

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

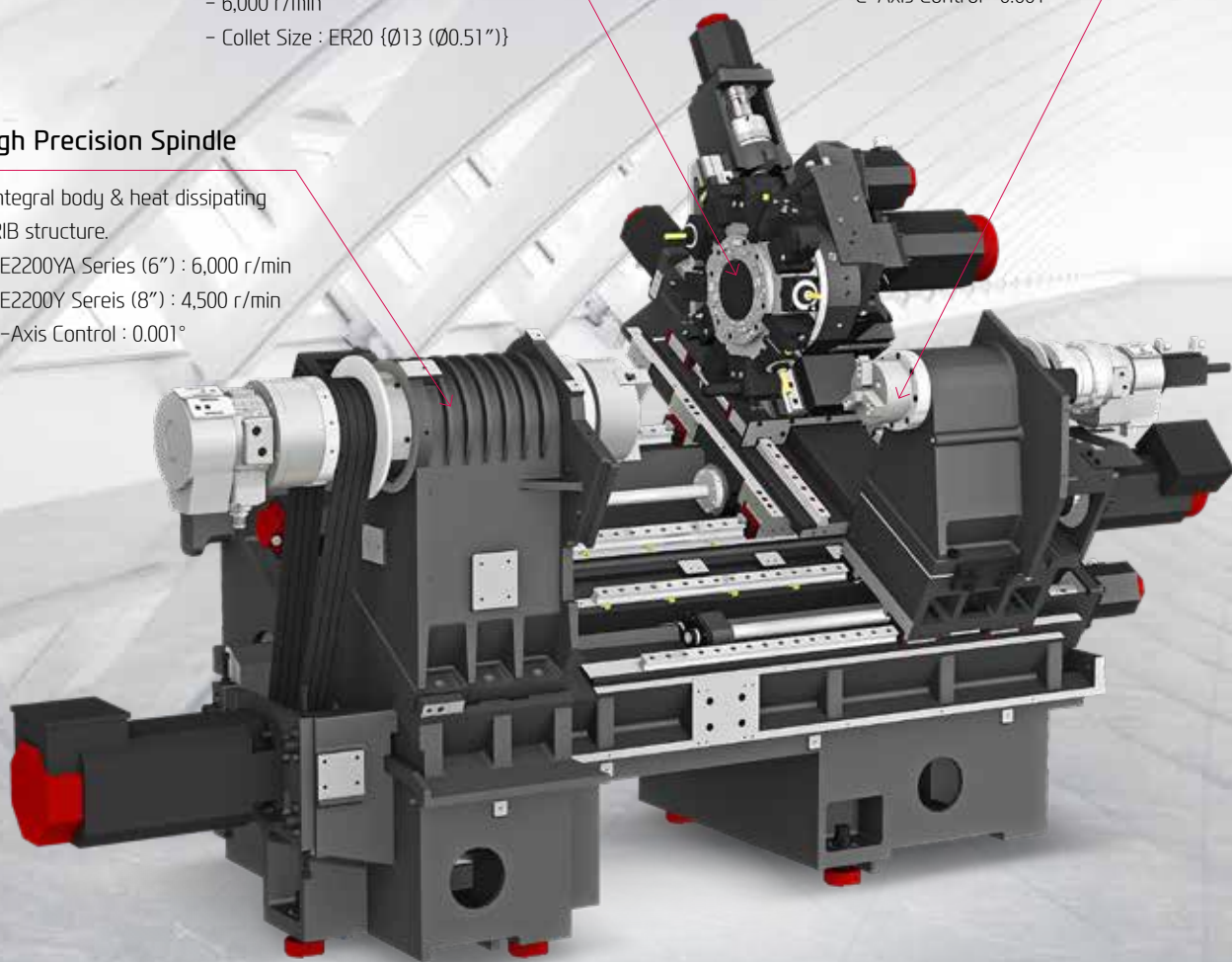
- BMT45 (12 [24] Station)
- 6,000 r/min
- Collet Size : ER20 {Ø13 (Ø0.51")}

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°



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

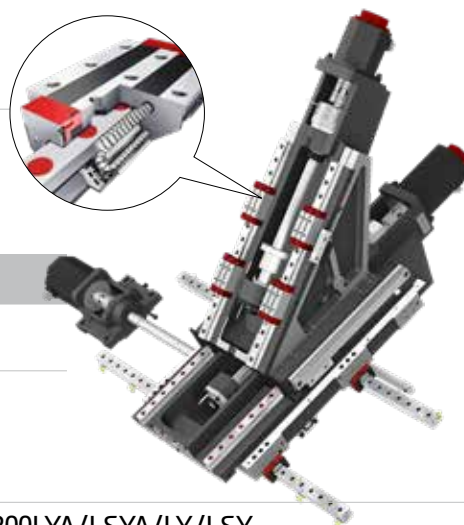
210/110/340 mm

(8.3"/4.3"/13.4")

SE2200LYA/LSYA/LY/LSY

210/110/560 mm

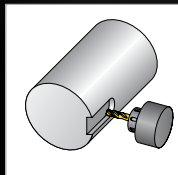
(8.3"/4.3"/22")



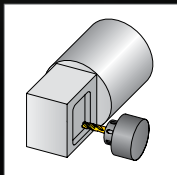
02 Y-AXIS FUNCTION

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

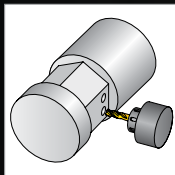
HIGH PERFORMANCE Y-AXIS



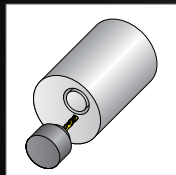
Keyway Milling



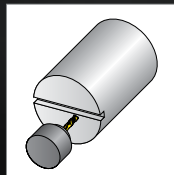
Multi-sided machining



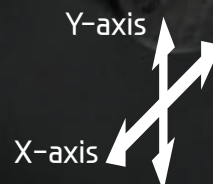
Eccentric hole machining



X+Y axis circular interpolation



Fine Grooving



MACHINING PROCESS WITH ONLY ONE INITIAL SETTING

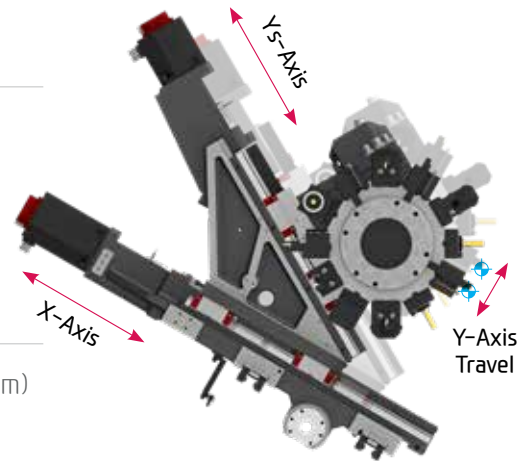
Y-AXIS

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.

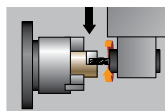
In addition, excellent rigidity makes it possible to perform superb quality when machining a high-accuracy machining.

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



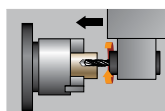
MACHINING CAPABILITY

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.



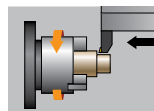
End Mill
(Material : SM45C)

Tool Dia.	Ø12 mm
Spindle rpm	750 r/min
Forwarding speed	188 mm/min
Cutting speed	29 m/min
Machining depth	14 mm



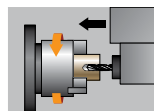
Drill
(Material : SM45C)

Tool Dia.	Ø13 mm
Spindle rpm	2,540 r/min
Forwarding speed	432 mm/min
Cutting speed	104 m/min



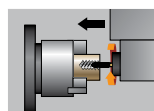
O.D Turning
(Material : SM45C)

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 (93.7 lbf·ft)	Belt
	6,000 rpm (iTROL)	13.5/9 kW (18/12 HP)	114.5 N·m (84.5 lbf·ft)	
8" Spindle	4,500 rpm (FANUC)	15/11 kW (20/15 HP)	167 N·m (123.2 lbf·ft)	
	4,500 rpm (iTROL)	13.5/9 kW (18/12 HP)	150.3 N·m (110.9 lbf·ft)	
Sub Spindle	6,000 rpm (FANUC)	7.5/3.7 kW (10/5 HP)	63.6 N·m (46.9 lbf·ft)	
	6,000 rpm (iTROL)	7.4/4.9 kW (9.9/6.6 HP)	47 N·m (34.7 lbf·ft)	

HEAVY DUTY CUTTING & HIGH ACCURACY

MAIN SPINDLE

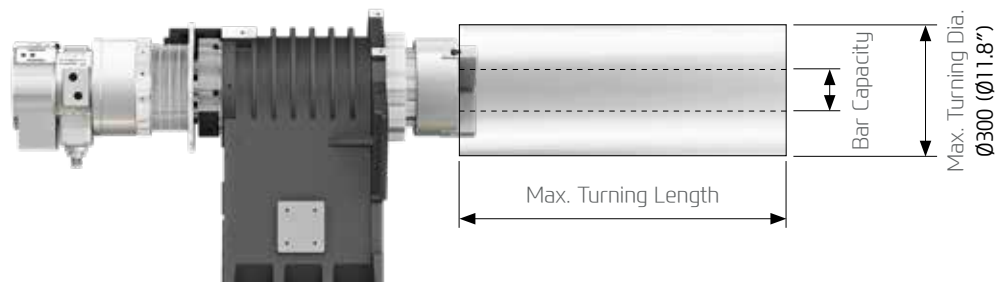
Spindle for Heavy Cutting

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)

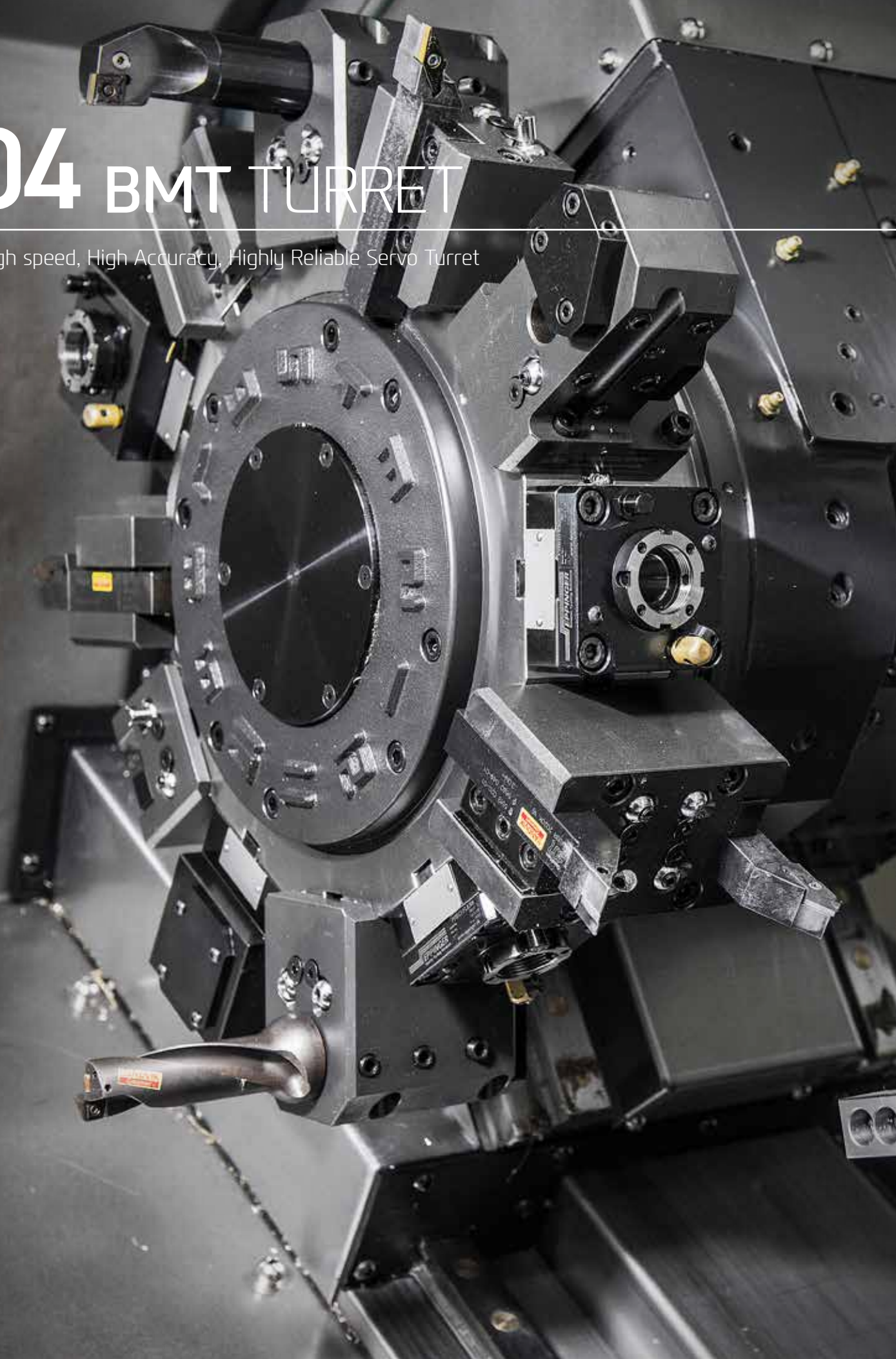
The Belt-type sub spindle is designed to minimize thermal displacement during the continuous machining, offering from the heavy-duty cutting to the high-speed machining. When the main spindle cutting is completed, the sub spindle rotation is synchronized with the main spindle allowing the workpiece to 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.

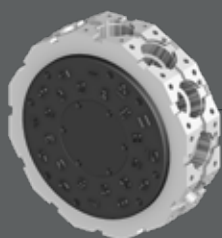
Increased Rotating Tools

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

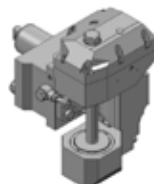
SPECIAL TOOL

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

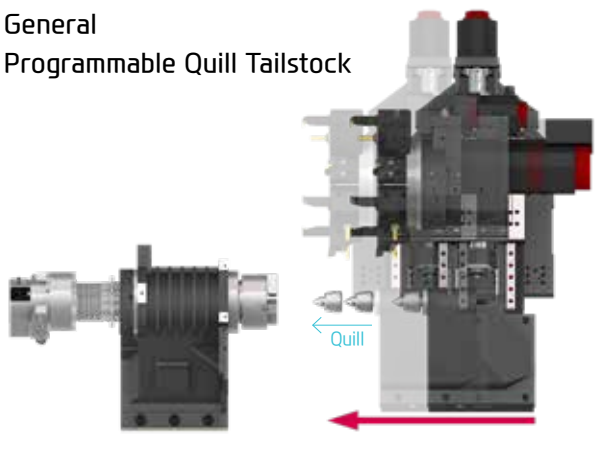
Various Devices for User Friendly

HYDRAULIC NC TAILSTOCK

Hydraulic NC Tailstock with Position Control ('L' Type Standard)

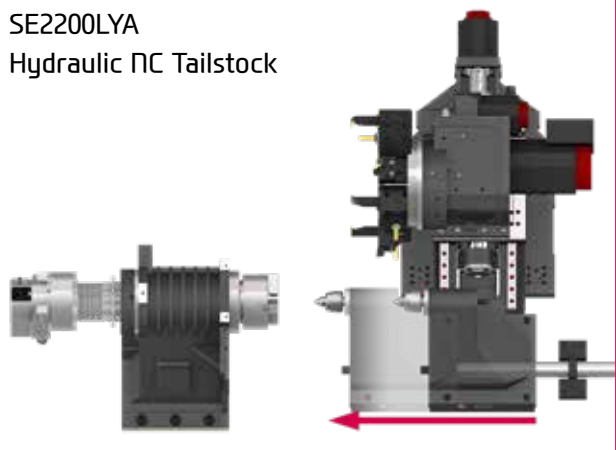
The hydraulic NC tailstock applied to the SE series enables independent transfer through a program independently of the turret movement and it simultaneously achieved "Improvement of user convenience" and "Reduction of cycle time".

General Programmable Quill Tailstock



- > A structure that moves by fixing the tailstock to the turret
- > After fixing the tailstock, the quill operated by hydraulic pressure advances to stabilize the material
- > Automation configuration error due to interference with turret during configuration of automation

SE2200LYA Hydraulic NC Tailstock



- > Structure in which the tailstock moves independently from the turret (position control : 0.1mm)
- > Stabilization of tailstock body hydraulic pressure
- > Turret moves independently while the tailstock moves to reduce machining setup time
- > SE2200LYA standard (MT#4 live center application)



HW-TMS (TAILSTOCK OPERATION)

This software is capable of manipulation and data management of tailstock operations through intuitive GUI.



CHIP DISPOSAL SOLUTION

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



- **Hinge Belt Type** : Highly efficient when disposing a lot of chips. Capable of handling stringy chips. (Long Chip)
- **Scraper Type** : Convenient for shortly cut chips. (Short Chip)
- **Screw Type** : Compresses and ejects chips to reduce chip Trouble. (Lower portion of micro-chips)
- **Drum Filter Type** : Advantageous in precision, as the chips do not flow in to the coolant nozzle. (Powder, Micro Chip)

HIGH PRECISION SYSTEM & COOLANT UNIT



Automatic Q-Setter



Linear Scale



Work Probe



Standard Coolant (Nozzle)



Chuck Coolant (Upper Chuck)



Chuck Air Blow (Upper Chuck)

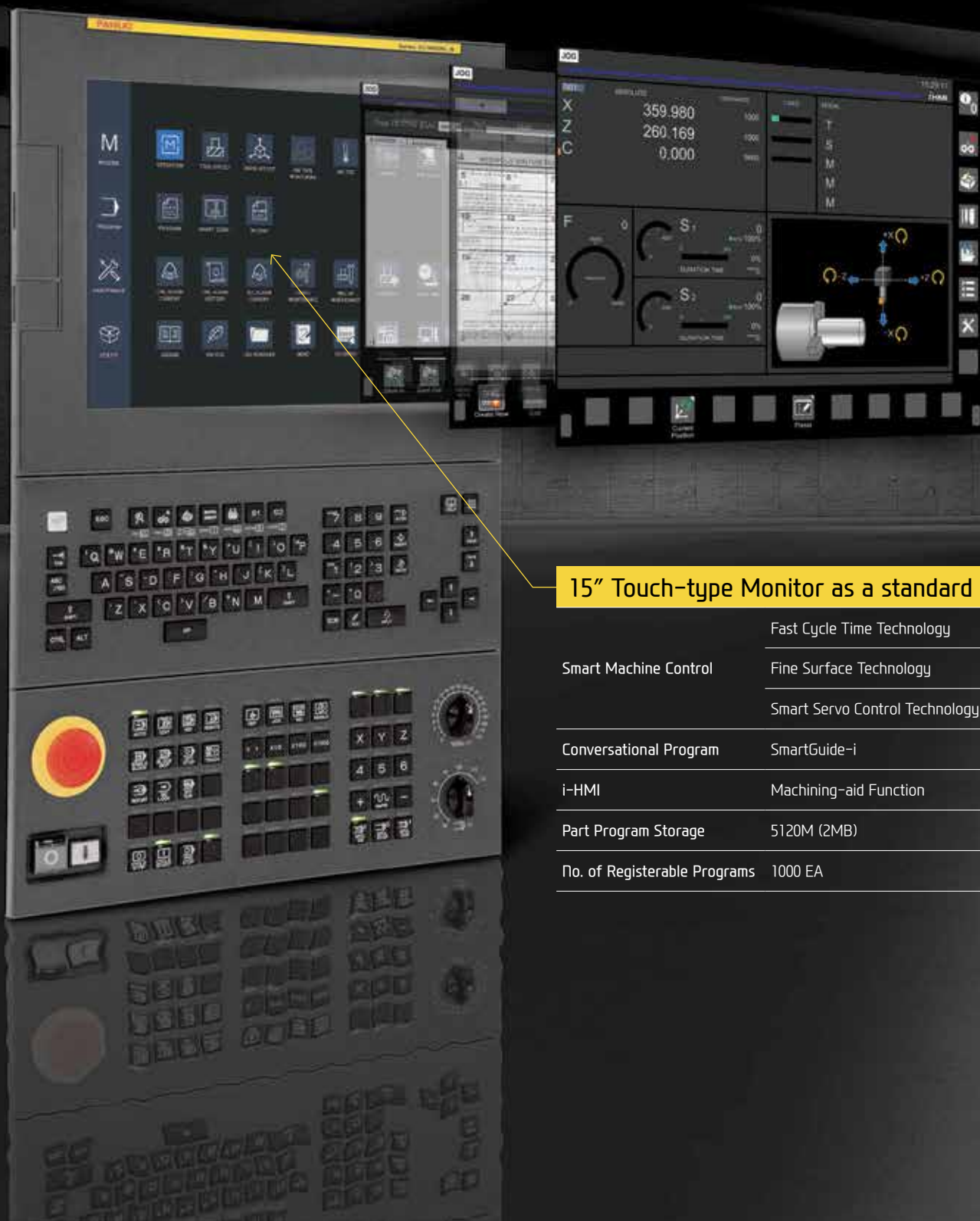


Grease Lubrication Device

- 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

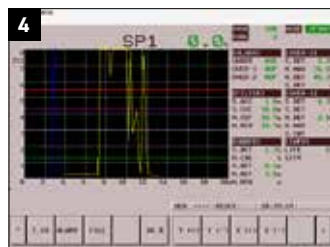
SMART SOFTWARE



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

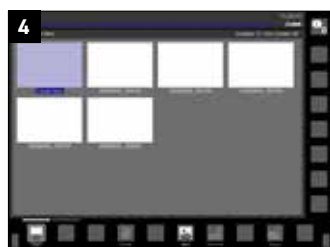
3. LAUNCHER

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		–	–	●
Turret				
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		☆	☆	☆
Tail Stock & Steady Rest				
Hydraulic NC Tail Stock (Std. Live Center)		○	●	–
Programmable Tail Stock		–	–	–
High Precision Live Center		☆	☆	–
2 Steps Tail Stock Pressure System		–	–	–
Tail Stock Foot Switch		○	○	–
Coolant & Air Blow				
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)		–	–	–
Chip Disposal				
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	☆	☆	☆
ETC				
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		○	○	○
Measurement				
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)		☆	☆	☆
Environment				
Air Conditioner	FANUC	○	○	○
	ITROL	○	○	●
Dehumidifier		○	○	○
Oil Mist Collector		☆	☆	☆
Oil Skimmer (Only for Chip Conveyor)		○	○	○
MQL (Minimal Quantity Lubrication)		☆	☆	☆
Fixture & Automation				
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		☆	☆	☆
Hyd. Device				
Standard Hyd. Cylinder	Hollow	●	●	●
Standard Hyd. Unit (35bar [507.6 psi])	15 ℓ (4gal)	●	●	–
	20 ℓ (5.3gal)	–	–	●
S/W				
DNC software (HW-eDNC)		○	○	○
Machine Monitoring System (HW-MMS Cloud/Edge/Remote)		○	○	○
Machine Monitoring System & Analysis (HW-MMS Edge Plus)		☆	☆	☆
Conversational program (HW-DPRO)		○	○	○
SmartGuide-i : FANUC		●	●	●
Thermal Displacement Compensation (HW-TDC)		○	○	○
Tool Monitoring (HW-TM) : FANUC		○	○	○
Machine Guidance (HW-MCG) : FANUC		●	●	●
Energy Saving System (HW-ESS) : FANUC		●	●	●
Premium Tool Operation : FANUC		●	●	●
Manual Viewer : FANUC		●	●	●
Scheduling : FANUC		●	●	●
Operation Memo : FANUC		●	●	●
Safety Device				
Total Splash Guard		●	●	●
Back Spin Torque Limiter (BST)		●	●	●
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

Spindle		SE2200Y	SE2200LY	SE2200LSY
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		-	-	●
Turret				
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		☆	☆	☆
Tail Stock & Steady Rest				
Hydraulic NC Tail Stock (Std. Live Center)		○	●	-
Programmable Tail Stock		-	-	-
High Precesion Live Center		☆	☆	-
2 Steps Tail Stock Pressure System		-	-	-
Tail Stock Foot Switch		○	○	-
Coolant & Air Blow				
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)		-	-	-
Chip Disposal				
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	☆	☆	☆
ETC				
Tool Box		●	●	●
Customized Color	Need Munsell No.	☆	☆	☆
CAD & CAM		☆	☆	☆

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

Electric Device		SE2200Y	SE2200LY	SE2200LSY
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		○	○	○
Measurement				
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)		☆	☆	☆
Environment				
Air Conditioner	FANUC	○	○	○
	ITROL	○	○	●
Dehumidifier		○	○	○
Oil Mist Collector		☆	☆	☆
Oil Skimmer (Only for Chip Conveyor)		○	○	○
ML (Minimal Quantity Lubrication)		☆	☆	☆
Fixture & Automation				
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	○	○	○
	Main SP.	○	○	○
Parts Catcher	Sub SP.	-	-	○
Turret Work Pusher (For Automation)		☆	☆	☆
Parts Conveyor (Required Main Parts Catcher)		○	○	○
Semi Automation System		☆	☆	☆
Hyd. Device				
Standard Hyd. Cylinder	Hollow	●	●	●
Standard Hyd. Unit (35bar (507.6 psi))	15 ℓ (4gal)	●	●	-
	20 ℓ (5.3gal)	-	-	●
S/W				
DNIC software (HW-eDNIC)		○	○	○
Machine Monitoring System (HW-MMS Cloud/Edge/Remote)		○	○	○
Machine Monitoring System & Analysis (HW-MMS Edge Plus)		☆	☆	☆
Conversational program (HW-DPRO)		○	○	○
SmartGuide-i : FANUC		●	●	●
Thermal Displacement Compensation (HW-TDC)		○	○	○
Tool Monitoring (HW-TM) : FANUC		○	○	○
Machine Guidance (HW-MCG) : FANUC		●	●	●
Energy Saving System (HW-ESS) : FANUC		●	●	●
Premium Tool Operation : FANUC		●	●	●
Manual Viewer : FANUC		●	●	●
Scheduling : FANUC		●	●	●
Operation Memo : FANUC		●	●	●
Safety Device				
Total Splash Guard		●	●	●
Back Spin Torque Limiter (BST)		●	●	●
Front Door Interlock		●	●	●
Chuck Hydraulic Pressure Maintenance Interlock		☆	☆	☆

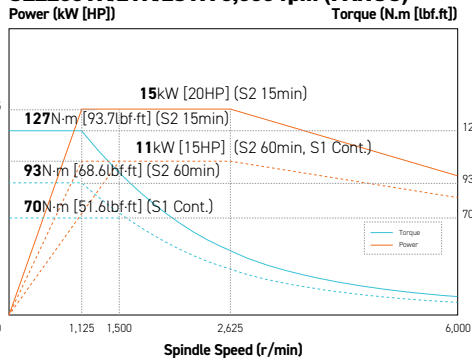
❖ Thermal Displacement Compensation device is recommended, when more than 6 bar of high pressure coolant is applied, for the high quality machining.

Specifications are subject to change without notice for improvement.

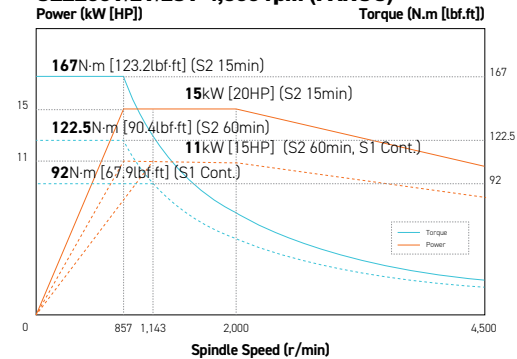
SPECIFICATIONS

Spindle Output/Torque Diagram

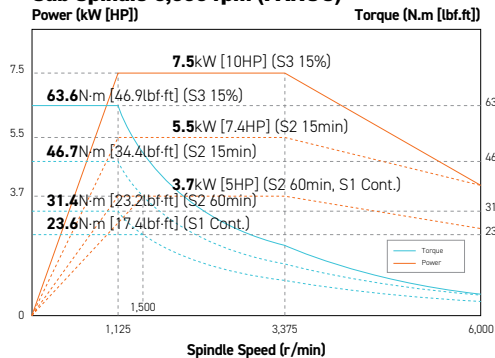
SE2200YA/LYA/LSYA 6,000 rpm (FANUC)



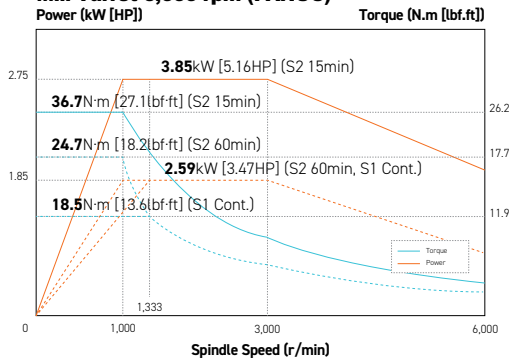
SE2200Y/LY/LSY 4,500 rpm (FANUC)



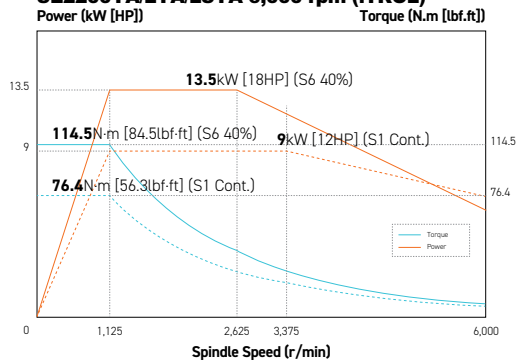
Sub Spindle 6,000 rpm (FANUC)



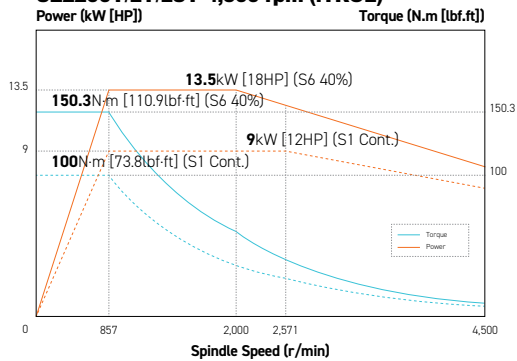
Mill Turret 6,000 rpm (FANUC)



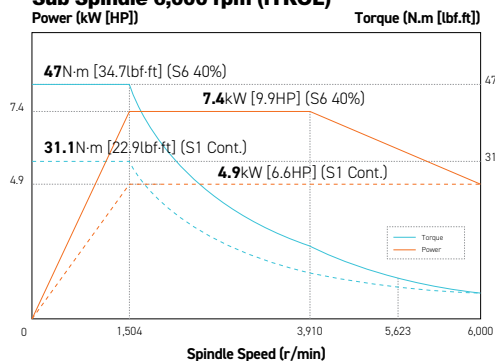
SE2200YA/LYA/LSYA 6,000 rpm (iTROL)



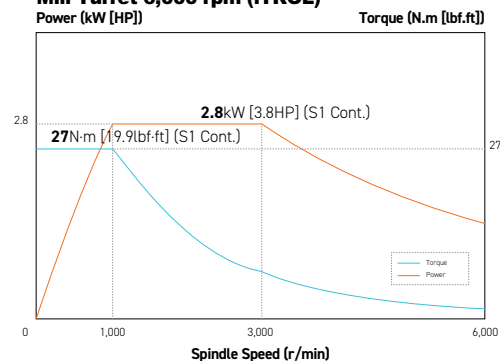
SE2200Y/LY/LSY 4,500 rpm (iTROL)



Sub Spindle 6,000 rpm (iTROL)



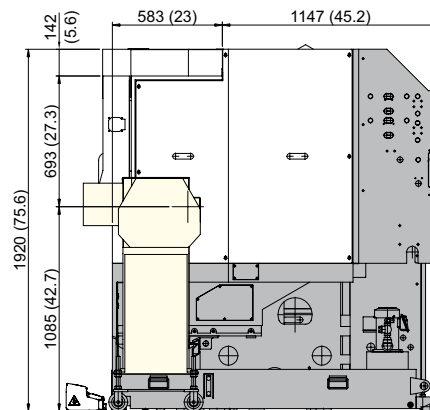
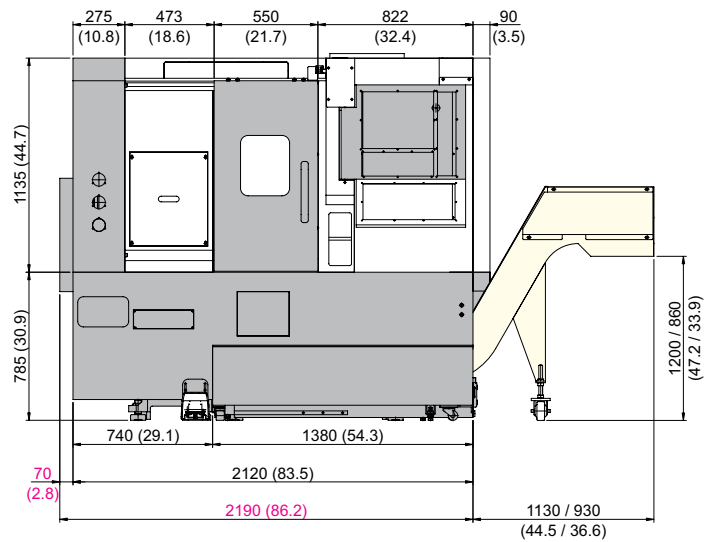
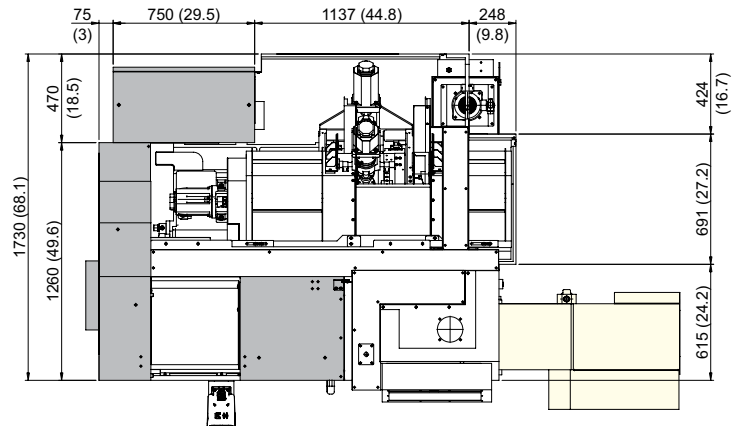
Mill Turret 6,000 rpm (iTROL)



HYUNDAI WIA
MACHINE TOOL

unit : mm(in)

SE2200Y



SE-Y Series
Y-Axis Turning Center

$$\begin{array}{r} 20 \\ + \\ 21 \end{array}$$

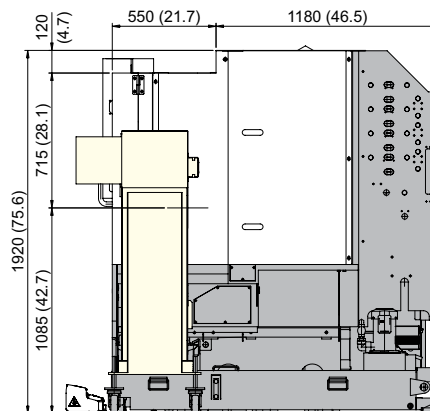
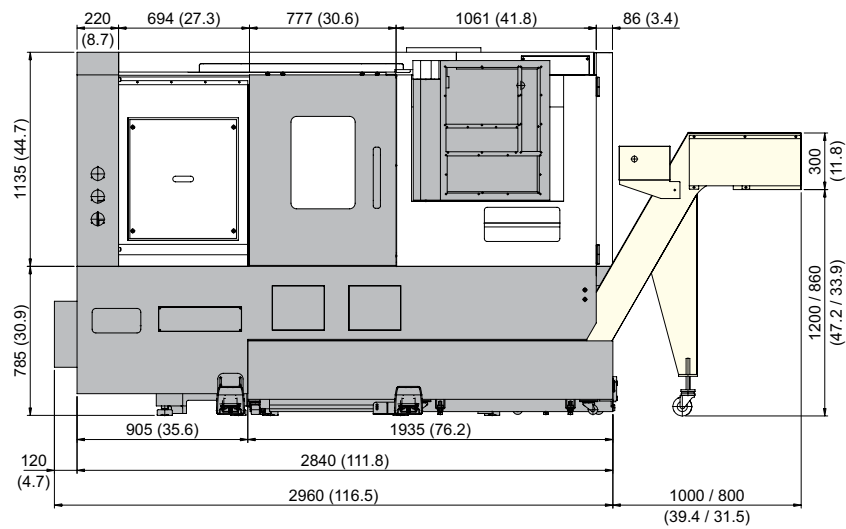
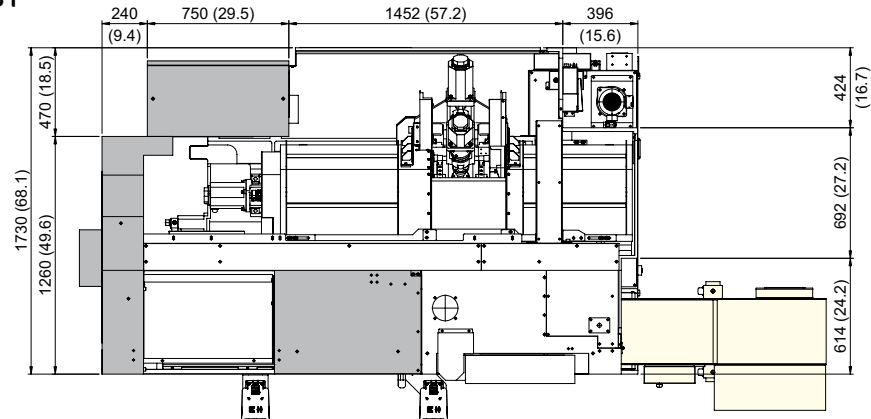
EXPERIENCE
THE NEW TECHNOLOGY

SPECIFICATIONS

External Dimensions

unit : mm(in)

SE2200LYA/LSYA
SE2200LY/LSY



HYUNDAI WIA
MACHINE TOOL

unit : mm

Figure 1: Schematic diagram of a subspool assembly. The diagram shows a cross-section of a subspool with various dimensions. Key dimensions include: 5 (0.2) for the top width, 25 (1) for the top width, 55 (2.2) for the height, 65 (2.6) for the base width, 180 (7.1) for the length, 30 (1.2) for the base width, 210 (8.3) for the X-axis St, and 70.3 (2.8) for the base width. A label "Sub Sp./Tail Stock (Some interference)" points to the top right section.

Figure 1: Schematic diagram of the test specimen. The diagram shows a cross-section of a specimen with a central hole. Dimensions are given in inches and millimeters. The total width is 10 inches (254 mm). The distance from the left edge to the center of the hole is 15 inches (381 mm). The distance from the center of the hole to the right edge is 15 inches (381 mm). The total length is 195 inches (4953 mm). The distance from the left edge to the start of the tapered section is 50 inches (1270 mm). The distance from the start of the tapered section to the center of the hole is 140 inches (3543 mm). The distance from the center of the hole to the end of the tapered section is 15 inches (381 mm). The distance from the end of the tapered section to the right edge is 70.3 inches (1785 mm). The thickness of the specimen is 55 inches (1397 mm). The label "Sub Sp./Tail Stock (Some interference)" points to the tapered section.

SE-Y Series

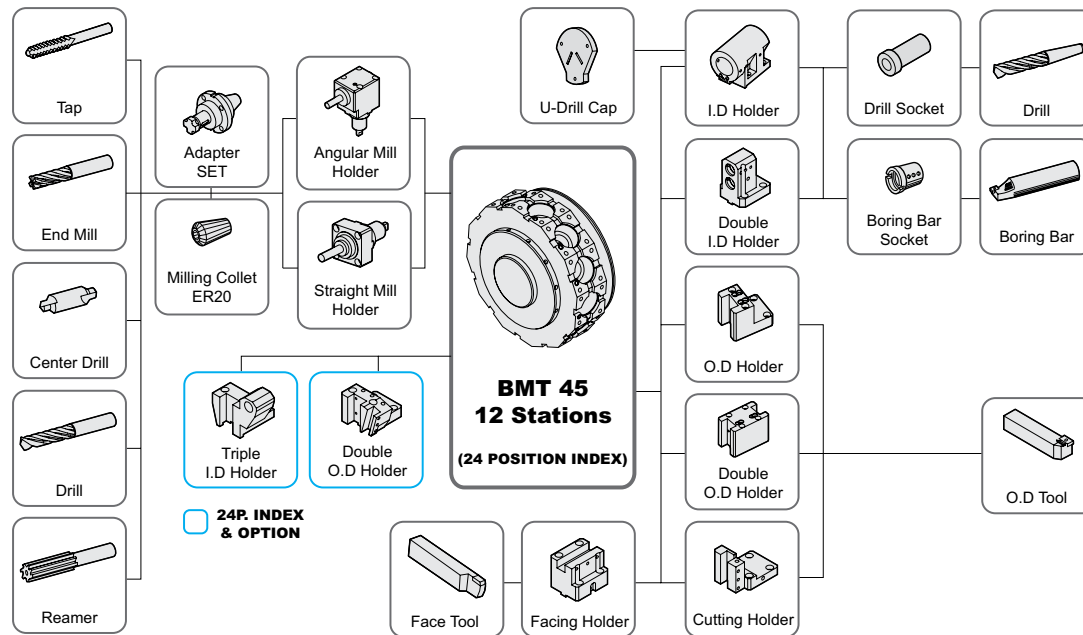
$$\begin{array}{r} 22 \\ + \\ 23 \end{array}$$

EXPERIENCE
THE NEW TECHNOLOGY

SPECIFICATIONS

Tooling System

unit : mm(in)



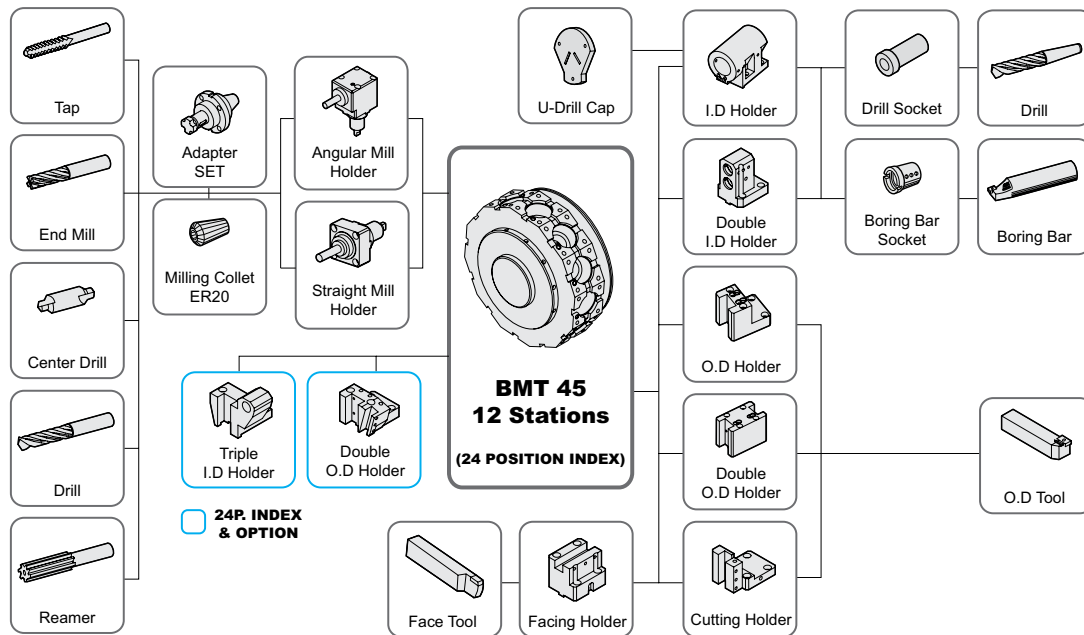
SE2200YA/LYA | SE2200Y/LY Tooling Parts Detail

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.

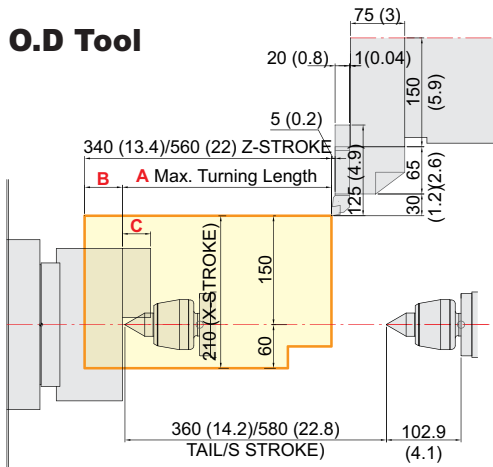
Specifications are subject to change without notice for improvement.

SPECIFICATIONS

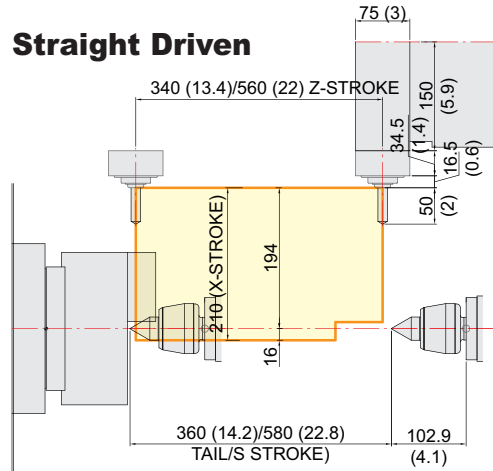
Tooling Travel Range (SE2200YA/LYA | SE2200Y/LY)

unit : mm(in)

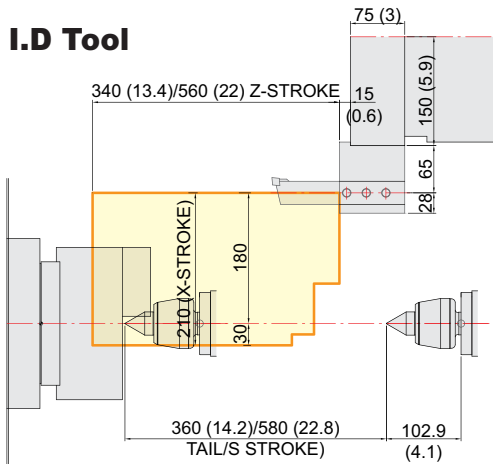
O.D Tool



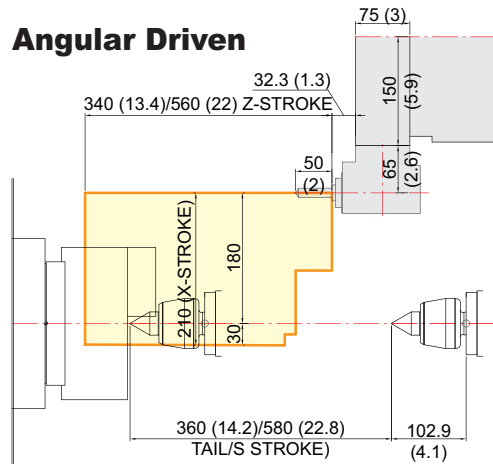
Straight Driven



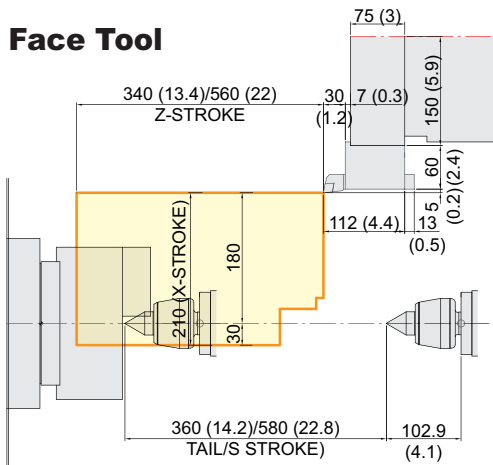
I.D Tool



Angular Driven



Face Tool



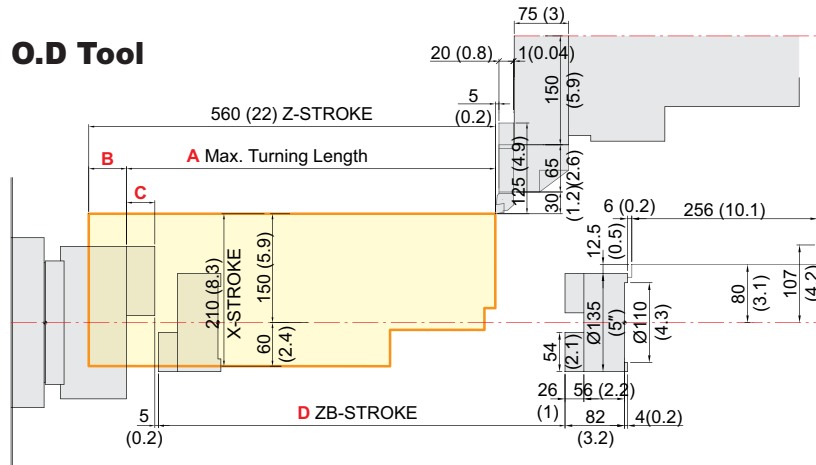
ITEM	A	B	C
SE2200YA	309 (12.2)	31 (1.2)	32.5 (1.3)
SE2200LYA	529 (20.8)		
SE2200Y	288 (11.3)	52 (2)	39 (1.5)
SE2200LY	508 (20)		

SPECIFICATIONS

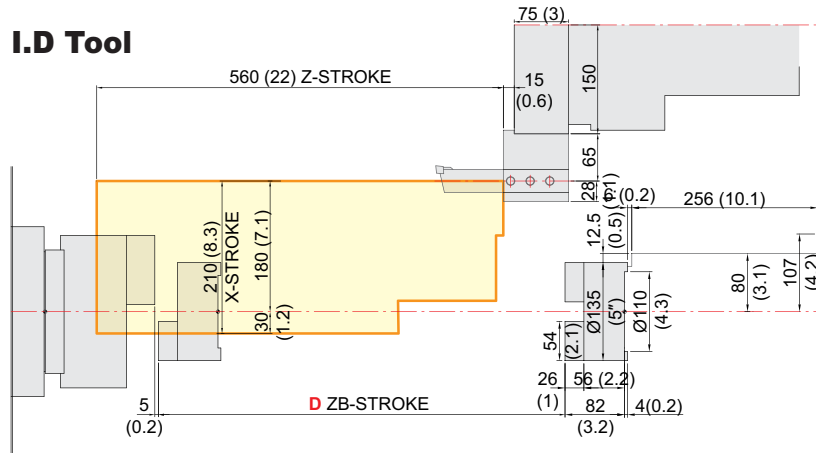
Tooling Travel Range (SE2200LSYA | SE2200LSY)

unit : mm(in)

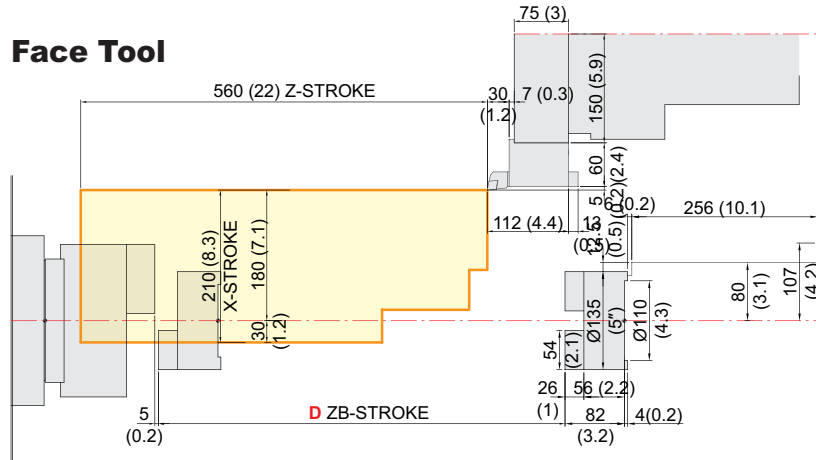
O.D Tool



I.D Tool



Face Tool



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	inch	6"		
		Sub	inch	-	5"	
	Spindle Bore	Main	mm(in)	Ø60 (Ø2.4")		
		Sub	mm(in)	-	Ø42 (Ø1.7")	
	Spindle Speed (rpm)	Main	r/min	6,000		
		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(lb·ft)	127 (93.7) [114.5 (84.5)]		
		Sub	N·m(lb·ft)	-	63.6 (46.9) [47 (34.7)]	
	Spindle Type	Main	-	BELT		
		Sub	-	-	BELT	
	Spindle Nose	Main	-	A2-5		
		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")	560/599.3 [569.3 (22"/23.6" [22.4")]
	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)	3.85/2.59 (5.16/3.47) [Cont. : 2.8 (3.8)]		
	Torque (Max./Cont.)		N·m(lb·ft)	36.7/18.5 (27.1/13.6) [Cont. : 27 (19.9)]		
	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(lbf·ft)	167 (123.2) [150.3 (110.9)]		
		Sub	N·m(lbf·ft)	-	63.6 (46.9) [47 (34.7)]	
	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)	3.85/2.59 (5.16/3.47) [Cont. : 2.8 (3.8)]		
	Torque (Max./Cont.)		N·m(lbf·ft)	36.7/18.5 (27.1/13.6) [Cont. : 27 (19.9)]		
	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	9 ea
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##)
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	
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 (SIEMENS 828D)

[] : Option ☆ Needed technical consultation

Controlled axis / Display / Accuracy Compensation	
Control axes	2 axes (X, Z) – Std.
	3 axes (X, Z, C) – Mill
	4 axes (X, Z, Y, C) – Y
	5 axes (X, Z, B, C, A) – MS
	6 axes (X, Z, Y, B, C, A) – SY
Simultaneously controlled axes	Max. 4 axes
Least setting Unit	X, Z, Y, B axes : 0.001 mm (0.0001 inch) C, A axes : 1 deg [0.001] deg
Least input increment	X, Z, Y, B axes : 0.001 mm (0.0001 inch) C, A axes : 1 deg [0.001] deg
Inch / Metric changeover	G70 (inch) / G71 (metric)
Interlock	All axes / Each axis
Backlash compensation	
Pitch error compensation	Leadscrew pitch error compensation
LCD / MDI	15 inch color LCD (With Touch panel)
Keyboard	QWERTY full keyboard
Stored stroke check	Over travel
Operation	
Automatic operation	
MDI operation	
Program restart	
Program check function	Dry run / Program check / Machine lock
Single block	
Block search	Block search
Reposition	
Working area limit	Working area limitations
Interpolation functions	
Positioning	G00
Linear interpolation	G01
Circular interpolation	Circular interpolation CW (G02)
	Circular interpolation CCW (G03)
Exact position stop	Single block exact stop (G09)
	Exact stop G60 (G601, G602, G603)
Dwell	Dwell (G04)
Reference position return	Return to reference point
	Return to 2nd reference point
Helical interpolation	
Thread synchronous cutting	
Thread cutting retract	
Spline interpolation	Non-uniform rational B splines
Feed function / Acc. & Dec. control	
Manual feed	Rapid traverse
	Jog
	Manual handle
	Reference position return
Cutting Feed command	Direct input F code
Feedrate override	0 ~ 200% (10% Unit)
Rapid traverse override	1%, 25%, 50%, 100%
Feed per minute	G94
Feed per revolution	G95
Look-ahead block	1 block
Program input	
ISO support	G291(ISO)/G290 (SIEMENS)
	(ISO G Code system-A)
Optional block skip	2
Program stop / end	M00, M01 / M02, M30
Maximum command unit	± 999,999.999 mm, ± 99,999.9999 inch
Plane selection	X-Y : G17, X-Z : G18, Y-Z : G19
	G54 ~ G57, G505~G549
Workpiece coordinate system	G500 (Basic frame – setable zero offset)
	G53 (Work offset non modal)
	G153 (basic frame non modal)
Sub program call	11 folds nested
G code preventing buffering	STOPRE
Turning Cycle	Turning programing (Cycle 93, 94, 95, 97)
User Cycle	

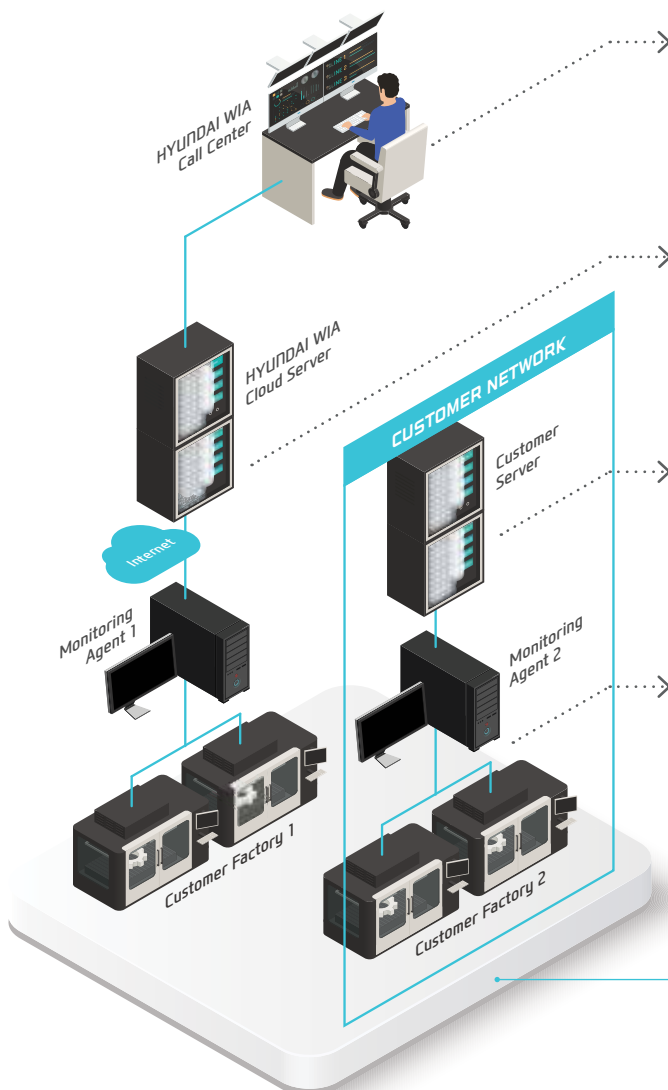
Auxiliary function / Spindle speed function	
Auxiliary function	M Code 4 digit
Spindle speed function	S Code 5 digit
Spindle override	0% ~ 150% (10% Unit)
Spindle orientation	SPOS
Rigid tapping	
Automatic mode interchange	Spindle / Axis mode
Constant surface speed control	G96, G97
Spindle speed limitation	LIMS
Tool function / Tool compensation	
Tool function	Tool number & Tool name
Tool life management	Tool : T + Offset : D
Tools in tool list	128 ea : Std.
	256 ea : Mill
	768 ea : Y, MS, SY
Cutting Edges in tool list	256 ea : Std.
	512 ea : Mill
	1,536 ea : Y, MS, SY
Tool nose radius compensation	ISO (G40, G41, G42)
Geometry / Wear compensation	
Measurement of tool length	
Tool management function	
Editing function	
Part program storage size	3MB – Std.
	5MB – Mill
	10MB – Y, MS, SY
No. of registerable programs	750 ea
External Storage devices	Local network, Server, USB, Flash drive
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 interface (ONLY 10.4")
	USB memory interface
	Embedded Ethernet memory interface
Screenshot	
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.
Multi language display	Support 9 languages
	Chinese (Simplified/Traditional), English, French, German, Italian, Korean, Portuguese, Spanish
	[☆ Support 22 languages : Inquiry need]
LCD Screen Saver	Screen saver & Motion sensing
Function for machine type	
Cs contour control (C & A axes)	Mill, MS, Y, SY model
Polar coordinate interpolation	Mill, MS, Y, SY model
Cylindrical interpolation	Mill, MS, Y, SY model
Canned cycle for drilling	Mill, MS, Y, SY model
[Polygon turning (CP-Basic)]	Mill, MS, Y, SY model
[Hobbing / Skybing (CP-Comfort)]	Mill, MS, Y, SY model
Spindle synchronous control	MS, SY model
Servo tailstock function	MS, SY model
Option	
Additional optional block skip	10
Contour handwheel	
3D simulation	
Real time simulation	
Shop Turn	Machining step programming for turning

HW-MMS

HYUNDAI WIA Machine Monitoring System



A manufacturing machine self-developed 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 Edge Plus

This is a facility big data-based smart factory solution that collects and analyzes spindle/feed data, tool lifespan, NC processing files, etc. in real time

HYUNDAI WIA
Smart Factory Solution



You Tube HYUNDAI WIA MT
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