot Switch		●	●	●
2 Steps Hyd. Pressure Device		○	○	○
Spindle Inside Stopper		☆	☆	☆
Main Spindle Cs-axis (0.001")		●	●	●
Sub Spindle Cs-axis (0.001")		-	-	●
Chuck Open/Close Confirmation Device		●	●	●
2 Steps Chuck Foot Switch		○	○	○
Sub Chuck Foot Switch		-	-	●
<b>Turret</b>				
Tool Holder		●	●	●
Mill Turret	BMT	●	●	●
	12 Tool	●	●	●
	24 Tool	○	○	○
Straight Milling Head (Axial)	Collet Type, 2ea	●	●	●
Angular Milling Head (Radial)	Collet Type, 2ea	●	●	●
Straight Milling Head (Axial)	Adapter Type	○	○	○
Angular Milling Head (Radial)	Adapter Type	○	○	○
Boring Sleeve (U-drill Holder/Sleeve : Public Use)		●	●	●
Drill Socket		○	○	○
U-Drill Holder/Cap		●	●	●
Angle Head		☆	☆	☆
<b>Tail Stock &amp; Steady Rest</b>				
Hydraulic F/C Tail Stock (Std. Live Center)		○	●	-
Programmable Tail Stock		-	-	-
High Precision Live Center		☆	☆	-
2 Steps Tail Stock Pressure System		-	-	-
Tail Stock Foot Switch		○	○	-
<b>Coolant &amp; Air Blow</b>				
Standard Coolant (Nozzle)		●	●	●
Chuck Coolant (Upper Chuck)		○	○	○
Gun Coolant		○	○	○
Through Spindle Coolant (Only for Special Chuck)		☆	☆	☆
Bed Flushing		-	-	-
Turnmill Through Coolant		○	○	○
Chuck Air Blow (Upper Chuck)		○	○	○
Sub Chuck Air Blow		-	-	○
Tail Stock Air Blow (Upper Tail Stock)		○	○	-
Turret Air Blow		☆	☆	☆
Air Gun		○	○	○
Through Spindle Air Blow (Only for Special Chuck)		-	-	-
High Pressure Coolant	0.5Bar	●	●	●
	6Bar	○	○	○
	20Bar	○	○	○
	70Bar	○	○	○
Power Coolant System (For Automation)		☆	☆	☆
Coolant Chiller (When selecting Sub Tank Type, Chip Conveyor)		-	-	-
<b>Chip Disposal</b>				
Coolant Tank	Front(150ℓ [39.6 gal])	●	-	-
	Front(200ℓ [52.8 gal])	-	●	●
	Rear(150ℓ [39.6 gal])	○	○	○
Chip Conveyor (Hinge/Scrapper/Screw)	Front (Right)	○	○	○
	Rear (Rear)	○	○	○
Special Chip Conveyor (Drum Filter)		-	-	-
Chip Wagon	Standard (180ℓ [47.5 gal])	○	○	○
	Swing (200ℓ [52.8 gal])	○	○	○
	Large Size (330ℓ [87.2 gal])	○	○	○
	Customized	☆	☆	☆
<b>ETC</b>				
Tool Box		●	●	●
Customized Color	Need Munsell No.	☆	☆	☆
CAD & CAM		☆	☆	☆

● : Standard ○ : Option ☆ : Prior Consultation - : Non Applicable

Electric Device		SE2200YA	SE2200LYA	SE2200LSYA
Call Light	1Color : ●	●	●	●
Call Light & Buzzer	3Color : ● ● ● B	○	○	○
Electric Cabinet Light		○	○	○
Remote MPG		○	○	○
Work Counter	Digital	○	○	○
Total Counter	Digital	○	○	○
Tool Counter	Digital	○	○	○
Multi Tool Counter	6ea	○	○	○
	9ea	○	○	○
Electric Circuit Breaker		○	○	○
AVR (Auto Voltage Regulator)		☆	☆	☆
Transformer	25kVA	○	○	-
	30kVA	-	-	○
Auto Power Off		○	○	○
<b>Measurement</b>				
Q-Setter		○	○	○
Automatic Q-Setter		○	○	○
Work Close Confirmation Device (Only for Special Chuck)	TACO	○	○	○
	SMC	○	○	○
Work Setter		☆	☆	☆
Linear Scale	X/Z/Y axis	○	○	○
Coolant Level Sensor (Only for Chip Conveyor)		☆	☆	☆
<b>Environment</b>				
Air Conditioner	FANUC	○	○	○
	ITROL	○	○	●
Dehumidifier		○	○	○
Oil Mist Collector		☆	☆	☆
Oil Skimmer (Only for Chip Conveyor)		○	○	○
ML (Minimal Quantity Lubrication)		☆	☆	☆
<b>Fixture &amp; Automation</b>				
Auto Door		○	○	○
Auto Shutter (Only for Automatic System)		○	○	○
Sub Operation Pannel		☆	☆	☆
Bar Feeder Interface		○	○	○
Bar Feeder (FEDEK)		☆	☆	☆
Sub Spindle Work Pusher (Spring Type)		-	-	○
Sub Spindle Work Ejector (Pneumatic Type)		-	-	○
Extra M-Code 4ea		○	○	○
Automation Interface		☆	☆	☆
I/O Extension (IN & OUT)	16 Contact	○	○	○
	32 Contact	○	○	○
Parts Catcher	Main SP.	○	○	○
	Sub SP.	-	-	○
Turret Work Pusher (For Automation)		☆	☆	☆
Parts Conveyor (Required Main Parts Catcher)		○	○	○
Semi Automation System		☆	☆	☆
<b>Hyd. Device</b>				
Standard Hyd. Cylinder	Hollow	●	●	●
Standard Hyd. Unit (35bar [507.6 psi])	15ℓ (4gal)	●	●	-
	20ℓ (5.3gal)	-	-	●
<b>S/W</b>				
Conversational program	SmartGuide-i	○	○	○
	HW-DPRO	○	○	○
Thermal Displacement Compensation (HW-TDC)		○	○	○
Tool Monitoring (HW-TM)		○	○	○
Machine Guidance (HW-MCG)		●	●	●
Energy Saving System (HW-ESS)		●	●	●
DNC software (HW-eDNC)		○	○	○
Machine Monitoring System (HW-MMS)		○	○	○
Thermal Displacement Compensation Device		○	○	○
Premium Tool Operation		●	●	●
Manual Viewer		●	●	●
Scheduling		●	●	●
Operation Memo		●	●	●
<b>Safety Device</b>				
Total Splash Guard		●	●	●
Back Spin Torque Limiter (BST)		●	●	●
Torque Limiter		○	○	○
Front Door Interlock		●	●	●
Chuck Hydraulic Pressure Maintenance Interlock		☆	☆	☆

❖ Thermal Displacement Compensation device is recommended, when more than 6 bar of high pressure coolant is applied, for the high quality machining.  
Specifications are subject to change without notice for improvement.

# SPECIFICATIONS

## Standard & Optional

		SE2200Y	SE2200LY	SE2200LSY
<b>Spindle</b>				
Main Spindle	6"	-	-	-
Hollow Chuck 3 Jaw	8"	●	●	●
Main Spindle	6"	-	-	-
Solid Chuck 3 Jaw	8"	○	○	○
Sub Spindle	5"	-	-	●
Hollow Chuck 3 Jaw				
Sub Spindle	5"	-	-	○
Solid Chuck 3 Jaw				
Standard Soft Jaw (1set)		●	●	●
Chuck Clamp Foot Switch		●	●	●
2 Steps Hyd. Pressure Device		○	○	○
Spindle Inside Stopper		☆	☆	☆
Main Spindle Cs-axis (0.001")		●	●	●
Sub Spindle Cs-axis (0.001")		-	-	-
Chuck Open/Close Confirmation Device		●	●	●
2 Steps Chuck Foot Switch		○	○	○
Sub Chuck Foot Switch		-	-	●
<b>Turret</b>				
Tool Holder		●	●	●
Mill Turret	BMT	●	●	●
	12 Tool	●	●	●
	24 Tool	○	○	○
Straight Milling Head (Axial)	Collet Type, 2ea	●	●	●
Angular Milling Head (Radial)	Collet Type, 2ea	●	●	●
Straight Milling Head (Axial)	Adapter Type	○	○	○
Angular Milling Head (Radial)	Adapter Type	○	○	○
Boring Sleeve (U-drill Holder/Sleeve : Public Use)		●	●	●
Drill Socket		○	○	○
U-Drill Holder/Cap		●	●	●
Angle Head		☆	☆	☆
<b>Tail Stock &amp; Steady Rest</b>				
Hydraulic NC Tail Stock (Std. Live Center)		○	●	-
Programmable Tail Stock		-	-	-
High Precision Live Center		☆	☆	-
2 Steps Tail Stock Pressure System		-	-	-
Tail Stock Foot Switch		○	○	-
<b>Coolant &amp; Air Blow</b>				
Standard Coolant (Nozzle)		●	●	●
Chuck Coolant (Upper Chuck)		○	○	○
Gun Coolant		○	○	○
Through Spindle Coolant (Only for Special Chuck)		☆	☆	☆
Bed Flushing		-	-	-
Turnmill Through Coolant		○	○	○
Chuck Air Blow (Upper Chuck)		○	○	○
Sub Chuck Air Blow		-	-	○
Tail Stock Air Blow (Upper Tail Stock)		○	○	-
Turret Air Blow		☆	☆	☆
Air Gun		○	○	○
Through Spindle Air Blow (Only for Special Chuck)		-	-	-
High Pressure Coolant	0.5Bar	●	●	●
	6Bar	○	○	○
	20Bar	○	○	○
	70Bar	○	○	○
Power Coolant System (For Automation)		☆	☆	☆
Coolant Chiller (When selecting Sub Tank Type, Chip Conveyor)		-	-	-
<b>Chip Disposal</b>				
Coolant Tank	Front(150 ℓ [39.6 gal])	●	-	-
	Front(200 ℓ [52.8 gal])	-	●	●
	Rear(150 ℓ [39.6 gal])	○	○	○
Chip Conveyor (Hinge/Scraper/Screw)	Front (Right)	○	○	○
	Rear (Rear)	○	○	○
Special Chip Conveyor (Drum Filter)		-	-	-
Chip Wagon	Standard (180 ℓ [47.5 gal])	○	○	○
	Swing (200 ℓ [52.8 gal])	○	○	○
	Large Size (330 ℓ [87.2 gal])	○	○	○
	Customized	☆	☆	☆
<b>ETC</b>				
Tool Box		●	●	●
Customized Color	Need Munsell No.	☆	☆	☆
CAD & CAM		☆	☆	☆

● : Standard ○ : Option ☆ : Prior Consultation - : Non Applicable

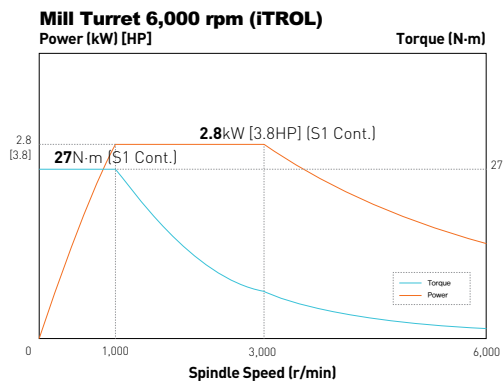
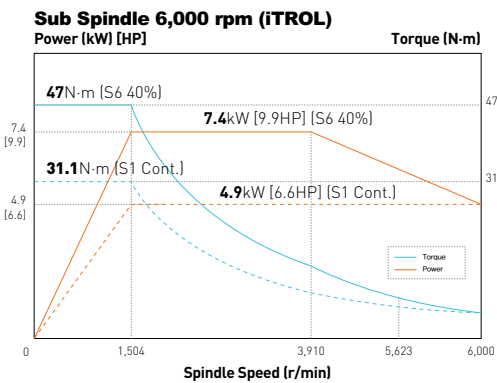
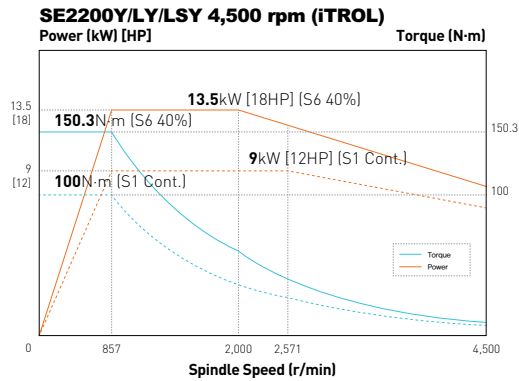
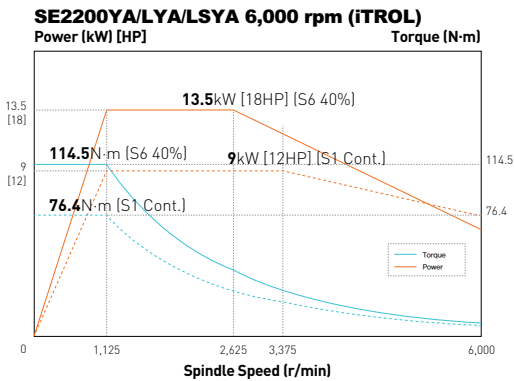
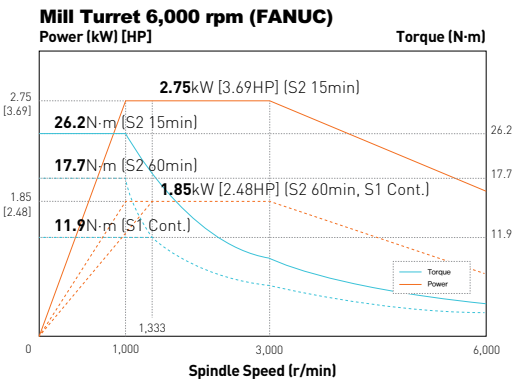
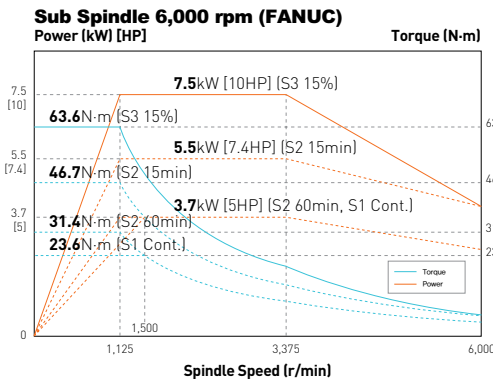
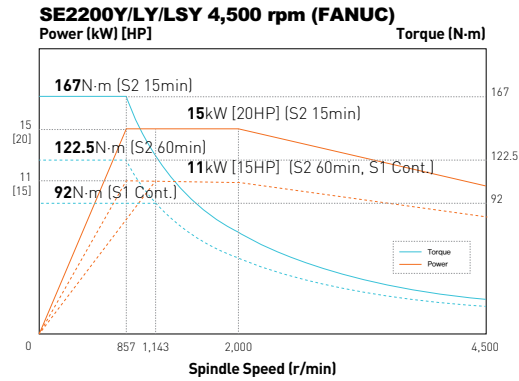
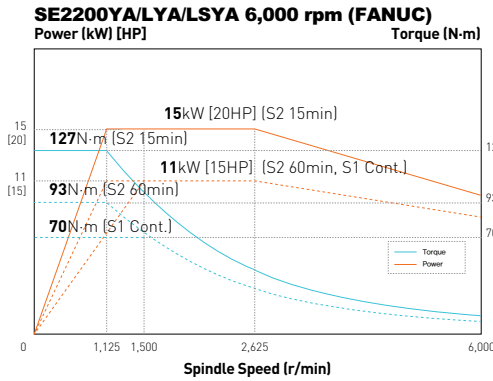
		SE2200Y	SE2200LY	SE2200LSY
<b>Electric Device</b>				
Call Light	1Color : ●	●	●	●
Call Light & Buzzer	3Color : ●●●B	○	○	○
Electric Cabinet Light		○	○	○
Remote MPG		○	○	○
Work Counter	Digital	○	○	○
Total Counter	Digital	○	○	○
Tool Counter	Digital	○	○	○
Multi Tool Counter	6ea	○	○	○
	9ea	○	○	○
Electric Circuit Breaker		○	○	○
AVR (Auto Voltage Regulator)		☆	☆	☆
Transformer	25kVA	○	○	-
	30kVA	-	-	○
Auto Power Off		○	○	○
<b>Measurement</b>				
Q-Setter		○	○	○
Automatic Q-Setter		○	○	○
Work Close Confirmation Device (Only for Special Chuck)	TACO	○	○	○
	SMC	○	○	○
Work Setter		☆	☆	☆
Linear Scale	X/Z/Y axis	○	○	○
Coolant Level Sensor (Only for Chip Conveyor)		☆	☆	☆
<b>Environment</b>				
Air Conditioner	FANUC	○	○	○
	iTROL	○	○	●
Dehumidifier		○	○	○
Oil Mist Collector		☆	☆	☆
Oil Skimmer (Only for Chip Conveyor)		○	○	○
MQL (Minimal Quantity Lubrication)		☆	☆	☆
<b>Fixture &amp; Automation</b>				
Auto Door		○	○	○
Auto Shutter (Only for Automatic System)		○	○	○
Sub Operation Panel		☆	☆	☆
Bar Feeder Interface		○	○	○
Bar Feeder (FEDEK)		☆	☆	☆
Sub Spindle Work Pusher (Spring Type)		-	-	○
Sub Spindle Work Ejector (Pneumatic Type)		-	-	○
Extra M-Code 4ea		○	○	○
Automation Interface		☆	☆	☆
I/O Extension (IN & OUT)	16 Contact	○	○	○
	32 Contact	○	○	○
Parts Catcher	Main SP.	○	○	○
	Sub SP.	-	-	○
Turret Work Pusher (For Automation)		☆	☆	☆
Parts Conveyor (Required Main Parts Catcher)		○	○	○
Semi Automation System		☆	☆	☆
<b>Hyd. Device</b>				
Standard Hyd. Cylinder	Hollow	●	●	●
Standard Hyd. Unit (35bar (507.6 psi))	15 ℓ (4gal)	●	●	-
	20 ℓ (5.3gal)	-	-	●
<b>S/W</b>				
Conversational program	SmartGuide-i	●	●	●
	HW-DPRO	○	○	○
Thermal Displacement Compensation (HW-TDC)		○	○	○
Tool Monitoring (HW-TM)		○	○	○
Machine Guidance (HW-MCG)		●	●	●
Energy Saving System (HW-ESS)		●	●	●
DNIC software (HW-eDNIC)		○	○	○
Machine Monitoring System (HW-MMS)		○	○	○
Thermal Displacement Compensation Device		○	○	○
Premium Tool Operation		●	●	●
Manual Viewer		●	●	●
Scheduling		●	●	●
Operation Memo		●	●	●
<b>Safety Device</b>				
Total Splash Guard		●	●	●
Back Spin Torque Limiter (BST)		○	○	○
Torque Limiter		○	○	○
Front Door Interlock		●	●	●
Chuck Hydraulic Pressure Maintenance Interlock		☆	☆	☆

◆ Thermal Displacement Compensation device is recommended, when more than 6 bar of high pressure coolant is applied, for the high quality machining.

Specifications are subject to change without notice for improvement.

# SPECIFICATIONS

## Spindle Output/Torque Diagram

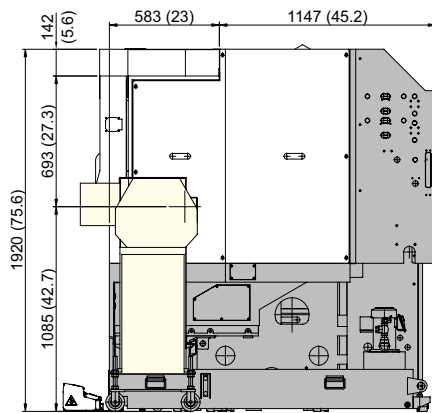
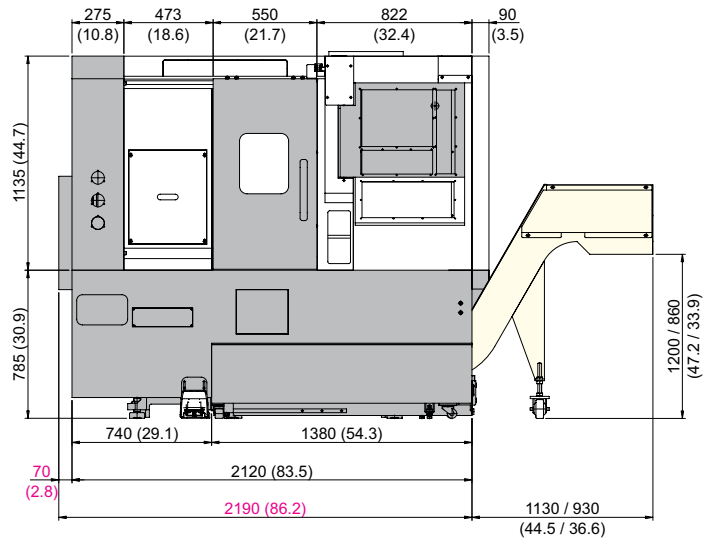
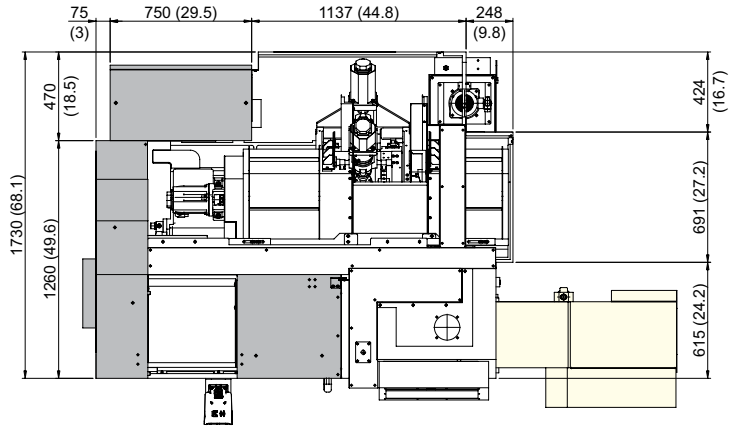


# SPECIFICATIONS

## External Dimensions

unit : mm(in)

SE2200YA  
SE2200Y

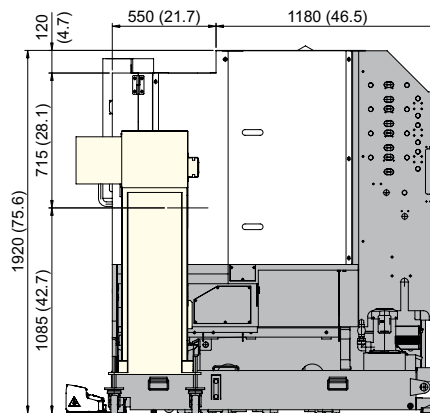
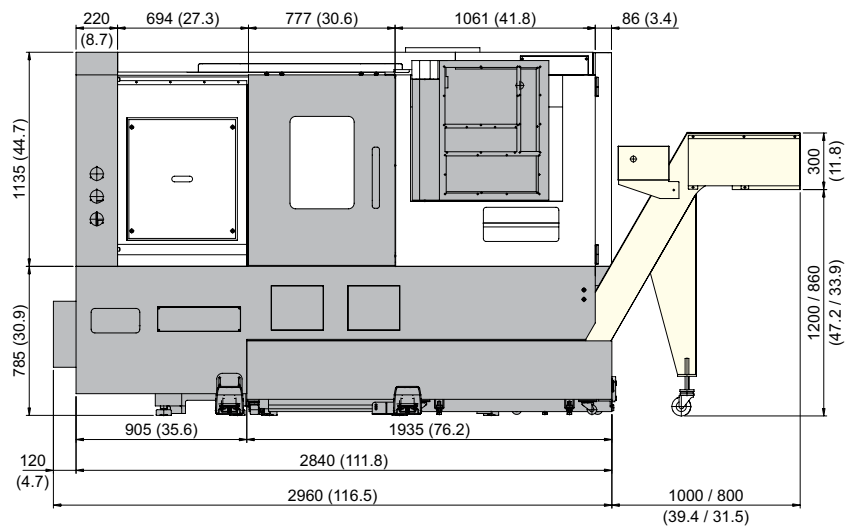
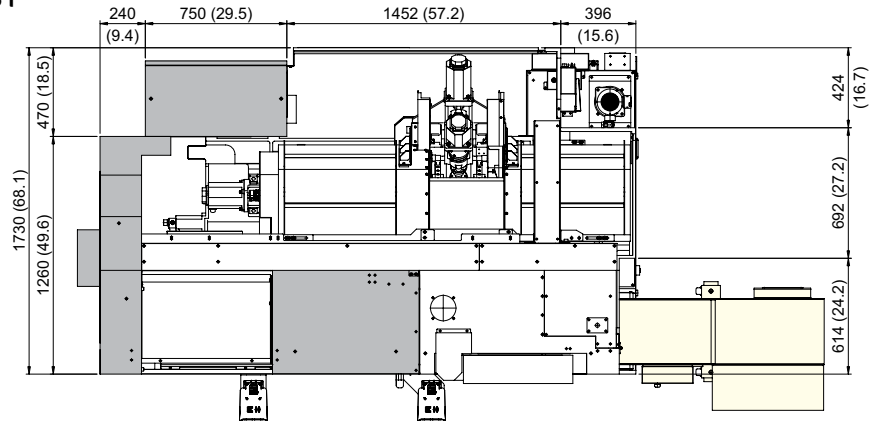


# SPECIFICATIONS

## External Dimensions

unit : mm(in)

SE2200LYA/LSYA  
SE2200LY/LSY

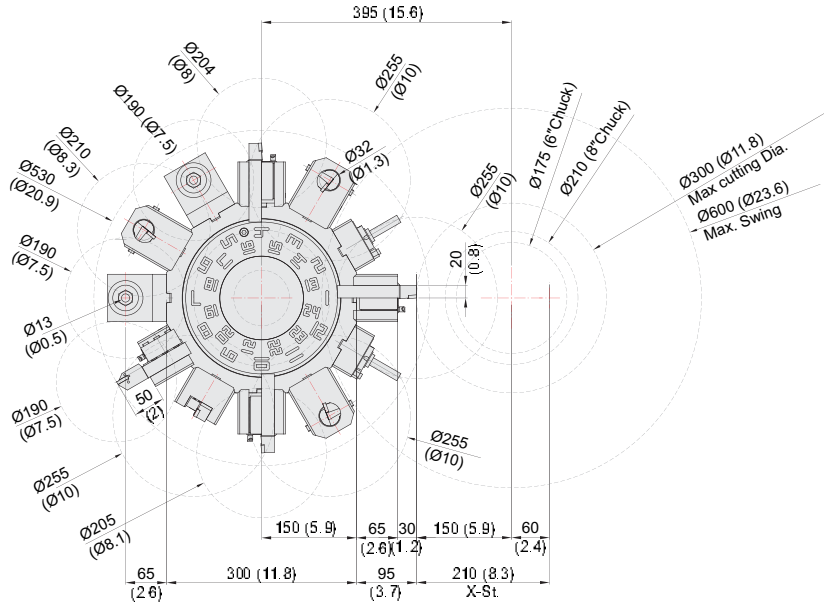


# SPECIFICATIONS

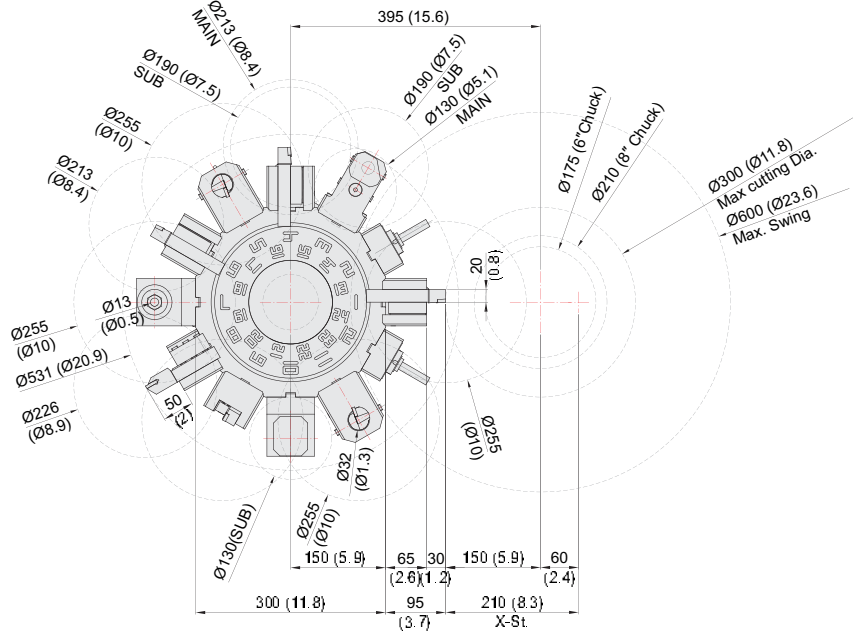
## Interference

unit : mm

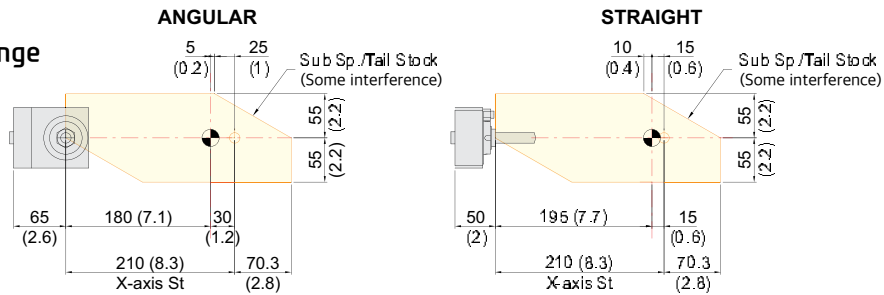
SE2200YA/LYA  
SE2200Y/LY



SE2200LSYA  
SE2200LSY



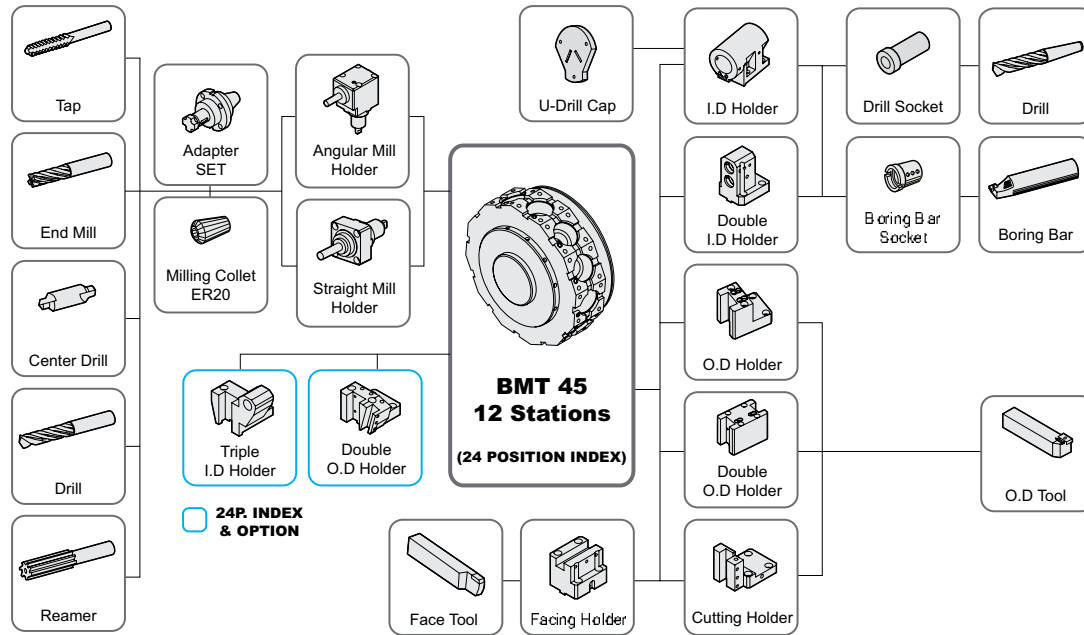
## Y-axis Travel Range



# SPECIFICATIONS

## Tooling System

unit : mm(in)



## SE2200YA/LYA | SE2200Y/LY Tooling Parts Detail

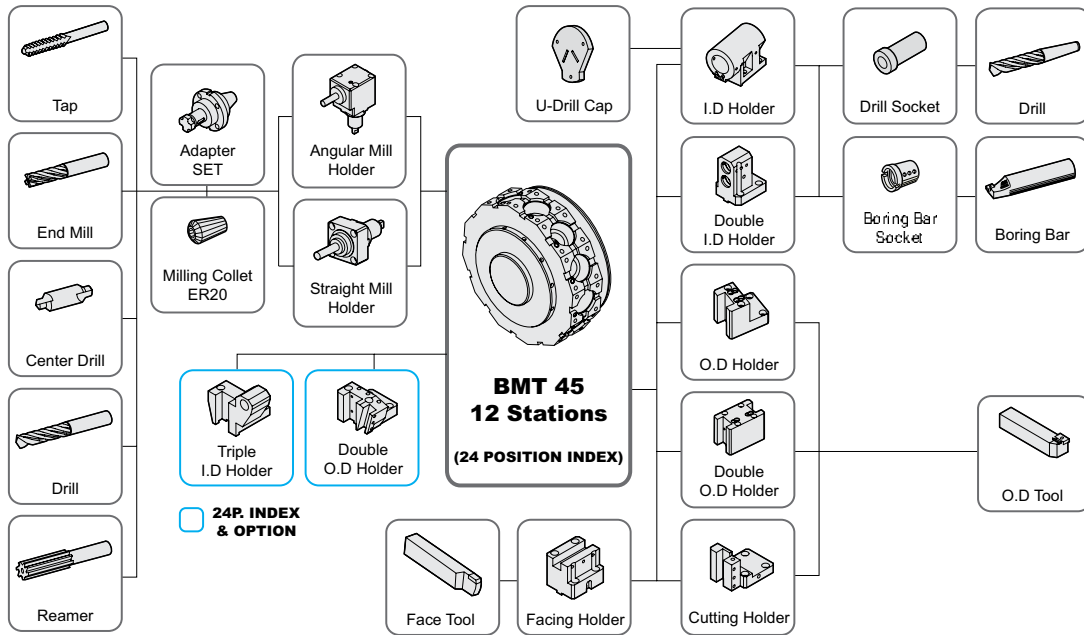
ITEM			12 Position		24 Position : Opt.	
			mm Unit	inch Unit	mm Unit	inch Unit
Turning Holder	O.D Holder	Right/Left	3	3	2	2
		Double	-	-	-	-
		Double (24P. Main)	-	-	1	1
		Double (24P. Sub)	-	-	-	-
	Facing Holder		1	1	1	1
	Cutting Holder		1	1	1	1
Boring Holder	I.D Holder	Single	2	2	1	1
		Double	-	-	-	-
		Triple	-	-	1	1
	U-Drill Holder	Cap	1	1	1	1
Driven Holder	Straight Mill Holder	Standard	2	2	2	2
	Angular Mill Holder	Standard	2	2	2	2
Socket	Boring	Ø10 (Ø3/8")	1	1	1	1
		Ø12 (Ø1/2")	1	1	1	1
		Ø16 (Ø5/8")	1	1	1	1
		Ø20 (Ø3/4")	1	1	1	1
		Ø25 (Ø1")	1	1	1	1
	Sub Boring	Ø8 (5/16")	-	-	-	-
		Ø10 (Ø3/8")	-	-	-	-
		Ø12 (1/2")	-	-	-	-
		Ø16 (5/8")	-	-	-	-
	Drill	MT 1	Opt.	Opt.	Opt.	Opt.
		MT 2	Opt.	Opt.	Opt.	Opt.
		ER Collet	1 Set	1 Set	1 Set	1 Set
		Adapter Set	Opt.	Opt.	Opt.	Opt.



# SPECIFICATIONS

## Tooling System

unit : mm(in)



## SE2200LSYA | SE2200LSY Tooling Parts Detail

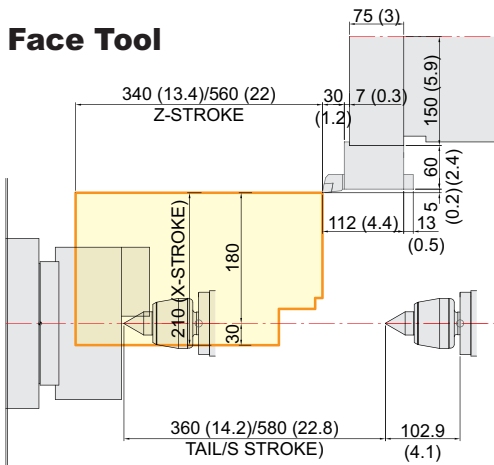
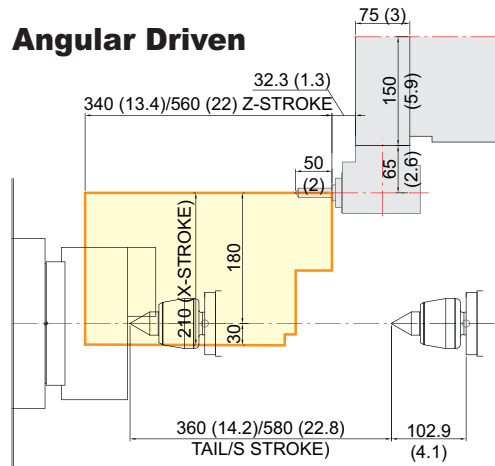
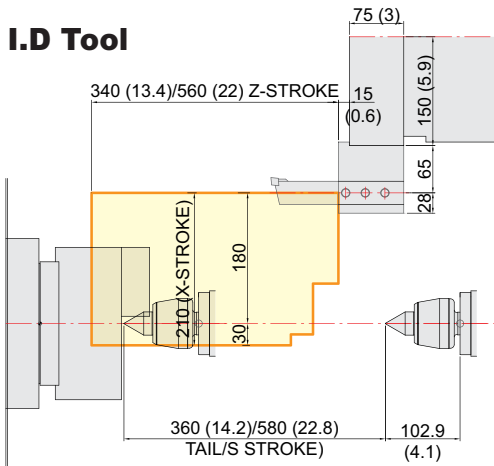
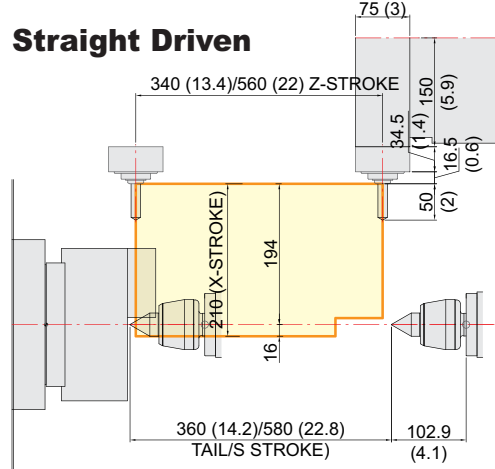
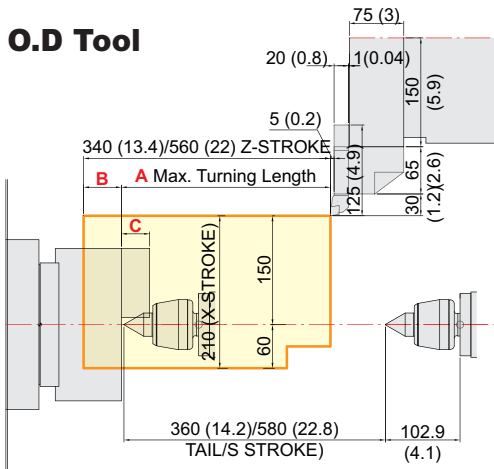
ITEM			12 Position		24 Position : Opt.	
			mm Unit	inch Unit	mm Unit	inch Unit
Turning Holder	O.D Holder	Right/Left	2	2	-	-
		Double	1	1	1	1
		Double (24P, Main)	-	-	1	1
		Double (24P, Sub)	-	-	1	1
	Facing Holder		1	1	1	1
Cutting Holder		1	1	1	1	
Boring Holder	I.D Holder	Single	1	1	-	-
		Double	1	1	1	1
		Triple	-	-	1	1
U-Drill Holder	Cap	1	1	1	1	
Driven Holder	Straight Mill Holder	Standard	2	2	2	2
	Angular Mill Holder	Standard	2	2	2	2
Socket	Boring	Ø10 (Ø3/8")	1	1	1	1
		Ø12 (Ø1/2")	1	1	1	1
		Ø16 (Ø5/8")	1	1	1	1
		Ø20 (Ø3/4")	1	1	1	1
		Ø25 (Ø1")	1	1	1	1
	Sub Boring	Ø8 (5/16")	1	1	1	1
		Ø10 (Ø3/8")	1	1	1	1
		Ø12 (1/2")	1	1	1	1
		Ø16 (5/8")	1	1	1	1
	Drill	MT 1	Opt.	Opt.	Opt.	Opt.
		MT 2	Opt.	Opt.	Opt.	Opt.
	ER Collet		1 Set	1 Set	1 Set	1 Set
	Adapter Set		Opt.	Opt.	Opt.	Opt.

Specifications are subject to change without notice for improvement.

# SPECIFICATIONS

Tooling Travel Range (SE2200YA/LYA | SE2200Y/LY)

unit : mm(in)

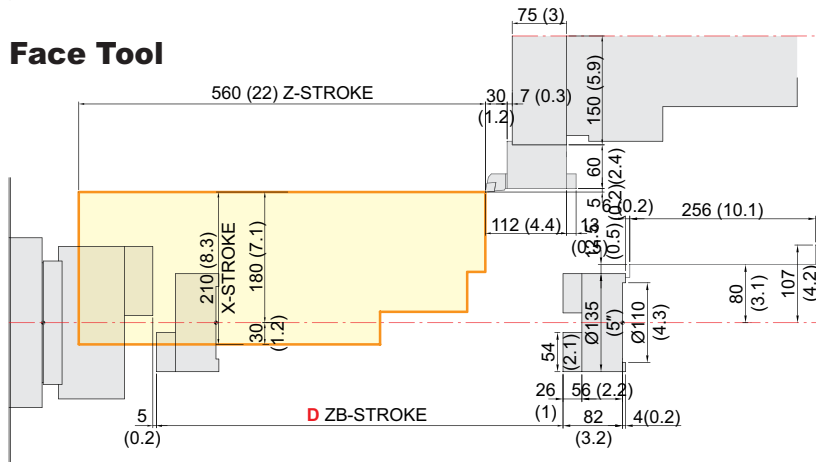
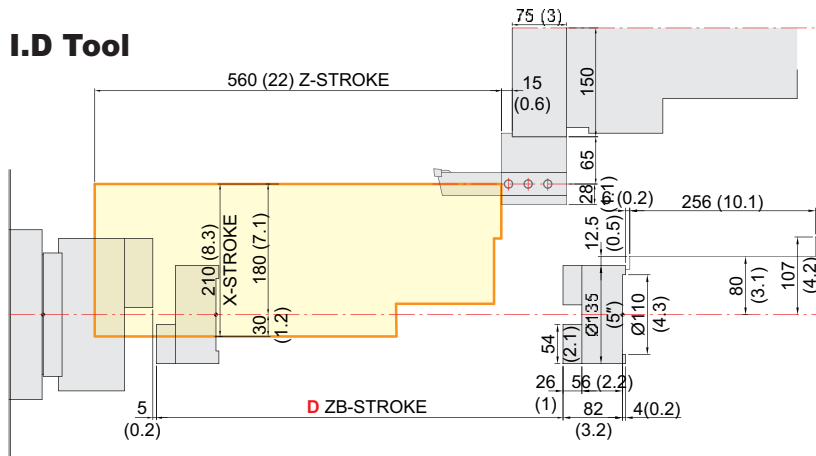
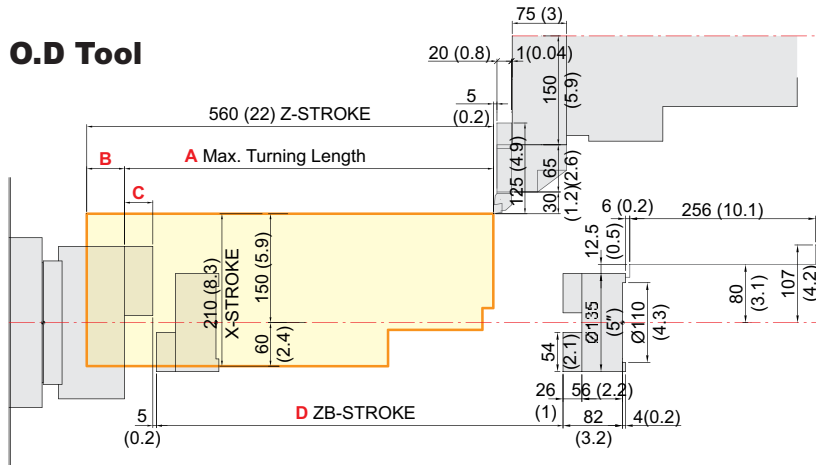


ITEM	A	B	C
SE2200YA	309 (12.2)	31 (1.2)	32.5 (1.3)
SE2200LYA	529 (20.8)		
SE2200Y	288 (11.3)	52 (2)	39 (1.5)
SE2200LY	508 (20)		

# SPECIFICATIONS

Tooling Travel Range (SE2200LSYA | SE2200LSY)

unit : mm(in)

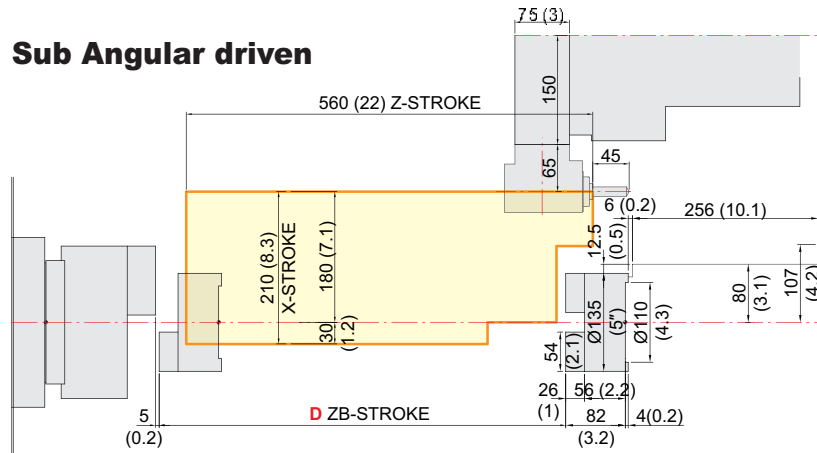
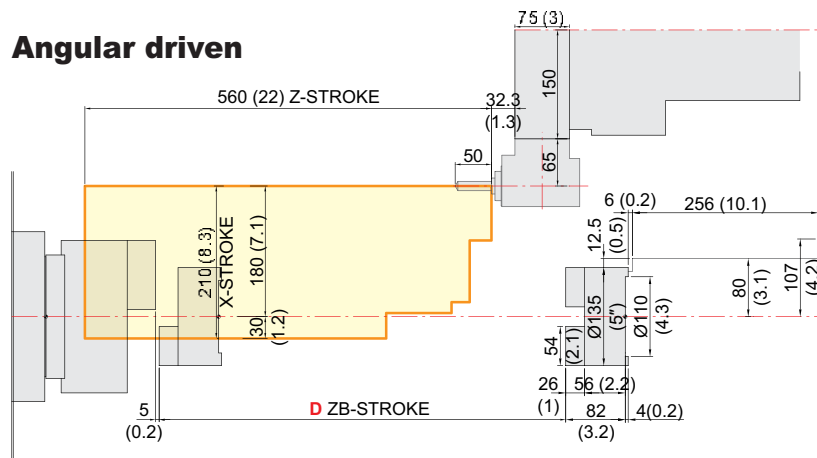
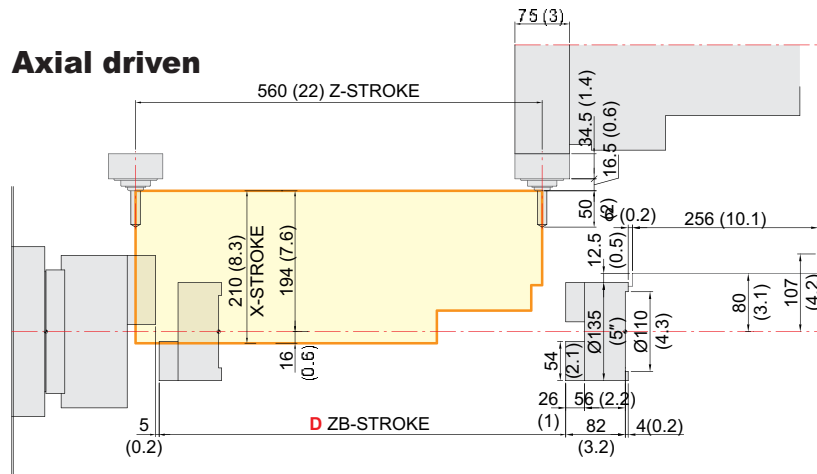


ITEM	A	B	C	D
SE2200LSYA	529 (20.8)	31 (1.2)	32.5 (1.3)	599.3 (23.6) [iTROL : 569.3 (22.4)]
SE2200LSY	508 (20)	52 (2)	39 (1.5)	560 (22) [iTROL : 530 (20.9)]

# SPECIFICATIONS

Tooling Travel Range (SE2200LSYA | SE2200LSY)

unit : mm(in)



ITEM	A	B	C	D
SE2200LSYA	529 (20.8)	31 (1.2)	32.5 (1.3)	599.3 (23.6) [iTROL : 569.3 (22.4)]
SE2200LSY	508 (20)	52 (2)	39 (1.5)	560 (22) [iTROL : 530 (20.9)]

# SPECIFICATIONS

## Specifications

[ ] : Option

ITEM			SE2200YA	SE2200LYA	SE2200LSYA
CAPACITY	Swing Over the Bed	mm(in)	Ø600 (Ø23.6")		
	Swing Over the Carriage	mm(in)	Ø600 (Ø23.6")		
	Max. Turning Dia.	mm(in)	Ø300 (Ø11.8")		
	Max. Turning Length	mm(in)	309 (12.2")	529 (20.8")	
	Bar Capacity	Main	mm(in)	Ø51 (Ø2")	
Sub		mm(in)	-	Ø32 (Ø1.3")	
SPINDLE	Chuck Size	Main	6"		
		Sub	5"		
	Spindle Bore	Main	Ø60 (Ø2.4")		
		Sub	Ø42 (Ø1.7")		
	Spindle Speed (rpm)	Main	6,000		
		Sub	-		
	Motor (Max./Cont.)	Main	15/11 (20/15) [13.5/9 (18/12)]		
		Sub	-		
	Max. Torque	Main	127 [114.5]		
		Sub	-		
	Spindle Type	Main	BELT		
		Sub	-		
	Spindle Nose	Main	A2-5		
		Sub	mm(in)		
C-axis Indexing	deg	0.001°			
FEED	Travel	X/Y	210/110 {±55} (8.3"/4.3" {±2.2"})		
		Z/ZB	340 (13.4")	560 (22")	560/599.3 [569.3] (22"/23.6" [22.4"])
	Rapid Traverse Rate	X/Y	30/10 (1,181/394)		
		Z/ZB	36 (1,417)		36/15 (1,417/591)
Slide Type	-	ROLLER LM GUIDE			
TURRET	No. of Tools	ea	12 [24]		
	Tool Size	O.D	□ 20 (□ 3/4")		
		I.D	Ø32 (Ø1 1/4")		
	Indexing Time	sec	0.15		
Y-Axis Type	-	WEDGE TYPE			
LIVE TOOL	Milling Tool Speed (rpm)	r/min	6,000		
	Motor (Max./Cont.)	kW(HP)	2.75/1.85 (3.69/2.48) [Cont. : 2.8 (3.8)]		
	Max. Torque	N·m	26.2 [Cont. : 27]		
	Collet Size	mm(in)	ER20 / Ø13 (Ø0.5")		
Type	-	BMT45			
TAIL STOCK	Taper	-	MT#4		-
	Dia.	mm(in)	Ø56 (Ø2.2")		-
	Travel	mm(in)	360 (14.2")	580 (22.8")	-
TANK CAPACITY	Coolant Tank	ℓ (gal)	150 (39.6)	200 (52.8)	
	Lubricating Tank	ℓ (gal)	0.7 (0.2)		
POWER SUPPLY	Electric Power Supply	kVA	18		23
	Thickness of Power Cable	Sq	Over 16		
	Voltage	V/Hz	220V, 50/60Hz		
MACHINE	Floor Space (L×W)	mm(in)	2,210×1,730 (87"×63.4")	2,960×1,730 (116.5"×68.1")	
	Height	mm(in)	1,920 (75.6")		
	Weight	kg(lb)	3,700 (8,157)	4,100 (9,039)	4,200 (9,259)
CNC	Controller	-	HYUNDAI WIA FANUC i Series - Smart Plus [HYUNDAI-iTROL]		

Specifications are subject to change without notice for improvement.

# SPECIFICATIONS

## Specifications

[ ] : Option

ITEM			SE2200Y	SE2200LY	SE2200LSY	
CAPACITY	Swing Over the Bed	mm(in)	Ø600 (Ø23.6")			
	Swing Over the Carriage	mm(in)	Ø600 (Ø23.6")			
	Max. Turning Dia.	mm(in)	Ø300 (Ø11.8")			
	Max. Turning Length	mm(in)	288 (11.3")	508 (20")		
	Bar Capacity	Main	mm(in)	Ø65 (Ø2.6")		
Sub		mm(in)	-	Ø32 (Ø1.3")		
SPINDLE	Chuck Size	Main	inch	8"		
		Sub	inch	-	5"	
	Spindle Bore	Main	mm(in)	Ø75 (Ø3")		
		Sub	mm(in)	-	Ø42 (Ø1.7")	
	Spindle Speed (rpm)	Main	r/min	4,500		
		Sub	r/min	-	6,000	
	Motor (Max./Cont.)	Main	kW(HP)	15/11 (20/15) [13.5/9 (18/12)]		
		Sub	kW(HP)	-	7.5/3.7 (10/5) [7.4/4.9 (93.9/6.6)]	
	Max. Torque	Main	N·m	167 [150.3]		
		Sub	N·m	-	63.6 [47]	
	Spindle Type	Main	-	BELT		
		Sub	-	-	BELT	
	Spindle Nose	Main	-	A2-6		
Sub		mm(in)	-	FLAT TYPE		
C-axis Indexing	deg	0.001°				
FEED	Travel	X/Y	mm(in)	210/110 {±55} (8.3"/4.3" {±2.2"})		
		Z/ZB	mm(in)	340 (13.4")	560 (22")	560/560 [530] (22"/22" [20.9"])
	Rapid Traverse Rate	X/Y	m/min(ipm)	30/10 (1,181/394)		
		Z/ZB	m/min(ipm)	36 (1,417)		36/15 (1,417/591)
Slide Type	-	ROLLER LM GUIDE				
TURRET	No. of Tools	ea	12 [24]			
	Tool Size	O.D	mm(in)	□20 (□ 3/4")		
		I.D	mm(in)	Ø32 (Ø1 1/4")		
	Indexing Time	sec	0.15			
Y-Axis Type	-	WEDGE TYPE				
LIVE TOOL	Milling Tool Speed (rpm)	r/min	6,000			
	Motor (Max./Cont.)	kW(HP)	2.75/1.85 (3.69/2.48) [Cont. : 2.8 (3.8)]			
	Max. Torque	N·m	26.2 [Cont. : 27]			
	Collet Size	mm(in)	ER20 / Ø13 (Ø0.5")			
	Type	-	BMT45			
TAIL STOCK	Taper	-	MT#4		-	
	Dia.	mm(in)	Ø56 (Ø2.2")			
	Travel	mm(in)	360 (14.2")	580 (22.8")	-	
TANK CAPACITY	Coolant Tank	ℓ (gal)	150 (39.6)	200 (52.8)		
	Lubricating Tank	ℓ (gal)	0.7 (0.2)			
POWER SUPPLY	Electric Power Supply	kVA	18		23	
	Thickness of Power Cable	Sq	Over 16			
	Voltage	V/Hz	220V, 50/60Hz			
MACHINE	Floor Space (L×W)	mm(in)	2,280×1,730 (89.8"×68.1")	2,960×1,730 (116.5"×68.1")		
	Height	mm(in)	1,920 (75.6")			
	Weight	kg(lb)	3,800 (8,378)	4,200 (9,259)	4,300 (9,480)	
CNC	Controller	-	HYUNDAI WIA FANUC i Series - Smart Plus [HYUNDAI-iTROL]			

Specifications are subject to change without notice for improvement.

# CONTROLLER

## HYUNDAI WIA FANUC i Series – Smart Plus

[ ] : Option

Controlled axis / Display / Accuracy Compensation	
Control axes	2 axes (X, Z) / 3 axes (X, Z, C) / 4 axes (X,Z,Y,C) 5 axes (X, Z, B, C, A) / 6 axes (X, Z, Y, B, C, A) 7 axes (X1/Z1, X2/Z2, B2, C1/C2)
Simultaneously controlled axes	2 axes [Max. 4 axes]
Designation of spindle axes	3 axes [Max. 4 axes]
Least setting Unit	X, Z, Y, B axes : 0.001 mm (0.0001 inch) C, A axes : 0.001 deg
Least input increment	X, Z, Y, B axes : 0.001 mm (0.0001 inch) C, A axes : 0.001 deg
Inch / Metric conversion	G20 / G21
High response vector control	
Interlock	All axes / Each axis
Machine lock	All axes
Backlash compensation	± 0~9999 pulses (exc. Rapid traverse / Cutting feed)
Position switch	
LCD / MDI	15 inch LCD unit (with Touch Panel)
Feedback	Absolute motor feedback
Stored stroke check 1	Over travel
Stored stroke check 2, 3	
PMC axis control	
Operation	
Automatic operation (Memory)	
MDI operation	
DNC operation	Needed DNC software / CF card
Program restart	
Wrong operation prevention	
Program check function	Dry run
Single block	
Search function	Program Number / Sequence Number
Interpolation functions	
Nano interpolation	
Positioning	G00
Linear interpolation	G01
Circular interpolation	G02, G03
Exact stop mode	Single : G09, Continuous : G61
Dwell	G04, 0 ~ 9999.9999 sec
Skip	G31
Reference position return	1st reference : G28, 2nd reference : G30 Ref. position check : G27
Thread synchronous cutting	G33
Thread cutting retract	
Variable lead thread cutting	
Multi / Continuous threading	
Feed function / Acc. & Dec. control	
Manual feed	Rapid traverse Jog : 0~2,000 mm/min (79 ipm) Manual handle : x1, x10, x100 pulses Reference position return
Cutting Feed command	Direct input F code
Feedrate override	0 ~ 200% (10% Unit)
Rapid traverse override	1%, F25%, 50%, 100%
Override cancel	
Feed per minute	G98
Feed per revolution	G99
Look-ahead block	1 block
Program input	
Tape Code	EIA / ISO
Optional block skip	1 ea
Absolute / Incremental program	G90 / G91
Program stop / end	M00, M01 / M02, M30
Maximum command unit	± 999,999.999 mm (± 99,999.9999 inch)
Plane selection	X-Y : G17 / Z-X : G18 / Y-Z : G19
Workpiece coordinate system	G52, G53, 6 pairs (G54 ~ G59)
Manual absolute	Fixed ON
Programmable data input	G10
Sub program call	10 folds nested
Custom macro	#100 ~ #199, #500 ~ #999
G code system	A, B/C
Programmable mirror image	G51.1, G50.1
G code preventing buffering	G4.1
Direct drawing dimension program	Including Chamfering / Corner R
Conversational Program	SmartGuide-i

Program input	
Multiple repetitive cycles	I, II
Canned cycle for turning	
Auxiliary function / Spindle speed function	
Auxiliary function	M & 4 digit
Level-up M Code	High speed / Multi / Bypass M code
Spindle speed function	S & 5 digit, Binary output
Spindle override	0% ~ 150% (10% Unit)
Multi position spindle orientation	M19 (S##)
FSSB Rigid tapping	
Constant surface speed control	G96, G97
Tool function / Tool compensation	
Tool function	T & 2 digit + Offset 2 digit
Tool life management	
Tool offset pairs	128 pairs
Tool nose radius compensation	G40, G41, G42
Geometry / Wear compensation	
Direct input of offset measured B	
Editing function	
Part program storage size	5,120m (2MB)
No. of registerable programs	1,000 ea
Program protect	
Background editing	
Extended part program editing	Copy, move and change of NC program
Memory card program edit	
Data input / output & Interface	
I/O interface	CF card, USB memory Embedded Ethernet interface
Screen hard copy	
External message	
External key input	
External workpiece number search	
Automatic data backup	
Setting, display and diagnosis	
Self-diagnosis function	
History display & Operation	Alarm & Operator message & Operation
Run hour / Parts count display	
Maintenance information	
Actual cutting feedrate display	
Display of spindle speed / T code	
Graphic display	
Operating monitor screen	Spindle / Servo load etc.
Power consumption monitoring	Spindle & Servo
Spindle / Servo setting screen	
Multi language display	Support 24 languages
Display language switching	Selection of 5 optional Languages
LCD Screen Saver	Screen saver
Unexpected disturbance torque	BST (Back spin torque limit)
Function for machine type	
Cs contour control (C & A axes)	Mill, MS, Y, SY, LF-Mill, TTMS, TTSY
Polar coordinate interpolation	Mill, MS, Y, SY, LF-Mill, TTMS, TTSY
Cylindrical interpolation	Mill, MS, Y, SY, LF-Mill, TTMS, TTSY
Polygon turning (2 Spindles)	Mill, MS, Y, SY, LF-Mill, TTMS, TTSY
Canned cycle for drilling	Mill, MS, Y, SY, LF-Mill, TTMS, TTSY
Spindle orientation expansion	MS, SY, TTS, TTMS, TTSY
Spindle synchronous control	MS, SY, TTS, TTMS, TTSY
Torque control	MS, SY, TTS, TTMS, TTSY
Y axis offset	Y, SY, TTSY
Arbitrary angular control	Y, SY, TTSY
Composite / Superimposed control	MS, SY, TTS, TTMS, TTSY
Balance cutting	TTS, TTMS, TTSY
Option	
Additional optional block skip	9 ea
Fast ethernet	Needed option board
Data server	Needed option board
Protection of data at 8 levels	
Tool offset pairs	200 pairs
Helical interpolation	
Optional block skip	40 ea, 200 ea (AICC II)

Figures in inch are converted from metric values.

The FANUC controller specifications are subject to change based on the policy of company CNC supplying.

# CONTROLLER

## HYUNDAI-iTROL

Control & Composition	
Number of axis/Spindles	2 axes (X, Z) / 3 axes (X, Z, C)
Number of axis/Spindles, max.	8 axes (Axis + Spindle)
Color display	TFT 10.4" Color (800 x 600)
Keyboard	QWERTY Full Keyboard
Part program storage	1MB, 3MB, 5MB
Addition of part program on CF card	
Transfer Function	
Feedrate override	0% ~ 200%
Transfer value input range	± 999999999
Unlimited rotation of rotation axis	
Acc./Dec. with jerk limitation	
Measuring systems 1 and 2, selectable	
Travel to fixed stop	
Auto servo drive tuning	
Spindle Function	
Spindle override	0% ~ 150%
Spindle speed, max. programmable value range	1000000 ~ 0.0001
Automatic gear stage selection	
Spindle orientation	
Spindle speed limitation	
Rigid tapping	
Spindle control with PLC	
Interpolation	
Linear interpolation axis, max.	4 axis
Circle via center point and end point	
Circle via interpolation point	
Helical interpolation	
Non-uniform rational B splines	
Continuous - path mode with programmable rounding clearance	
Program Function	
Subroutine levels, max.	7
Interrupt routines, max.	2
Number of levels for skip blocks	2
Polar Coordinates	
Dimensions inch/metric, changeover manually or via program	
Dynamic preprocessing memory FIFO	
Look ahead	1
Absolute/Incremental command	G90 / G91
Scaling/Rotation	
Read/Write system variables	
Block search	
Edit background	
Processing program number, max.	750
Using of CF Card, USB	
Basic coordinate number, max.	1
Work coordinate number, max.	100
Basic/Work coordinate programming change	
Scratching function	
Global and Local user data (GUD/LUD)	
Global program user data	
Conversational Cycle Program	
Tool Function	
Tool radius compensations	
Tool offset selection via T/D numbers	
Tools / Cutting edges in tool list	128 / 256, 256 / 512
Monitoring Function	
Working area limit	
Software and Hardware limit	
Zero-speed/Clamping monitoring	
2D/3D protection zones	
Contour monitoring	

Compensation	
Backlash compensation	
Leadscrew error compensation	
Measuring system error compensation	
Feedforward control (Speed control)	
Safety Function	
Safe torque off (STO)	
Safe brake control (SBC)	
Safe stop 1 (SS1)	
Diagnostic Function	
Alarm/Message . Alarm log	
PLC status/LAD online display	
PLC remote connection (Ethernet)	
Automation Support Function	
Actual velocity display	
Tool life management	As time / As amount
Work counter/Cycle time	Embedded
2D simulation	
Manual Operation	
Manual handle/Log transfer	
Manual measurement of workpiece / tool offset	
Automatic tool/Workpiece measurement	
Automatic/Program reference approach	
Automatic Operation	
Program run as using CF card/USB	
Program control/modification	
Block search	
Reposition	
Preset (Set actual value)	
Data Transmission	
Ethernet network	
USB memory stick & CF card	
Convenience Function	
Processing setting	Coordinate system setting, Auto tool length measurement
Processing support	Tool Monitoring, Spindle overload monitoring
Maintenance	Turret Guidance, I/O monitoring, Manual
Management	Soft MCP, M/G code List
SMART machining	
Energy saving function (ECO)	
Machine Monitoring System (MMS Lite)	
Language	
Standard support language	Chinese Simplified, English, Korean
Option	
Maximum skip block number	10
DRF offset	
MDI program save/load	
Teach-In mode	
3D simulation	Except for working area/Collision check
Real time simulation	
Shop Turn	Conversational Program
Spline interpolation	
Program remote control in network	
Language	Chinese Traditional, French, German, Italian, Portuguese, Spanish

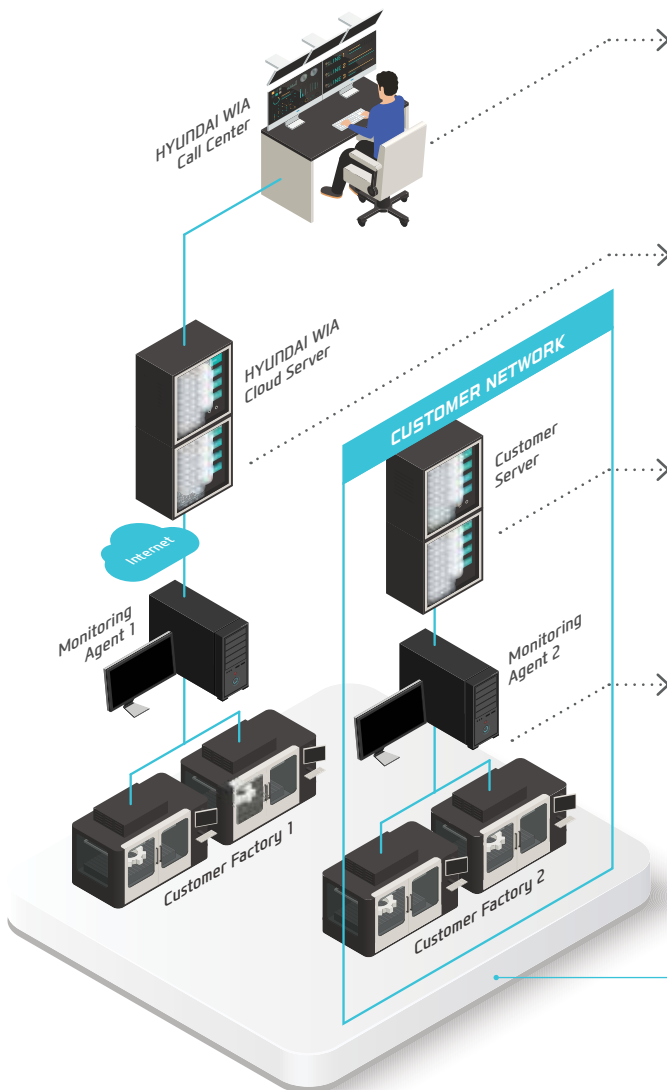


# HW-MMS

HYUNDAI WIA Machine Monitoring System



A brand new manufacturing machine by Hyundai Wia, HW-MMS is a unique software capable of monitoring the operation status of manufacturing machines in factories, a smart solution to improve manufacturing conditions of customers.



### HW-MMS Remote

Hyundai Wia Call Center's remote diagnosis service provides a HMI/video diagnostic function.



### HW-MMS Cloud

A cloud server-based equipment monitoring system for collecting and analyzing facility operation data.



### HW-MMS Edge

A client server-based tool monitoring system for collection/analysis of facility operation data. (Compatible with client MES / ERP interface)



### HW-MMS PT

This is a facility big data-based smart factory solution that collects and analyzes changes in spindle/feed data and NC processing files

HYUNDAI WIA  
Smart Factory Solution



You Tube HYUNDAI WIA MT

[www.youtube.com/HYUNDAIWIAMT](http://www.youtube.com/HYUNDAIWIAMT)

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