Sowin 硕方

SHENZHEN SOWIN PRECISION MACHINE TOOL CO., LTD.

Add.: Area A, Tantou Western Industrial Zone, Songgang Street, Bao'an District, Shenzhen, Guangdong Province, China

TEL: +86 2755-23405269
FAX: +86 755-29874501
English web: www.cncswisstypelathe.com
E-mail: admin@cncswisstypelathe.com
Chinese web: www.sowincnc.com
E-mail: overseas@sowincnc.com

Paste Area

Sowin 硕方

Professional CNC Swiss type automatic lathe manufacturer

CNC Swiss Type Automatic Lathe

Dual spindles E series: 125E/205E/206E/255E/256E
Single spindle E series: 12E/20E/25E

Slant Bed CNC Turn Mill Lathe

SC-46L/SC-46YL1/SC-46YL2

SHENZHEN SOWIN PRECISION MACHINE TOOL CO., LTD.

Company Profile

Shenzhen Sowin Precision Machine Tool Co., Ltd was founded in 2010, locating in Shenzhen city, Guangdong Province, which is a national high-tech enterprise specializing in research and development of CNC Swiss type automatic lathe and slant bed CNC turn mill lathe, and a member of Shenzhen Machinery Alliance. SOWIN always focus on becoming a world-class equipment manufacturer and service provider, and the core products of SOWIN are high precision, high stability, high reliability CNC Swiss type automatic lathe and slant bed CNC turn mill lathe. In the past years efforts and technological innovation, SOWIN products always take the leading position in China, providing a large number of efficient processing solutions for aviation, automobile, medical equipment, 3C, household appliances, new energy vehicles, hardware, electric tools and other industries at home and abroad.

SOWIN with advanced intelligent processing equipment as the manufacturing machine tool, includes Japan Mitsubishi Heavy Industries Vertical planomiller, Japan OKUMA-BYJC large horizontal and vertical machining centers, HAAS vertical processing center, Taiwan KENT Surface Grinding Machine, ect which ensure SOWIN's each product with high quality and high precision components and parts.

Now, SOWIN has developed C series and E series CNC Swiss type automatic lathe, and slant bed CNC turn mill lathe. SOWIN products are exported to Italy, Russia, Thailand, Malaysia and other overseas countries. The domestic sales network covers most provinces, cities and regions in China. Products is widely used by customers and win unanimous praise from customers.

Sowin Culture

1 SOWIN'S MISSION
Equip China, service the world.

2 SOWIN'S VISION
Aspire to become a word first-class high-end small precision CNC machine tools manufacturer and service provider.

3 SOWIN'S VALUE
Value co-creation, value co-share.

4 SOWIN'S SPIRIT
Pursuit of excellence, eager to innovation

5 SOWIN'S QUALITY POLICY
Innovative design, sophisticated manufacturing

6 SOWIN'S SERVICE CONCEPT
Timely, efficient, high-quality, considerate service!

Sowin Honour

Efficient and Independent R&D Team

SOWIN has a high level research and development team, after years of dedicated research, breakthrough many technical difficulties, which is the first in China to develop the CNC Swiss type automatic lathe using electric spindle, and has obtained a number of inventions and new utility technology patents, thus breaking the monopoly of the same kind of lathes abroad and gradually replacing the imported lathes.

Advanced Processing Equipment

"A workman must sharpen his tools if he is to do his work well". SOWIN has advanced intelligent processing equipment as the manufacturing machine tools to ensure each product with high quality and high precision components and parts.

Japan Mitsubishi Vertical Planomiller

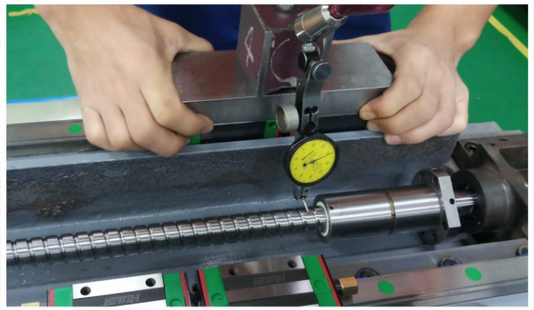
Japan OKUMA-BYJC Horizontal and vertical Machining Centers

Rigorous Manufacturing Process

To guarantee the quality of product assembly process, SOWIN executes standardized manufacturing and integrates product process inspection into the whole production process.

The scraper of main mounting surface

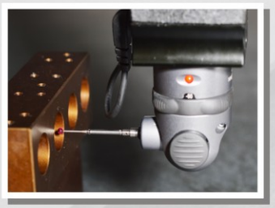
Reconfirm the assembly accuracy of moving parts

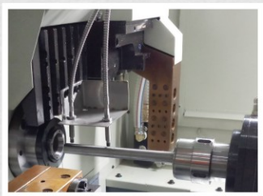


High Precision Testing Instrument

Strict Testing Procedure

SOWIN establishes and implements the most strict internal quality control standard to realize the strict monitoring on the whole process of machine tool design and production, e.g. 45 inspection and testing items, 632 quality control key points, 48-hours running in load processing test, three-coordinate measuring instrument, laser interferometer (RENISHAW brand, UK), field dynamic balancing instrument (SIGMA brand, Japan), eddy-current transducer—spindle designed-temperature rising test ISO230-3 ect., all of these to guarantee the accuracy control of lathes' each installation processes .





Comprehensive Service System

The Pre-sales Service Department aims to provide comprehensive machining solution for customers, and help customers to study and analyze the optimal products processing technology, and undertake the processing of customers' samples. It also serves as customer's on-site operation experience center, and has cultivated a large number of technical professionals for customers in various fields for many years.

Adhering to the business philosophy -- "All for Customers", the After-sales Service Department always carries out the service tenet-quick response, timely dispose and thorough settlement.

Pre-sales Service Customer Experience Center

Quick Response After-sale Service Team

Product Overview

CNC Swiss type automatic lathe named method

Take SZ-205E2 as an example

S Z - 20 5 E 2

- **S**: stand for SOWIN
- **Z**: stand for CNC Swiss type auto lathe
- **20**: stand for max machining dia.
- **5**: stand for the number of axis; 3 axis, without number
- **E**: stand for E series, C stand for C series
- **2**:
  - **3** axis lathe
    - 1: O.D turning tool+end face fixed tool
    - 2: O.D turning tool+cross live tool+end face fixed tool
    - 3: O.D. turning tool+cross live tool+end face live tool
  - **5** axis lathe
    - 1: back end face fixed tool
    - 2: back end face live tool
  - **6** axis lathe without number

Slant Bed CNC Turn Mill Lathe

Take SC-46YL2 as an example

S C - 46 Y L 2

- **S**: stand for SOWIN
- **C**: slant bed cnc turn mill lathe
- **46**: stand for spindle max through hole
- **Y**: stand for Y axis
- **L**: stand for X axis travel is lengthened (X axis travel is longer than similar lathe in the same industry)
- **2**:
  - 1: live tool+row tool
  - 2: live tool+tool turret

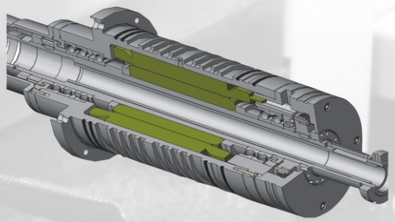
Product

CNC Swiss Type Automatic Lathe	E series (High-end)	12E Type	SZ-12E2、SZ-125E1、SZ-125E2
		20E Type	SZ-20E2、SZ-20E3、SZ-205E1、SZ-205E2、SZ-206E
		25E Type	SZ-25E2、SZ-25E3、SZ-255E1、SZ-255E2、SZ-256E
Slant Bed CNC Turn Mill Lathe			SC-46L SC-46YL1 SC-46YL2

E Series CNC Swiss Type Automatic Lathe

Standard lathes use FANUC system

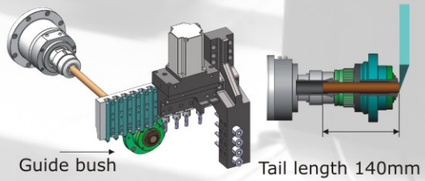
- Live heads in main spindle and sub spindle have flexible expansibility.
- With guide bush mode and non guide bush mode can be freely switched.
- The front of the spindle is designed to 3-axis support type that can improve the rigity.
- Install SOWIN new generation self-developed oil-cooled electrical spindle.
- Enlarged divided type chip collector,residual heat from cuttings cannot be transmitted to the lathe body which can provide the lathe thermal stability.



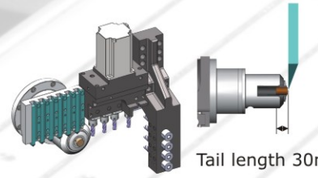
Internal oil-cooled electric spindle

Switchable

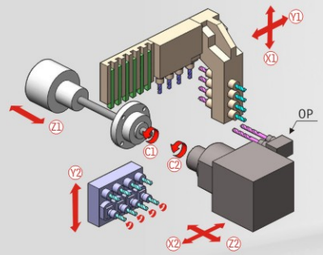
With guide bush type



Non guide bush type

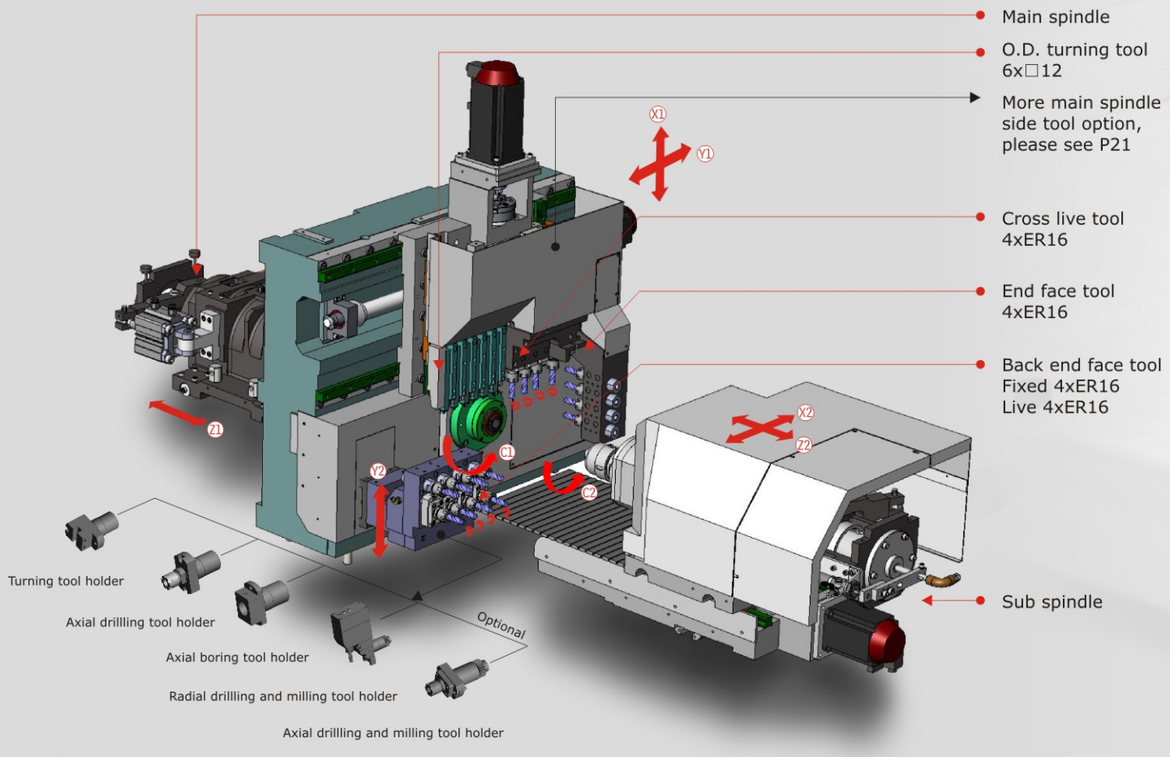


SZ-206E/SZ-256E (6 axis , dual spindles)



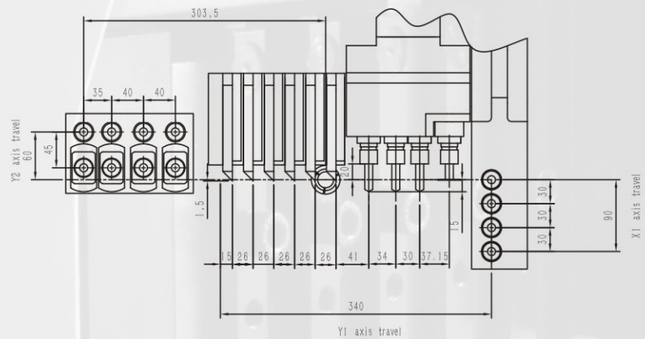
SZ-206E/256E

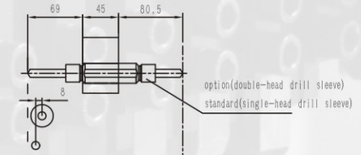
- The tool holder in the sub spindle side with Y2 axis, it can install two row cutters.
- The live head in the main spindle and sub spindle can expand many tool holders.

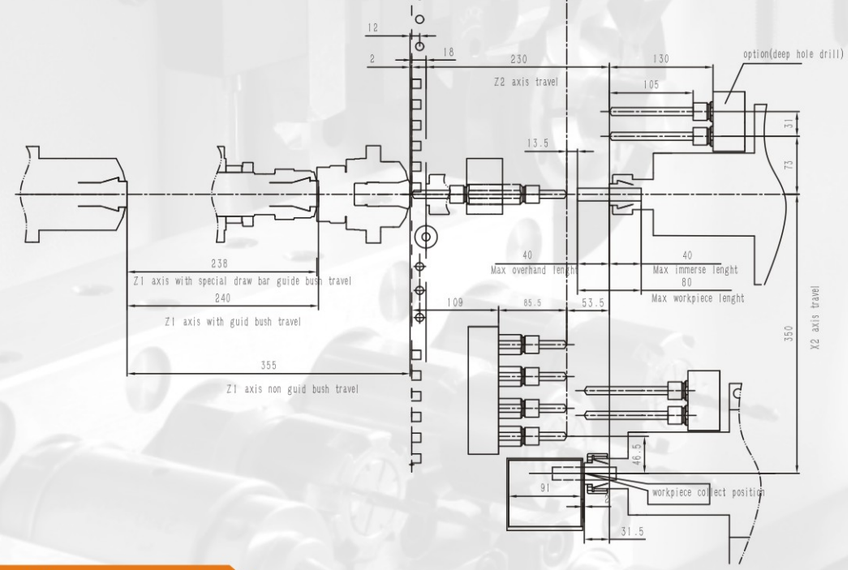


Travel Interference (mm)

SZ-206E/256E

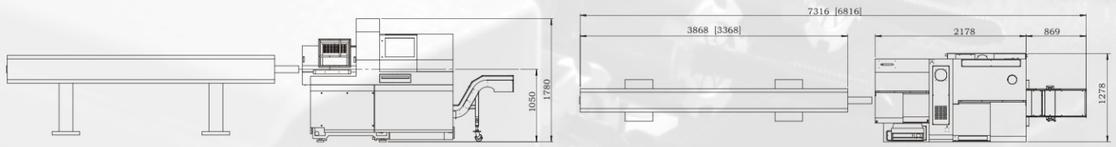




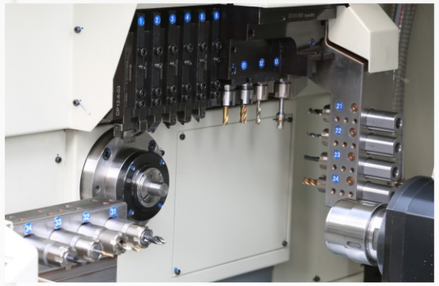


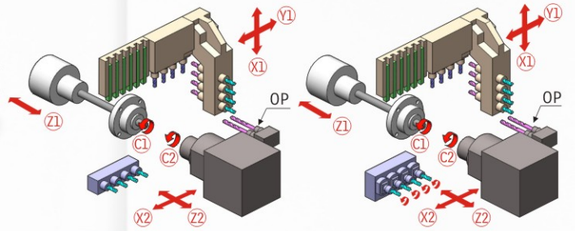
Installation Size (mm)

SZ-206E/256E

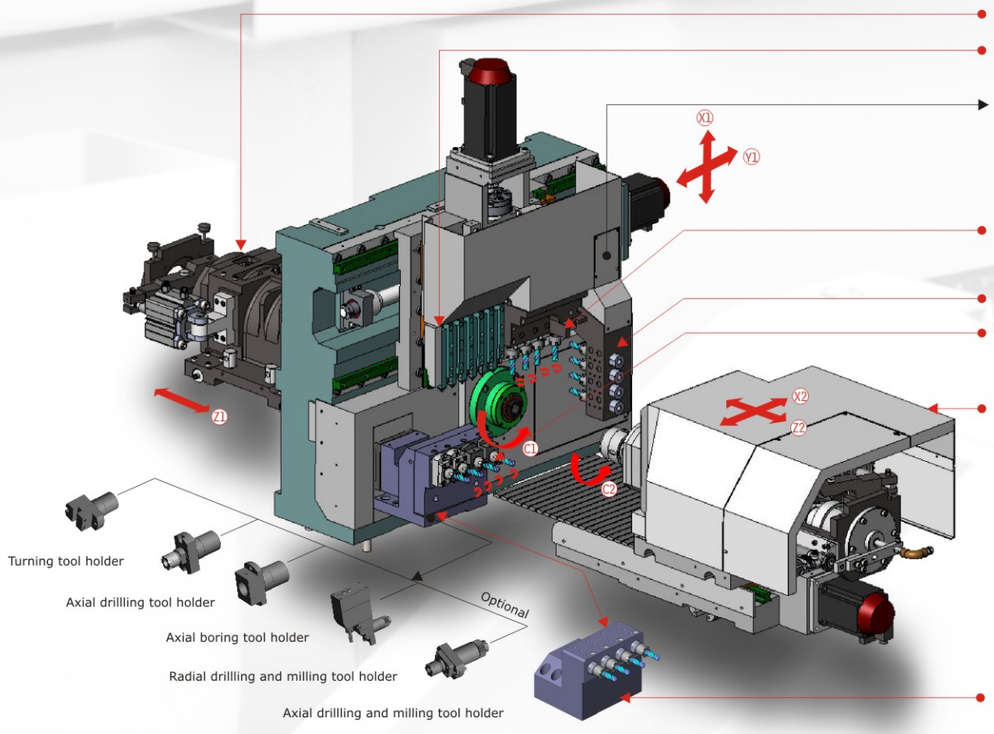


SZ-205E1/ 255E1, SZ-205E2/SZ-255E2 (5 axis , dual spindles)



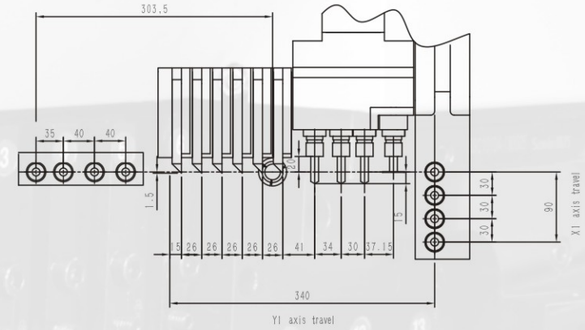


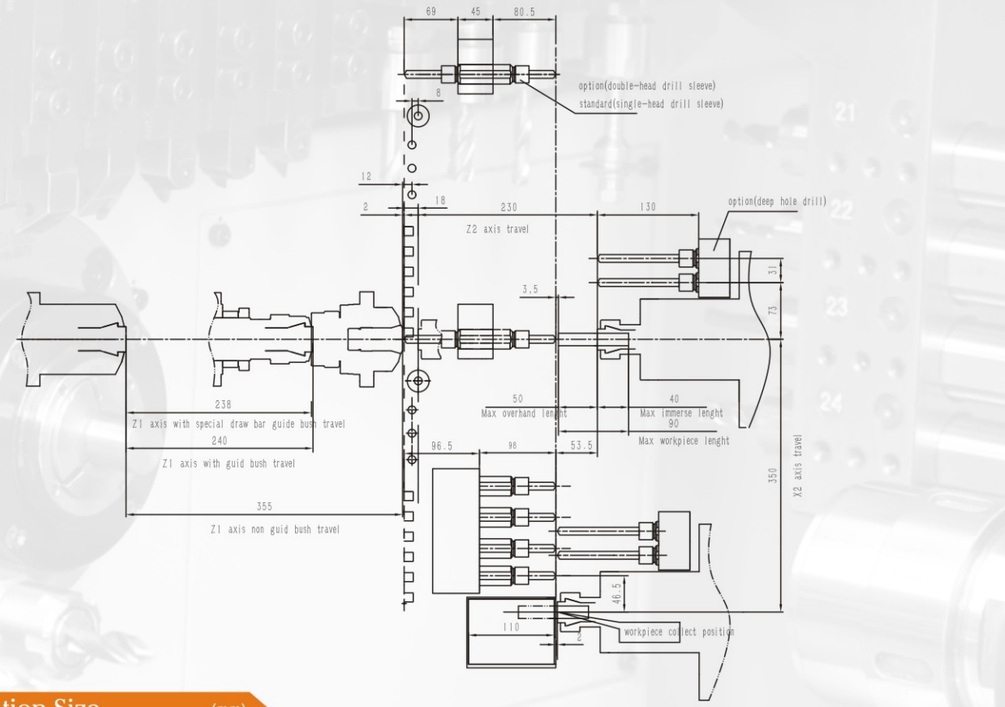
- The tool structure in main spindle side is same with 6 axis lathe.
- In the back side has a row tool holder, E1 tool holder for fixed tool, E2 tool holder for fixed and live tool that can be free combined.
- Back end face tool with high processing rigity.



Travel Interference (mm)

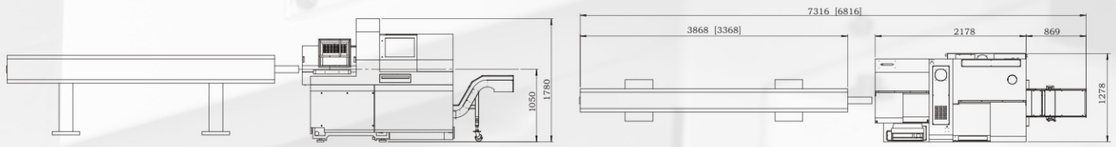
SZ-205E1/255E1



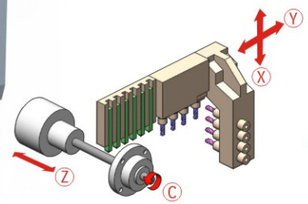


Installation Size (mm)

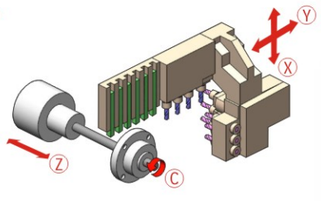
SZ-205E1/255E1



SZ-20E2/SZ-25E2, SZ-20E3/SZ-25E3 (3 axis , single spindle)

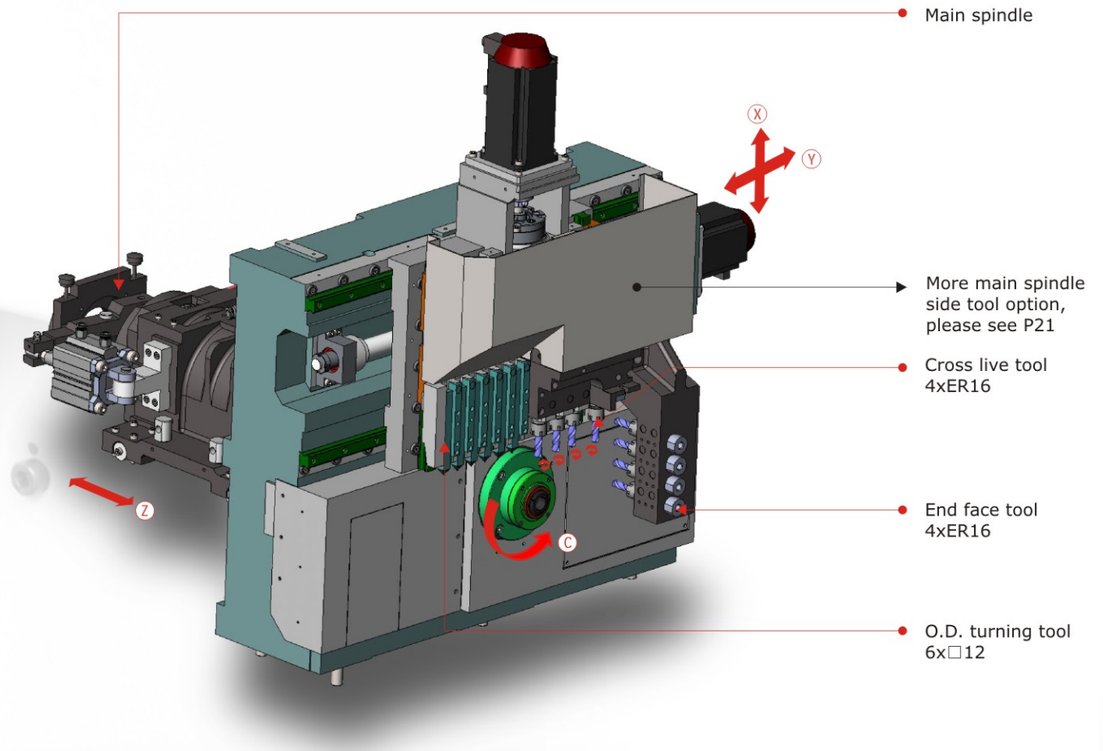


SZ-20E2/25E2



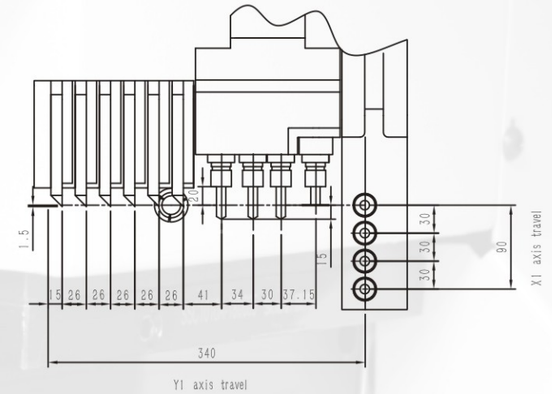
SZ-20E3/25E3

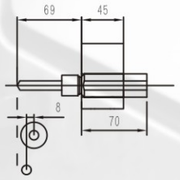
- Mid to high-end lathe in 3 axis Swiss type lathes.
- With guide bush mode and non guide bush mode are freely switchable.

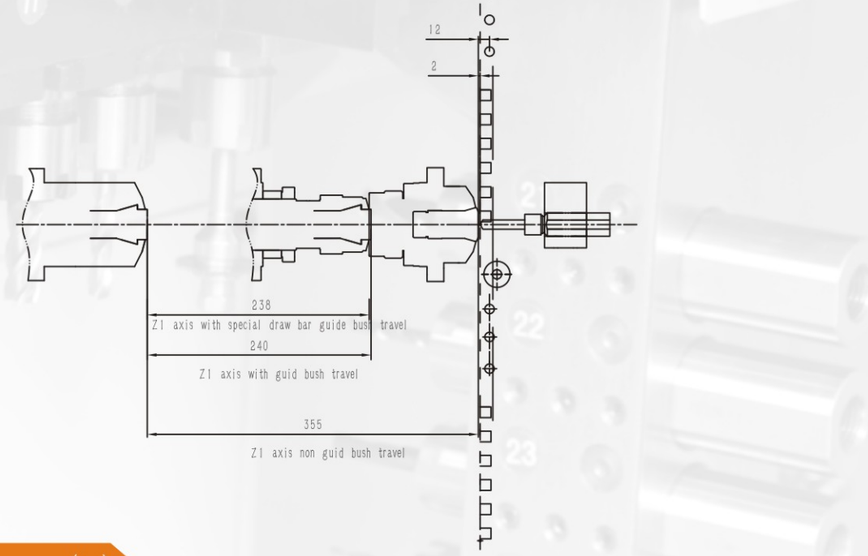


Travel Interference (mm)

SZ-20E2/25E2

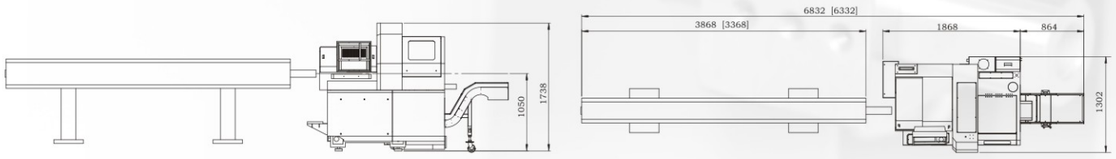




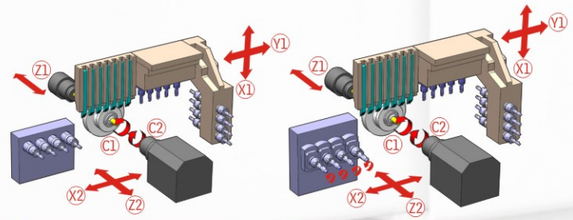


Installation Size (mm)

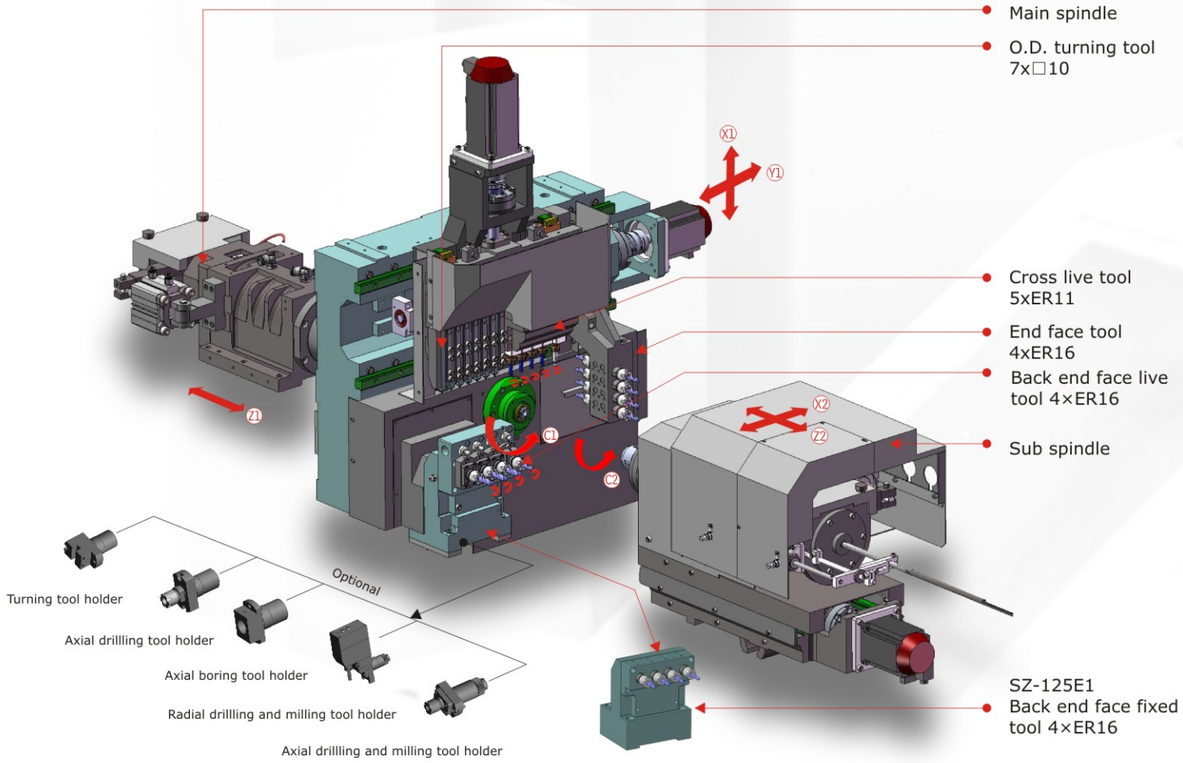
SZ-20E2/25E2



SZ-125E1/SZ-125E2 (5 axis , dual spindles)

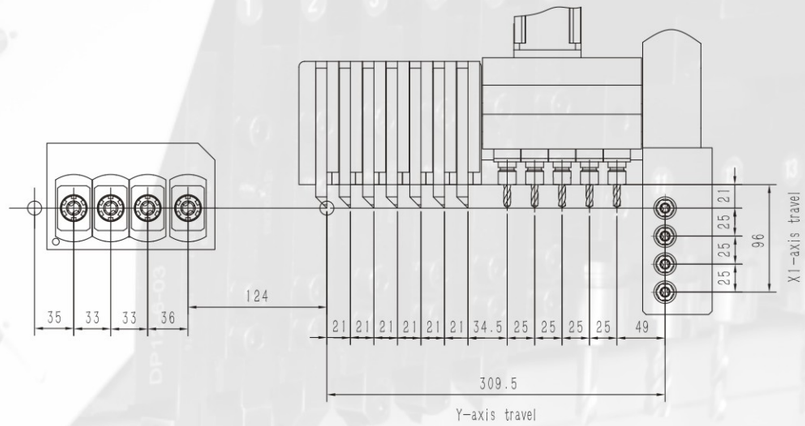


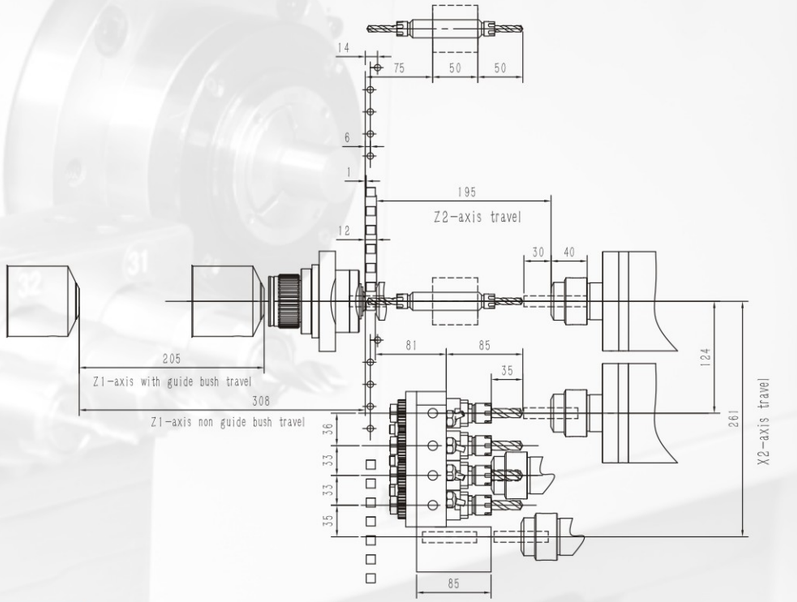
- Main spindle with high rotation speed,small vibration.
- Especially suitable for processing small parts and connectors.



Travel Interference (mm)

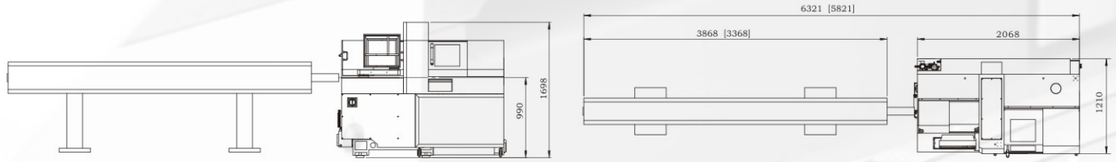
SZ-125E1/125E2



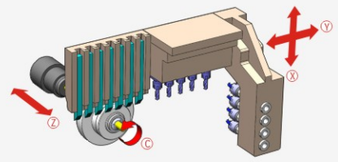


Installation Size (mm)

SZ-125E1/SZ-125E2

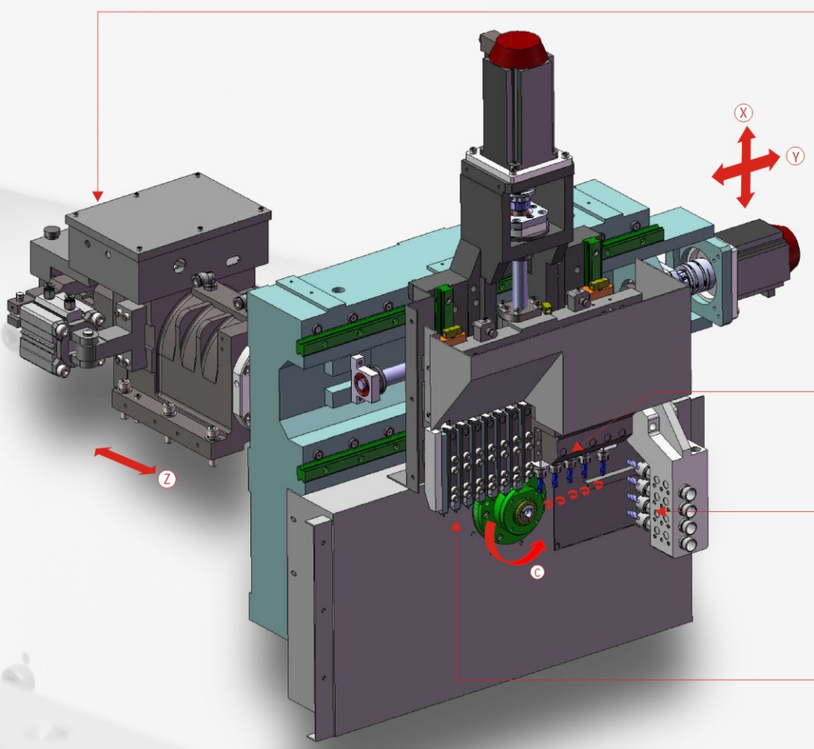


SZ-12E2 (3 axis , single spindle)



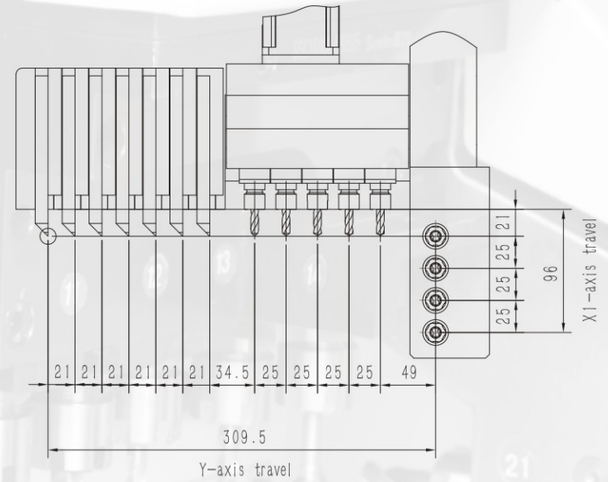
SZ-12E2

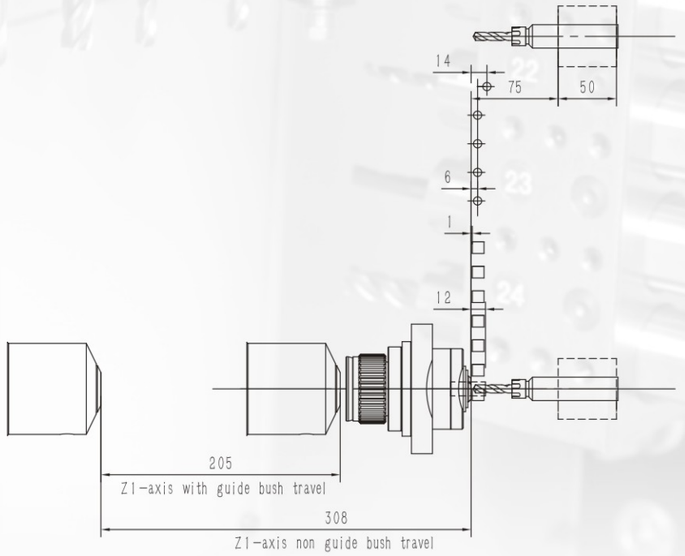
- The single spindle lathe of 12 series.
- Economical Swiss type lathe for processing connectors.



Travel Interference (mm)

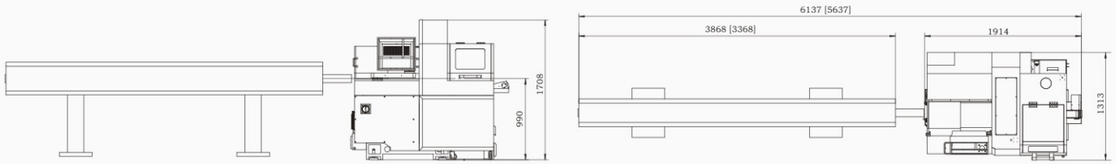
SZ-12E2



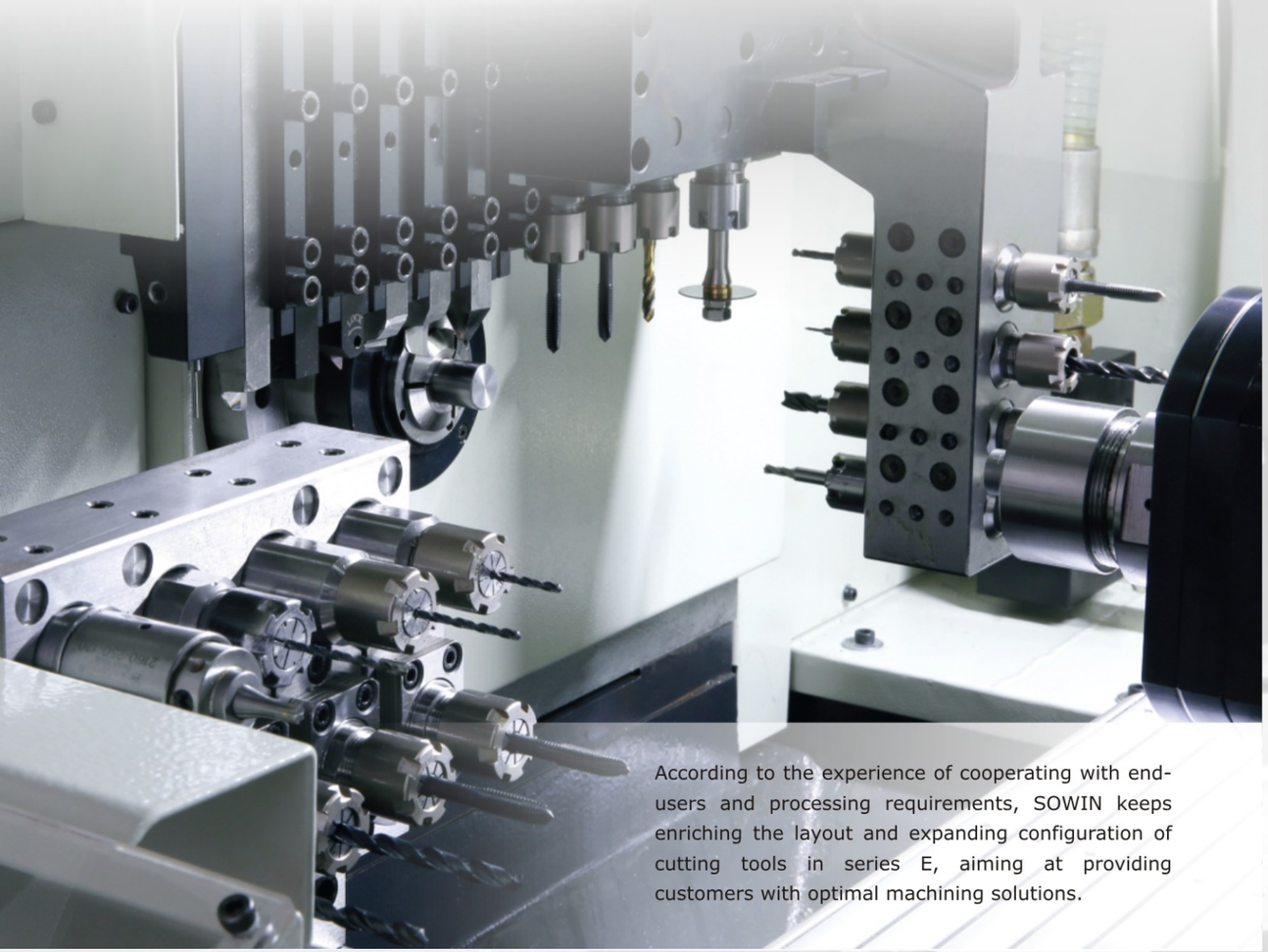


Installation Size (mm)

SZ-12E2



20E/25E Series Main Spindle Side Non-standard Tool Holder Option



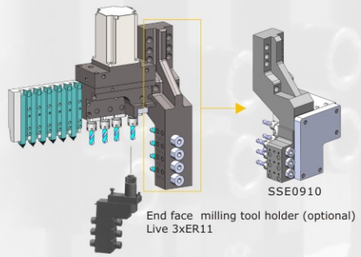
According to the experience of cooperating with end-users and processing requirements, SOWIN keeps enriching the layout and expanding configuration of cutting tools in series E, aiming at providing customers with optimal machining solutions.

20E/25E series main spindle side non-standard tool holder option

	O.D.Turning tool	Cross live tool	End face tool	
No.1	6X□12	3XER16+*1XER16/4XER16	4XER16(Fixed)	standard
			3XER16(Fixed)+3XER16(live)	optional
No.2	5X□12	4XER16+*1XER16	4XER16(Fixed)	optional
			3XER16(Fixed)+3XER16(live)	optional
No.3	4X□12	6XER16	4XER16(Fixed)	optional
			3XER16(Fixed)+3XER16(live)	optional
No.4	6X□12	2XER11+*3XER16		optional

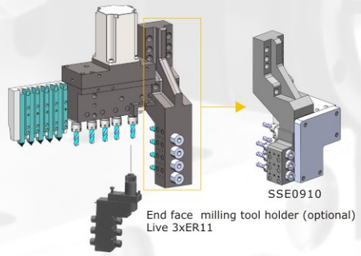
* axial drillling and milling tool holder

No.1



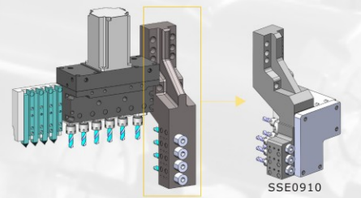
O.D. turning tool	6X□12
Cross live tool	3XER16+*1XER16
	4XER16
End face tool	4XER16(Fixed)
	3XER16(Fixed)+3XER16(live)

No.2



O.D. turning tool	5X□12
Cross live tool	4XER16+*1XER16
End face tool	4XER16(Fixed)
	3XER16(Fixed)+3XER16(live)

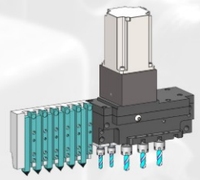
No.3



O.D. turning tool	4X□12
Cross live tool	6XER16
End face tool	4XER16(Fixed)
	3XER16(Fixed)+3XER16(live)

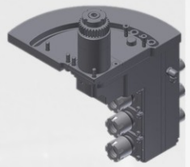
No.4

Tool holder model



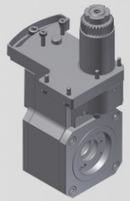
O.D. turning tool	6X□12	
Cross live tool	2XER11+*3XER16 (Depends on specific situation)	SSC1710
End face tool	More detail,please find on Page21	

Extend Tool Holder With SSC1710 Live Head



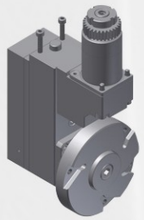
Angular drilling head

- Speed ratio 1/1
- Max rotary speed 6000RPM
- Rotatable degree 0-90
- Main spindle side collet ER16
  sub spindle side collet ER11
- Applicable lathe model
  20E/25E/205E/255E/206E/256E



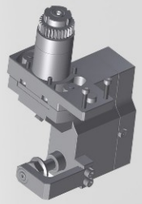
Whirling threading unit

- Speed ratio 1/1
- Max rotary speed 6000RPM
- Max threading M10
- Angle adjustment range ±15°
- Applicable lathe model
  20E/25E/205E/255E/206E/256E



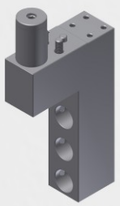
Polygon maker

- Speed ratio 1/1
- Max rotary speed 3000RPM
- Max outside dia. of blade ϕ95
- Applicable lathe model
  220E/25E/205E/255E/206E/256E



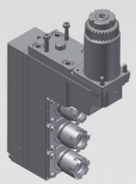
Gear hobbing tool holder

- Speed ratio 1/1
- Max rotary speed 6000RPM
- Angle adjustment range ±20°
- Applicable lathe model
  20E/25E/205E/255E/206E/256E



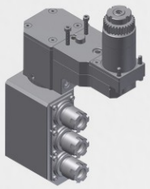
End face drilling tool holder

- Shank dia. ϕ34
- Hole dia. ϕ22
- Max outside dia. of blade ϕ95
- Applicable lathe model
  20E/25E/205E/255E/206E/256E



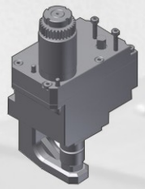
Front eccentric tool holder

- Speed ratio 1/1
- Max rotary speed 6000RPM
- Collet ER16
- Applicable lathe model
  20E/25E/205E/255E/206E/256E



360 degree front rotation tool holder

- Speed ratio 1/1
- Max rotary speed 6000RPM
- Angle adjustment range ±180°
- Applicable lathe model
  20E/25E/205E/255E/206E/256E



Saw blade holder

- Speed ratio 1/ 0.374
- Max rotary speed 4000RPM
- Sawblade bore dia. ϕ12.7
- Sawblade max outside dia. ϕ70
- Applicable lathe model
  20E/25E/205E/255E/206E/256E

Extend Tool Holder With SSC1710 Live Head

Automatic bar feeder

Automatically feed, when a bar material is used up, the new bar can be automatically replaced.

Chip conveyor

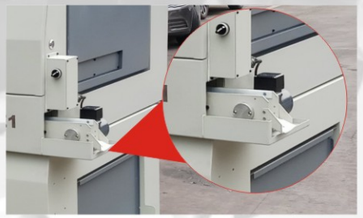
The processing chip can be discharged at any time.

Oil mist collector

To collect the oil mist that produced in the processing area, usually accompany with a high-pressure pump.

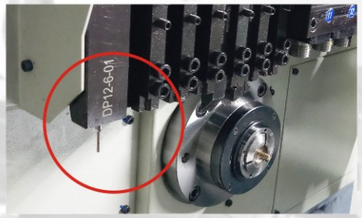
High pressure pump

It's used to extremely difficult workpiece processing, such as aluminum, red copper, stainless steel, ect. To improve the cooling effect and change processing chip shape. High pressure pump can be selected according to the actual requirement; usually it has 30, 60 and 100 bar.



Workpiece belt conveyor

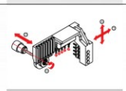
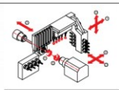
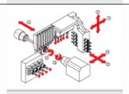
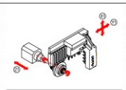
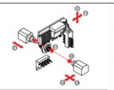
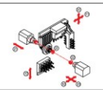
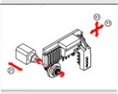
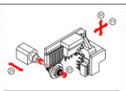
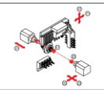
The finished workpiece can be transmitted from this belt conveyor.



Cut-off tool breakage detector

The the cut-off tool breakage can be detected when it breaks accidentally.

E Series CNC Swiss Type Automatic Lathe Technical Specifications

Model		SZ-12E2	SZ-125E1	SZ-125E2	SZ-20E2	SZ-20E3	SZ-205E1	SZ-205E2	SZ-206E	SZ-25E2	SZ-25E3	SZ-255E1	SZ-255E2	SZ-256E
		3axis, single spindle	5axis, dual spindle	5axis, dual spindle	3axis, single spindle	3axis, single spindle	5axis, dual spindle	5axis, dual spindle	6axis, dual spindle	3axis, single spindle	3axis, single spindle	5axis, dual spindle	5axis, dual spindle	6axis, dual spindle
Cutting-tool layout sketch														
NC device		FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF
Power source		200VAC	200VAC	200VAC	200VAC	200VAC	200VAC	200VAC	200VAC	200VAC	200VAC	200VAC	200VAC	200VAC
Lathe rated power	Kw	8	11	11	8	8	11	11	11	8	8	11	11	11
Machining range														
Max machining dia.	mm	Φ12	Φ12	Φ12	Φ20	Φ20	Φ20	Φ20	Φ20	Φ26	Φ26	Φ26	Φ26	Φ26
Main spindle max clamping dia.	mm	Φ12	Φ12	Φ12	Φ20	Φ20	Φ20	Φ20	Φ20	Φ26	Φ26	Φ26	Φ26	Φ26
Max feed length (once)	mm	205	205	205	Max 240	Max 240	Max 240	Max 240	Max 240	Max 240	Max 240	Max 240	Max 240	Max 240
Main/sub spindle														
Main spindle power	Kw	1.5/2.2	1.5/2.2	1.5/2.2	2.2/3.7	2.2/3.7	2.2/3.7	2.2/3.7	2.2/3.7	2.2/3.7	2.2/3.7	2.2/3.7	2.2/3.7	2.2/3.7
Sub spindle power	Kw	-	1.5/2.2	1.5/2.2	-	-	1.5/2.2	1.5/2.2	1.5/2.2	-	-	1.5/2.2	1.5/2.2	1.5/2.2
Main spindle max through hole dia.	mm	Φ13	Φ13	Φ13	Max Φ27	Max Φ27	Max Φ27	Max Φ27	Max Φ27	Max Φ27	Max Φ27	Max Φ27	Max Φ27	Max Φ27
C axis resolution	°	C1 0.001°	C1/C2 0.001°	C1/C2 0.001°	C1 0.001°	C1 0.001°	C1/C2 0.001°	C1/C2 0.001°	C1/C2 0.001°	C1 0.001°	C1 0.001°	C1/C2 0.001°	C1/C2 0.001°	C1/C2 0.001°
Main/sub spindle rev speed	rpm	Max12000	Max12000	Max12000	Max10000/12000	Max10000/12000	Max10000/12000	Max10000/12000	Max10000/12000	Max10000/12000	Max10000/12000	Max10000/12000	Max10000/12000	Max10000/12000
Sub spindle max clamping dia.	mm	-	Φ12	Φ12	-	-	Max Φ20	Max Φ20	Max Φ20	-	-	Max Φ26	Max Φ26	Max Φ26
Sub spindle max through hole dia.	mm	-	Φ13	Φ13	-	-	Max Φ27	Max Φ27	Max Φ27	-	-	Max Φ27	Max Φ27	Max Φ27
Main spindle max travel														
With guide bush	mm	205	205	205	240	240	240	240	240	240	240	240	240	240
Non guide bush	mm	308	308	308	355	355	355	355	355	355	355	355	355	355
Max tool installed qty.	pcs	16	20	20	14	16	22	22	26	14	16	22	22	26
OD Turning tool														
Qty.xModel		7x□10	7x□10	7x□10	6x□12	6x□12	6x□12	6x□12	6x□12	6x□12	6x□12	6x□12	6x□12	6x□12
Cross live tool														
Qty.xModel		5xER11	5xER11	5xER11	4xER16	4xER16	4xER16	4xER16	4xER16	4xER16	4xER16	4xER16	4xER16	4xER16
Drilling dia.	mm	Max Φ7	Max Φ7	Max Φ7	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10
Tapping/Threading die dia.		Max M6	Max M6	Max M6	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8
Live tool rev speed	rpm	Max4000	Max4000	Max4000	Max4000	Max4000	Max4000	Max4000	Max4000	Max4000	Max4000	Max4000	Max4000	Max4000
Live tool power	Kw	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
End-face tool(Main spindle)														
Fixed	Qty.xModel	4xER16	4xER16	4xER16	4xER16	3xER16	4xER16	4xER16	4xER16	4xER16	3xER16	4xER16	4xER16	4xER16
Fixed	Drilling dia. mm	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10	Max Φ10
Fixed	Tapping/Threading die dia.	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8	Max M8
Live	Qty.xModel	-	-	-	-	3xER16	-	-	-	-	3xER16	-	-	-
Live	Drilling dia. mm	-	-	-	-	Max Φ8	-	-	-	-	Max Φ8	-	-	-
Live	Tapping/Threading die dia.	-	-	-	-	Max M6	-	-	-	-	Max M6	-	-	-
Live	Live tool rev speed rpm	-	-	-	-	Max6000	-	-	-	-	Max6000	-	-	-
Live	Live tool power Kw	-	-	-	-	0.5	-	-	-	-	0.5	-	-	-
Back end-face tool(Sub spindle)														
Fixed	Qty.xModel	-	4xER16	-	-	-	4xER16	-	4xER16	-	-	4xER16	-	4xER16
Fixed	Drilling dia. mm	-	Max Φ10	-	-	-	Max Φ10	-	Max Φ10	-	-	Max Φ10	-	Max Φ10
Fixed	Tapping/Threading die dia.	-	Max M8	-	-	-	Max M8	-	Max M8	-	-	Max M8	-	Max M8
Live	Qty.xModel	-	-	*4xER16	-	-	-	*4xER16	4xER16	-	-	-	*4xER16	4xER16
Live	Drilling dia. mm	-	-	Max Φ10	-	-	-	Max Φ10	Max Φ10	-	-	-	Max Φ10	Max Φ10
Live	Tapping/Threading die dia.	-	-	Max M8	-	-	-	Max M8	Max M8	-	-	-	Max M8	Max M8
Live	Live tool rev speed rpm	-	-	Max4000	-	-	-	Max4000	Max4000	-	-	-	Max4000	Max4000
Live	Live tool power Kw	-	-	0.75	-	-	-	0.75	0.75	-	-	-	0.75	0.75
Rapid feed speed	m/min	30(Z/Y)15(X)	30(Z1/Z2/X2/Y)15(X1)	30(Z1/Z2/X2/Y)15(X1)	30(Z/Y)24(X)	30(Z/Y)24(X)	30(Z1/Z2/X2/Y)24(X1)	30(Z1/Z2/X2/Y)24(X1)	30(Z1/Z2/X2/Y1) 24(X1),15(Y2)	30(Z/Y)24(X)	30(Z/Y)24(X)	30(Z1/Z2/X2/Y)24(X1)	30(Z1/Z2/X2/Y)24(X1)	30(Z1/Z2/X2/Y1) 24(X1),15(Y2)
Feed motor power	Kw	0.75(Z/X/Y)	0.75(Z1/Z2/X1/X2/Y)	0.75(Z1/Z2/X1/X2/Y)	0.75(Z/X/Y)	0.75(Z/X/Y)	0.75(Z1/Z2/X1/X2/Y)	0.75(Z1/Z2/X1/X2/Y)	0.75(Z1/Z2/X1/X2/Y1) 0.5(Y2)	0.75(Z/X/Y)	0.75(Z/X/Y)	0.75(Z1/Z2/X1/X2/Y)	0.75(Z1/Z2/X1/X2/Y)	0.75(Z1/Z2/X1/X2/Y1) 0.5(Y2)
Cutting oil pump power	Kw	0.35	0.75	0.75	0.35	0.35	0.75	0.75	0.75	0.35	0.35	0.75	0.75	0.75
Main/sub spindle cooling oil pump power	Kw	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Lubricating oil pump power	Kw	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Max collecting length of workpieces collect box	mm	50	80	80	50	50	90	90	80	50	50	90	90	80
Main/sub spindle center to the bottom of lathe body	mm	990	990	990	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
Cutting oil tank volume	L	100	160	160	150	150	180	180	180	150	150	180	180	180
Net weight	Kg	1910	2500	2500	1950	1950	2300	2600	2700	1950	1950	2300	2600	2700
Dimensions(LxWxH)	mm	1914x1313x1708	2068x1210x1698	2068x1210x1698	1868x1302x1738	1868x1302x1738	2178x1278x1780	2178x1278x1780	2178x1278x1780	1868x1302x1738	1868x1302x1738	2178x1278x1780	2178x1278x1780	2178x1278x1780

Notes：1. OD Turning tool length: 125mm
2. *4xER16： *4xER16: Standard 2 live and 2 fixed tool holder (Option: 4 live tool holder)
Technical parameters are subject to change without prior notice.

Standard configuration

- Japan FANUC control system
- 10.4 inch Color LCD display
- Main/sub spindle cooling system
- Lricating system
- Rotatory guide bush
- Main/sub spindle air blowing device
- LED working light
- Electric leakage protection
- Transformer
- External light connector
- 3-colour tower light
- HIWIN/PMI screw/guide rail
- Cutting oil tank
- Main/sub spindle collet 1pcs; guide bush 1 pcs
- Tool cabinet

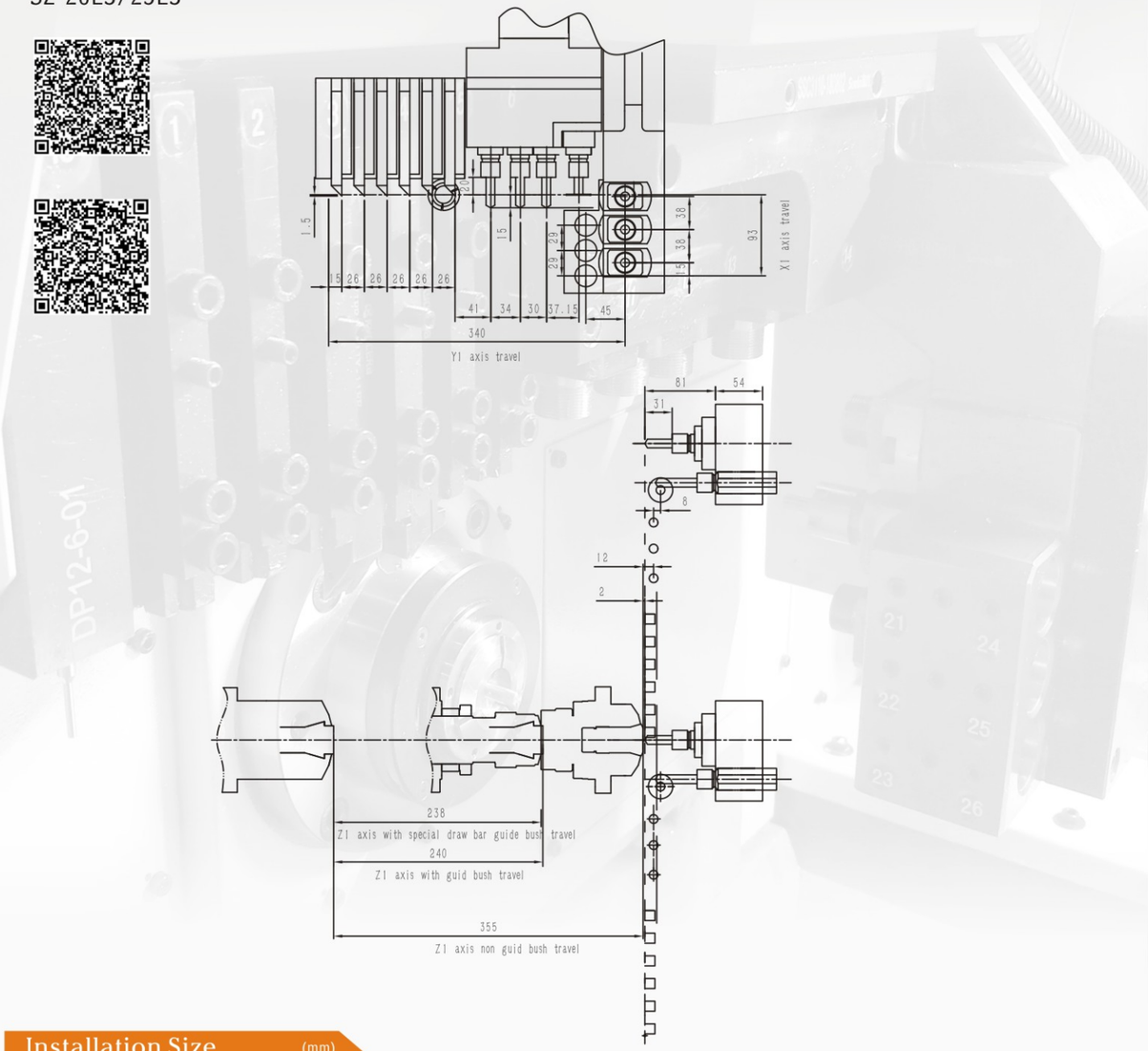
Optional configuration

- Automatic bar feeder
- Chip conveyor
- Oil mist collector
- High pressure pump
- Long workpiece collector
- Workpiece belt conveyor
- External working litht
- Tap breakage detector
- cut-off tool breakage detector
- Special shaped material clamping device
- Automatic fire extinguisher

Appendix

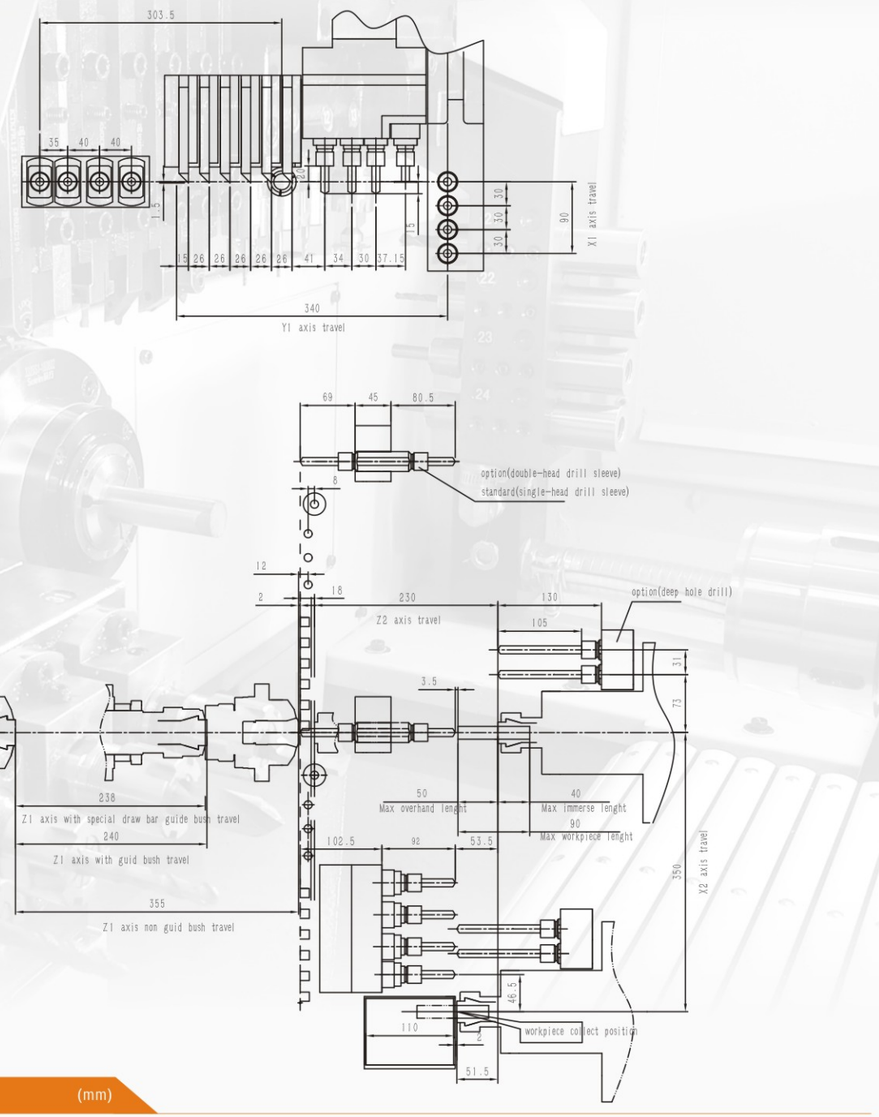
Travel Interference (mm)

SZ-20E3/25E3



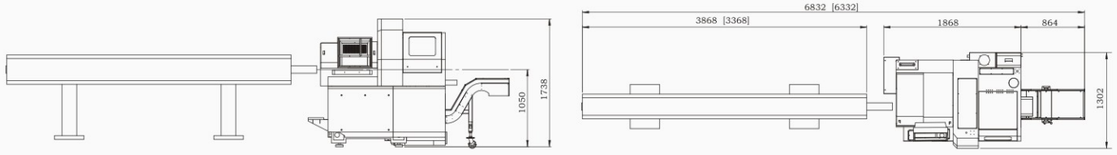
Travel Interference (mm)

SZ-205E2/255E2



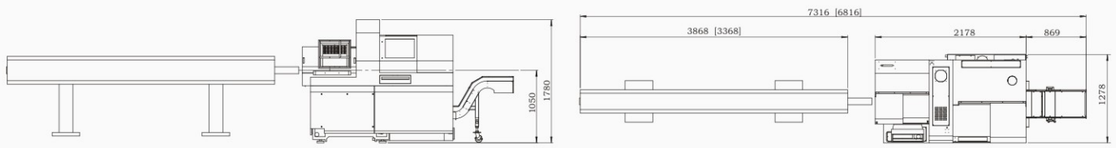
Installation Size (mm)

SZ-20E3/25E3



Installation Size (mm)

SZ-205E2/255E2



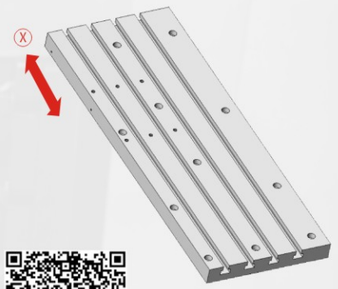
SC-46L/SC-46YL1/SC-46YL2 Slant Bed CNC Turn Mill Lathe

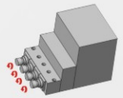
Extra long X axis travel, large processing space, high cutting capacity, and high cost performance.

- Lathe body uses high quality integral cast iron, slanting degree 30 , anti-bending, anti-torsion, high rigidity.
- The main spindle adopts Taiwan POSA spindle, Grade P4 high-precision angular contact ball bearing, and the heavy load design combination is front three and back two, which can effectively ensure the rigidity and accuracy.
- The feeding motors use Japan FANUC servo motor, the full pulse control is more accurate and more fast positioning, which can be used for Cs contour shaft, rigid tapping and other functions.
- Continuous pursuit of high - speed technology, greatly reduce non-cutting time.
- Grade C3 ball screw and guide rail with high rigity; Japan FANUC 0i-TF control system, more accuracy positioning, machining process more stable.
- Extra long X axis travel, max 700mm.
- Use Japan FANUC 0i-TF control system, support X/Z/Y axis united machining, support milling flat /drilling/tapping /engraving/turning, etc., can complete complex part machining at one time, which can improve product accuracy and reduce process.
- The live head can select 4+4 or 4+3 different structures, which greatly meet the needs of customer production and processing.
- Use Taiwan famous brand turret, hydraulic/servo drive turret to replace the cutter nearby, quick tool change, higher accuracy.

SC-46L/SC-46YL1/SC-46YL2 Tool Layout

SC-46L




Live head power driven tool option 0/2/3/4


Dual hole boring tool post 2×Φ25

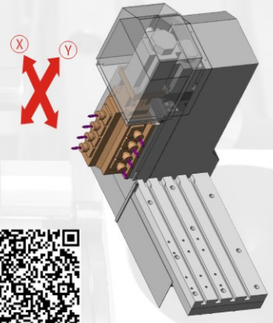

Single hole boring tool post Φ25


Single hole boring tool post □20


Dual turning tool post 2x□20

Gang tool configuration

SC-46YL1




Dual hole boring tool post 2×Φ25

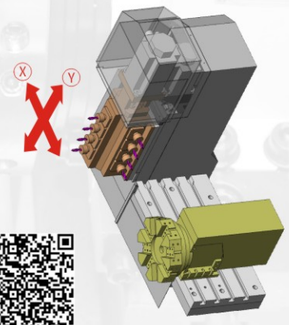

Single hole boring tool post Φ25


Single hole boring tool post □20


Dual turning tool post 2x□20

Gang tool configuration

SC-46YL2




Face turning tool post □20


Single hole boring tool post Φ25


Dual hole boring tool post 2xΦ20


Dual turning tool post 2x□16

Turret tool configuration

Sc-46 Series Slant Bed CNC Turn Mill Lathe Technical Specifications

Model		SC-46YL1	SC-46YL2	SC-46L
NC device		FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF
Lathe rated power	Kw	15	15	13
Main spindle				
Spindle end face type	Kw	ANSI A2-5	ANSI A2-5	ANSI A2-5
Spindle through hole	mm	Φ46	Φ46	Φ46
Spindle power	Kw	5.5	5.5	5.5
Spindle rev speed	rpm	Max 4500	Max 4500	Max 4500
Spindle center to slanting table distance	mm	75	75	75
Machining range				
Spindle max swing dia.	mm	Φ400	Φ400	Φ400
Max turning dia.	mm	Φ350	Φ350	Φ350
Rapid feed speed	m/min	20(X,Y axis),16(Z axis)	20(X,Y axis),16(Z axis)	20(X axis),16(Z axis)
Feed servo motor power	Kw	1.8(X axis),1.2(Y axis), 1.4(Z axis)	1.8(X axis),1.2(Y axis), 1.4(Z axis)	1.8(X axis),1.4(Z axis)
Live head power	Kw	1.8	1.8	-
Max travel				
X axis	mm	1400	1400	1400
Y axis	mm	210	210	-
Z axis	mm	350	350	350
Positioning accuracy				
X/Y/Z axis positioning accuracy	mm	0.005	0.005	0.005
X/Y/Z axis repeat positioning accuracy	mm	0.005	0.005	0.005
Spindle rotary jumpiness accuracy	mm	0.003	0.003	0.003
Spindle ban-type brake		Hydraulic brake	Hydraulic brake	Hydraulic brake
Lathe body gradient	°	30° (Integral casting body)	30° (Integral casting body)	30° (Integral casting body)
Max tool installed qty.	pcs	16	16	-
Tool system				
Live head		8xER20	8xER20	-
Live head rev speed	rpm	4+4 Live head (Max 4500)	4+4 Live head (Max 4500)	-
Row type turning tool		5x□20	-	□20
Row type boring tool		3xΦ25	-	Φ25
Hydraulic turret		-	8 Tool holder Φ25	-
Cutting oil pump power	Kw	0.4	0.4	0.4
Cutting oil tank volume	L	120	120	120
Net weight	Kg	3200	3500	3200
Dimensions(LxWxH)	mm	2350x1960x2160	2350x1960x2160	2350x1960x2160

Standard configuration
Japan FANUC control system
Taiwan spindle
Japan FANUC X/Y/Z axis drive
Hydraulic/servo turret
HIWIN/PMI screw/guide rail
Hydraulic pressure station
Spindle hydraulic ban-type brake
Angling cylinder
Lubricating system
3-colour tower light
LCD working light
Cutting oil tank
Transformer
Tool cabinet

Optional configuration
Chip conveyor
Oil mist collector
Hydraulic chuck
Oil-bath bar feeder/Auto bar feeder
Truss manipulator
Workpiece belt conveyor

SC-46 Series Slant Bed CNC Turn Mill Lathe Configuration


8 stations hydraulic/servo turret

High-precision
Taiwan POSA spindle

Live head


High quality integral cast iron, slanting degree 30


Hydraulic Chuck
(Optional)


Oil mis collector
(Optional)


High pressure pump
(Optional)


Oil bath feeder
(Optional)


Chip conveyor
(Chain type, lifting type)
(Optional)

Oil bath feeder (Optional)	
Bar material dia.	Φ5～Φ45
Max bar material length	2500mm
Feed tube length	3800mm
L X W X CH	3800x700x1130

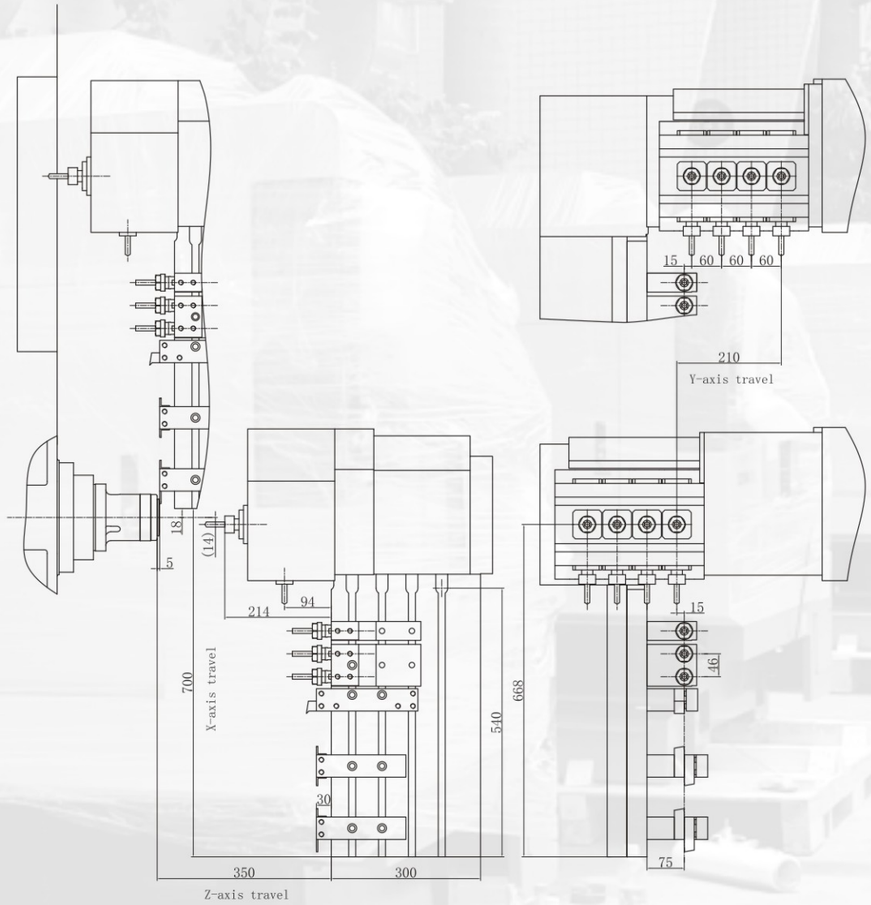
*(CH: abbr center height)

Standard configuration
Hydraulic system(Include electrical control box)
Two lifting columns
Four loading tubes: dia. Φ18、Φ26、Φ34、Φ45
Motor : 380V、0.75KW

Travel Interference

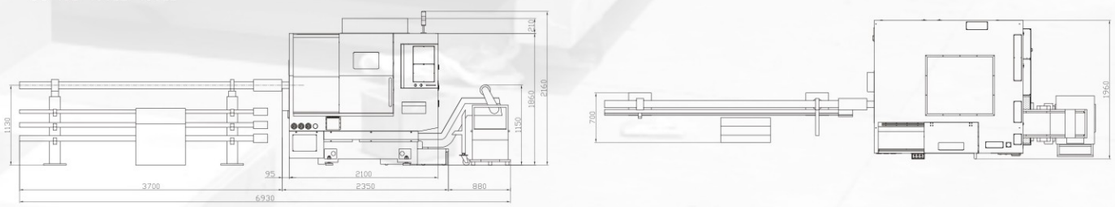
SC-46YL1 travel interference

(4+4 live head)



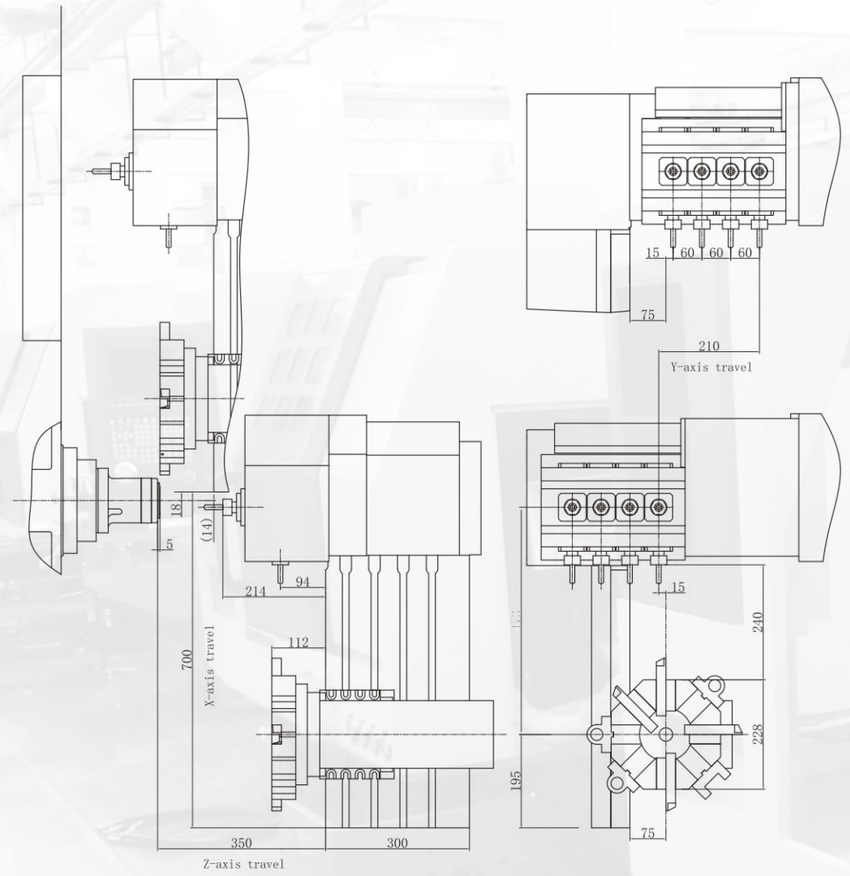
Installation Size (mm)

SC-46L/46YL1/46YL2

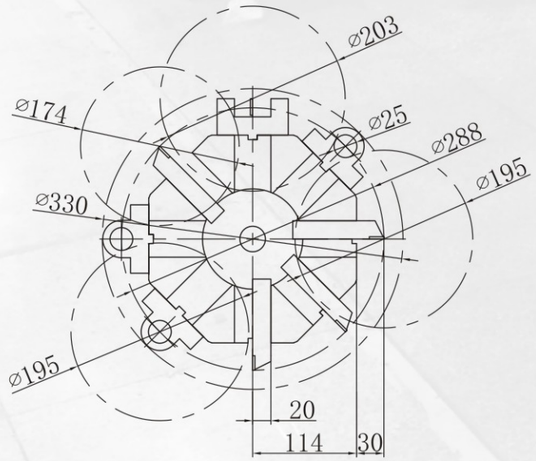


SC-46YL2 travel interference

(4+4 live head)



SC-46YL2 Turret interference



CNC Swiss Type Lathe Machining Cases Display

Computer and Consumer Electronic Industry

Auto Industry

Jewelry Industry

Locking-making Industry

Communication Industry

Medical Industry

Fishing Tools Industry

Other Industries

Slant Bed CNC Turn Mill Lathe Machining Cases Display

Exhibition Photos and Engineering Cases