

WELCOME TO SMARTLATHE!
Smart Automation, Smarter Turning.

SMART
LATHE

WELCOME TO SMART
Smart Automation, Smarter Turning.

SW Series

Multi-axis machining

Entry-level

4 AXIS Max. Bar $\Phi 6$



Mid-range

5/6 AXIS Max. Bar $\Phi 20$
Max. Bar $\Phi 26$



High-end

5/6 AXIS Max. Bar $\Phi 32$



SW-06

SWISS TYPE



- Fast Micropart Machining
- Small Lathe, Big Capability
- Compact Size, Precise Performance

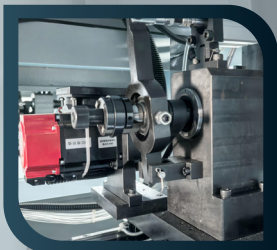
Standard Configuration

10

Core Features For High-Precision CNC Turning.



0.75KW Spindle Servo Motor
Telescopic Guards for X/Z Axes



Lubrication System



Guide Bush



Multifunctional Control Panel



Coolant Tank



SMARTBRAIN CNC System



Live Tools



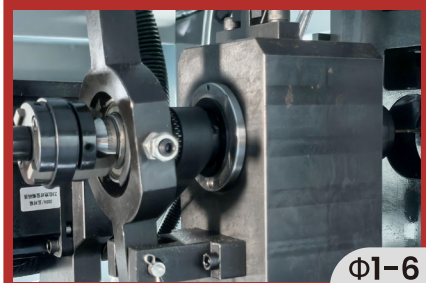
User Manual



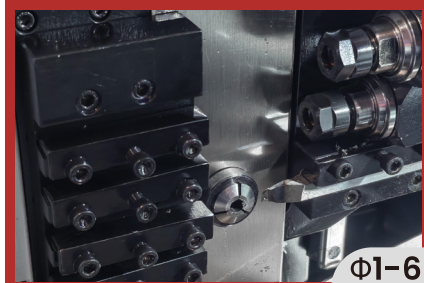
Toolbox



Main Spindle (Standard)



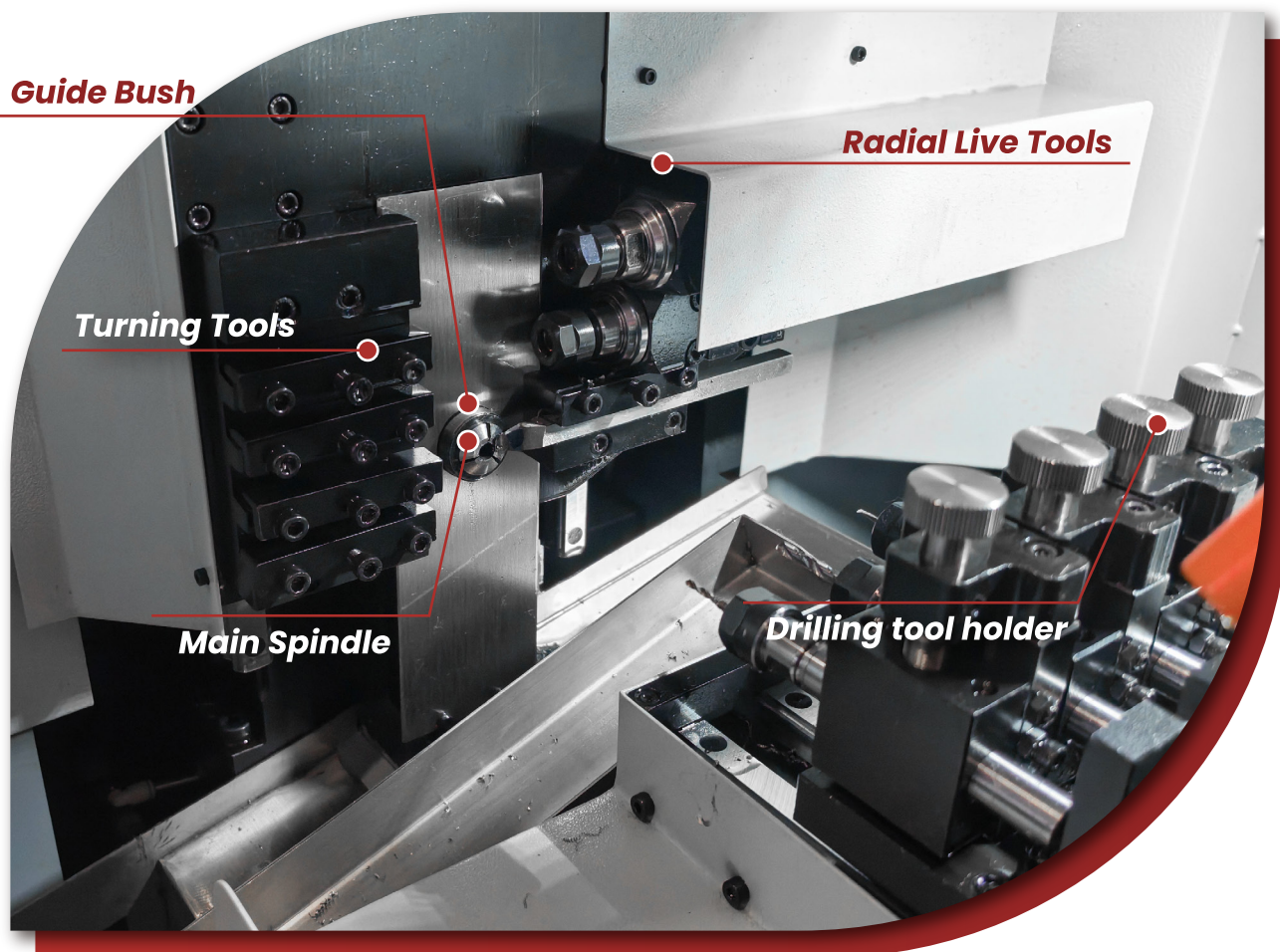
Guide Bush



Automatic Bar Feeder



Machine Tool Structure



Main Spindle

Spindle Motor Power	0.75 kw
Spindle Speed	8000 rpm
Max. Machinable Bar Diameter	6 mm(0.236 in)
Z1 Travel	Φ150 mm(Φ5.91 in)

Guide Bush

Size	Φ1-6
------	------

Drilling Tool Holder

Max. Turning Tools	4 sets
Tool Size	ER11

Turning Tools

Max. Turning Tools	5 sets
Rapid Traverse Speed	30 m/min
X Travel	12 mm(0.472 in)
Y Travel	60 mm(2.36 in)
Tool Size	□8×8 mm

Live Tools

Max. Turning Tools	2 sets
Spindle Speed	5800 rpm
Tool Size	ER11

*The images and the specifications of the machine in this offer are indicative. The data is subject to change without prior notice.

Machining Parameters

Main Spindle Max. Ø	6 mm(0.236 in)
Max. Bar Ø	Ø6 mm(0.236 in)
Max. Machining Length	150 mm
Max. Axial Drilling Diameter	4 mm
Max. Main Spindle Speed	8000 rpm
Max. Live Tools Diameter	4 mm
Max. Live Tools Speed	5800 rpm Optional: 12000 rpm

Axis Travel

X Axis	12 mm(0.472 in)
Z Axis	300 mm(11.81 in)
Y Axis	60 mm(2.36 in)
Rapid Feed Z//X/Y	Up to 60m/min

Motor Power

Main Spindle Motor	0.75KW
Live Tool Motor	0.15KW
Cutting Oil Motor Power	0.12Kw

Dimensions

Footprint	1000×700×1750 mm
Weight	680 kg

Power Supply & Air Source

Total Power	3.75KW
Voltage	AC 380V 50Hz
Air Pressure	0.4-0.6 MPa

Tools

Number of Tools	11
Turning Tool Size	5×□8×8 mm
Drilling tool holder	4×ER11
Live Tools	2×ER11

Clamp

Spindle Chucks	P4
Guide Bushing	CK1107

Chucks & Bushings

Spindle Chucks	P4
Guide Bushing	CK1107

CNC System Specifications

SMARTBIRAN Control System
 Display Language
 MPG & USB
 Program Capacity
 Tool Offsets
 ISO A Code Programming
 Rigid Tapping
 Tool Radius Compensation
 Constant Surface Speed
 Thread Cutting (Single/Multi-Pass)
 Manual Jog Feed
 Runtime Display
 Part Count

SW-205 SW-266 **SWISS TYPE**



- Sliding headstock design
- Long bar feeding
- Multi-axis machining

Standard Configuration

13

Core Features For
High-Precision
CNC Turning.



Guide Bush



Double Spindle



Lubricating
Oil Pump



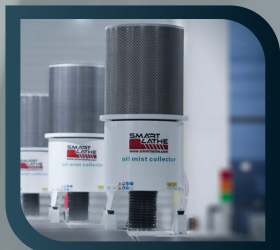
High-Pressure
Oil Pump



Oil Cooling Device



Oil mist Collector



Syntec System



Transformer



Coolant Tank



Product
Conveyor Belt



Toolbox



Servo Bar feeder



User Manual

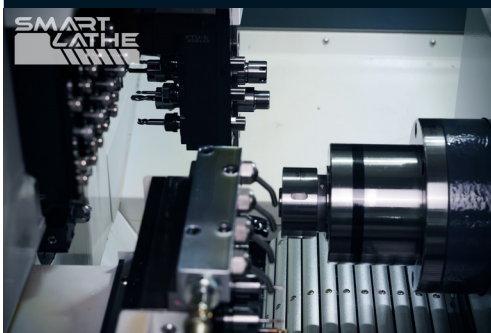


Standard Configuration

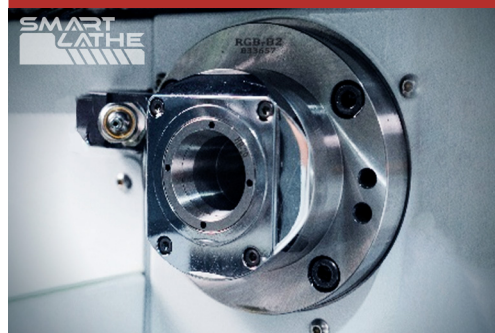
Main Spindle (Standard)



Sub Spindle (Standard)



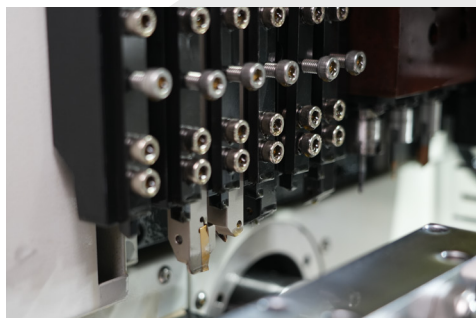
Guide Bush



SW-205 ○Φ1-Φ20 ▢H2-H19 □S2-S16

SW-266 ○Φ1-Φ26 ▢H2-H24 □S2-S19

01



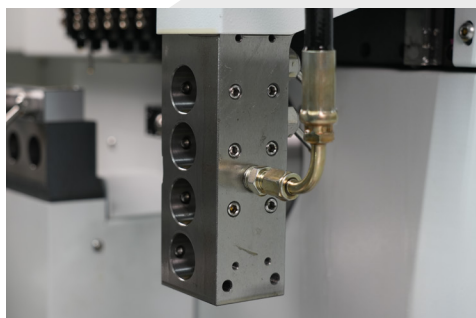
Main-spindle Turning Tool Size 6×□12×12 mm

02



Main-spindle Radial Milling Live Tools 4×ER16

03



Main-spindle End Face Fixed Tool Holders 4×ER16

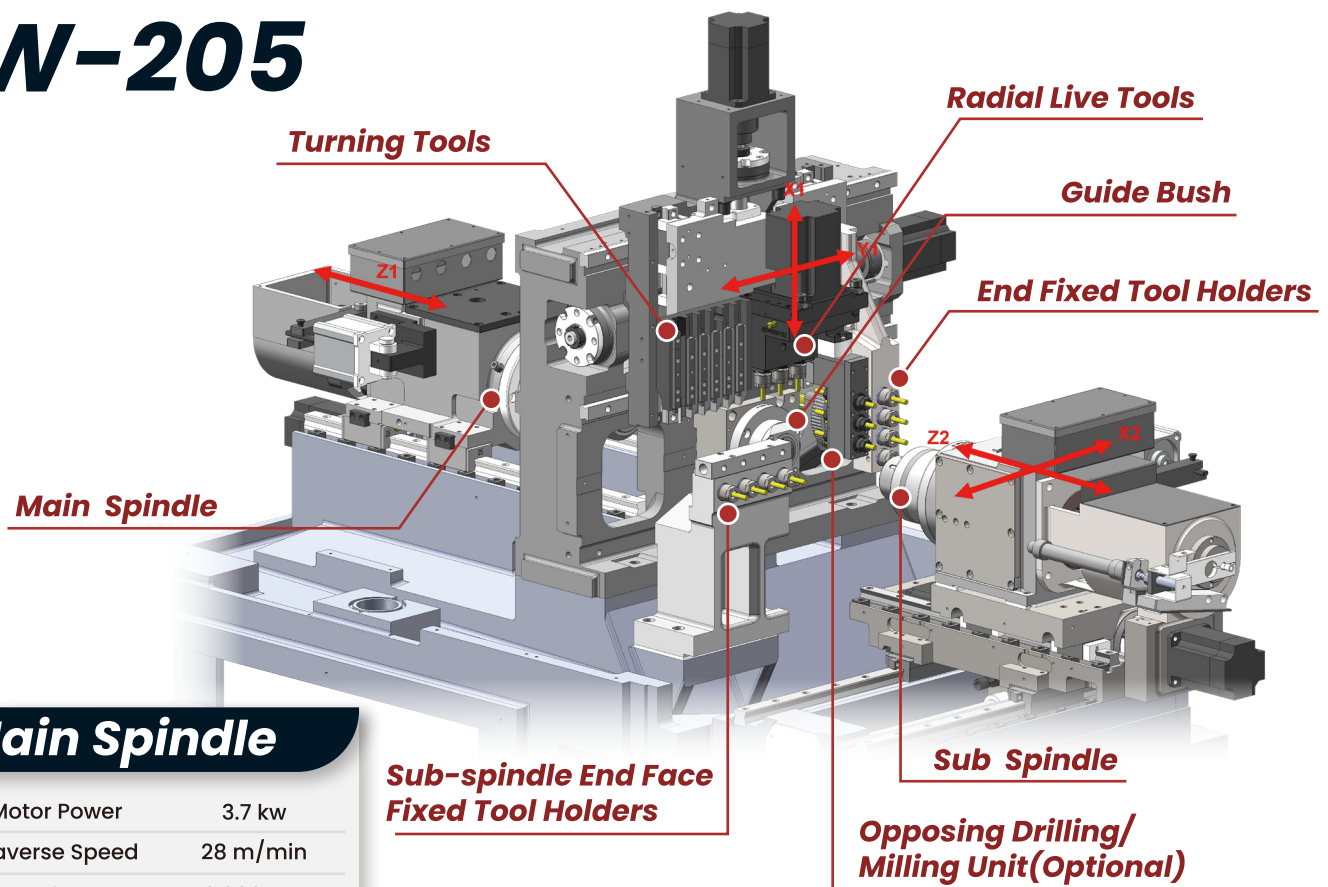
04



Sub-spindle End Face Fixed Tool Holders 4×ER16 Turning

Machine Tool Structure

SW-205



Main Spindle

Spindle Motor Power	3.7 kw
Rapid Traverse Speed	28 m/min
Spindle Speed	10,000 rpm
Max. Machinable Bar Diameter	20 mm(0.787 in)
Z1 Travel	280 mm(11.02 in)

Radial Live Tools

Tool Detection Device	T07-T10
Max. Number of Holders	3 sets
Tool Size	ER16

Guide Bush

SW-205 Size $\varnothing 2-19$ / $\square 2-16$ / $\varnothing 1-20$

End Fixed Tool Holders

Max. Number of Tool Holders	8 sets
Tool Size	ER16
Tool Detection Device	T11-T14

Sub Spindle

Spindle Motor Power	2.5 kw
Rapid Traverse Speed	30 m/min
Spindle Speed	12,000 rpm
Max. Machinable Bar Diameter	20 mm(0.787 in)
Z2 Travel	520 mm(20.47 in)
X2 Travel	170 mm(6.69 in)
Docking Tool Number	T20

Opposing Drilling/Milling Unit(Optional)

Tool Detection Device	T31-T33
Max. Holders	6 Sets
Tool Size	ER11
Max Speed	6000 rpm

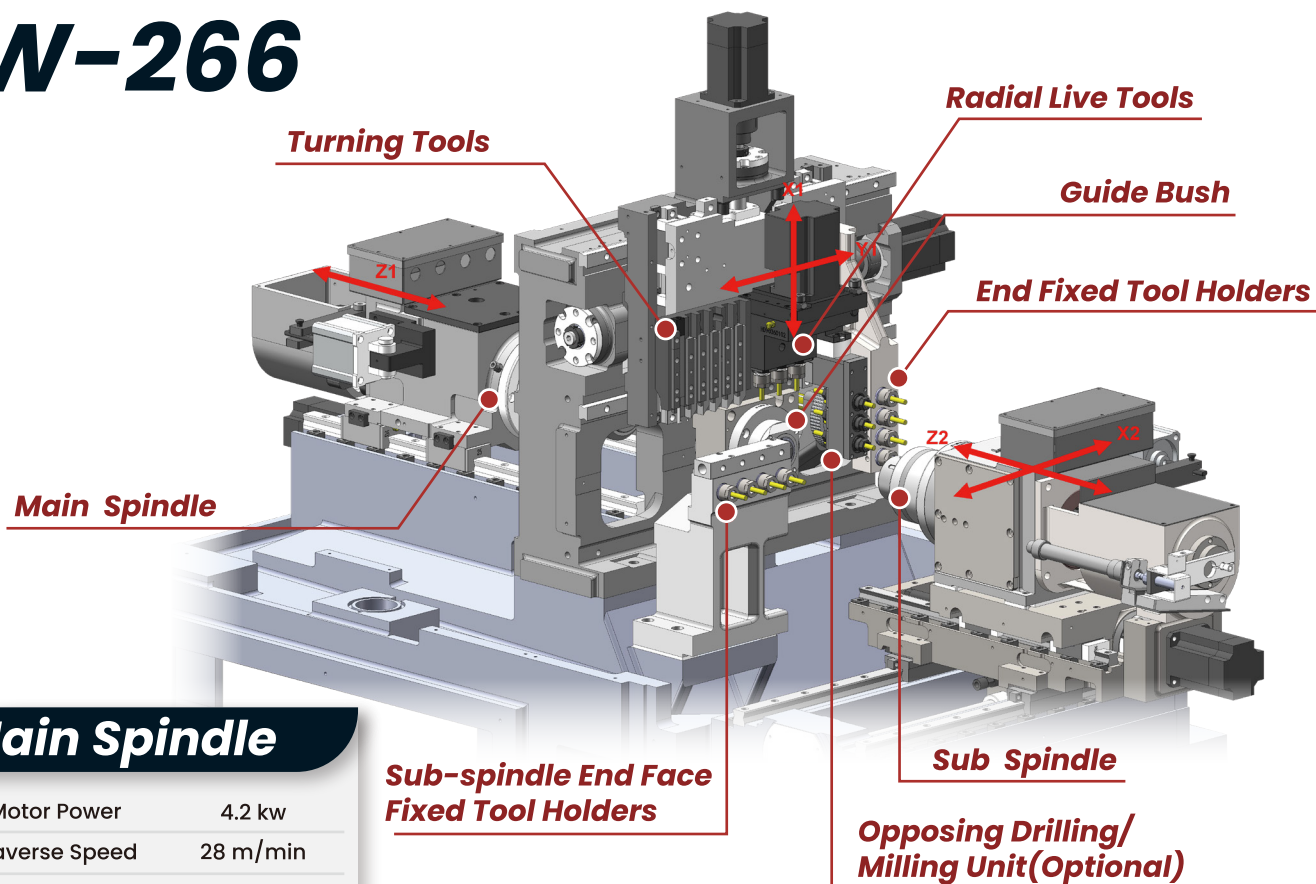
Turning Tools

Max. Number of Turning Tool Holders	6 sets
Rapid Traverse Speed	30 m/min
X1 Travel	185 mm(7.28 in)
Y1 Travel	300 mm(11.81 in)
Tool Detection Device	T01-T06
Tool Size	$\square 12 \times 12$ mm

Sub-spindle End Face Fixed Tool Holders

Max. Tool Holders	4 Sets
4 Turning Tools	ER16
Live Tools(Optional)	ER16
Y2 Axis Live Tools	Optional
Tool Detection Device	T21-T24

SW-266



Main Spindle

Spindle Motor Power	4.2 kw
Rapid Traverse Speed	28 m/min
Spindle Speed	10,000 rpm
Max. Machinable Bar Diameter	26 mm(1.02 in)
Z1 Travel	280 mm(11.02 in)

Radial Live Tools

Tool Detection Device	T07-T10
Max. Number of Holders	3 sets
Tool Size	ER16

Guide Bush

SW-266 Size $\varnothing 2-24$ / $\square 2-19$ / $\varnothing 1-26$

End Fixed Tool Holders

Max. Number of Tool Holders	8 sets
Tool Size	ER16
Tool Detection Device	T11-T14

Sub-spindle End Face Fixed Tool Holders

Sub Spindle

Spindle Motor Power	3.7 kw
Rapid Traverse Speed	30 m/min
Spindle Speed	12,000 rpm
Max. Machinable Bar Diameter	26 mm(1.02 in)
Z2 Travel	520 mm(20.47 in)
X2 Travel	170 mm(6.69 in)
Docking Tool Number	T20

Opposing Drilling/Milling Unit(Optional)

Tool Detection Device	T31-T33
Max. Holders	6 Sets
Tool Size	ER11
Max Speed	6000 rpm

Opposing Drilling/Milling Unit(Optional)

Turning Tools

Max. Number of Turning Tool Holders	6 sets
Rapid Traverse Speed	30 m/min
X1 Travel	185 mm(7.28 in)
Y1 Travel	300 mm(11.81 in)
Tool Detection Device	T01-T06
Tool Size	$\square 12 \times 12$ mm

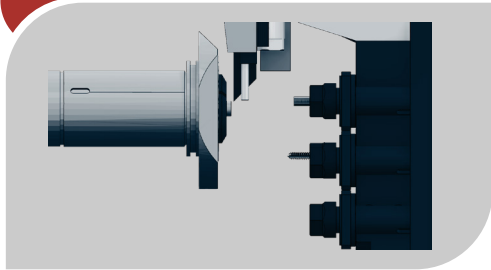
Sub-spindle End Face Fixed Tool Holders

Max. Tool Holders	4 Sets
4 Turning Tools	ER16
Live Tools(Optional)	ER16
Y2 Axis Live Tools	Optional
Tool Detection Device	T21-T24

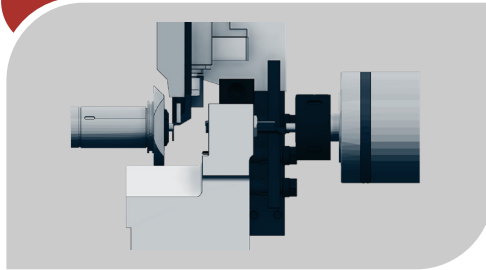
Machining Operations

Turning

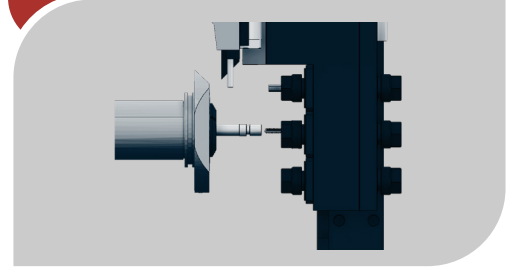
External Turning



Synchronous Machining

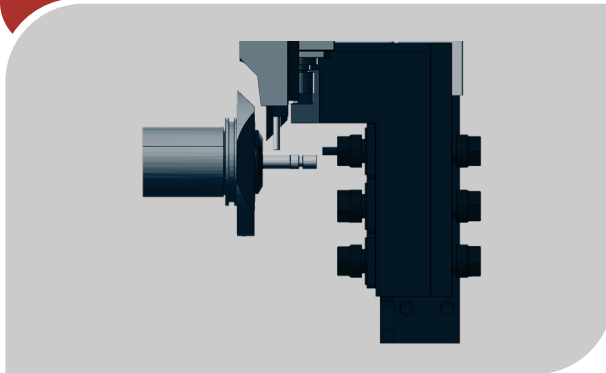


Tapping

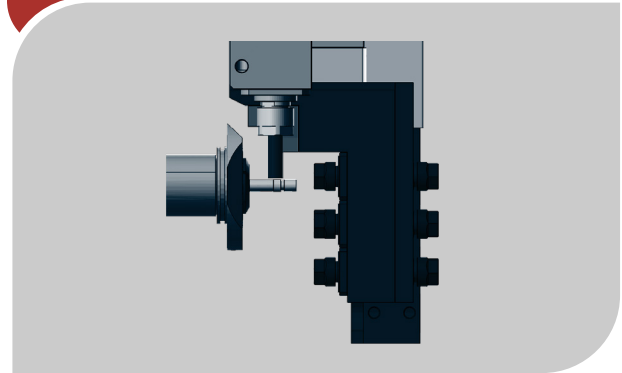


Milling

End Face Milling

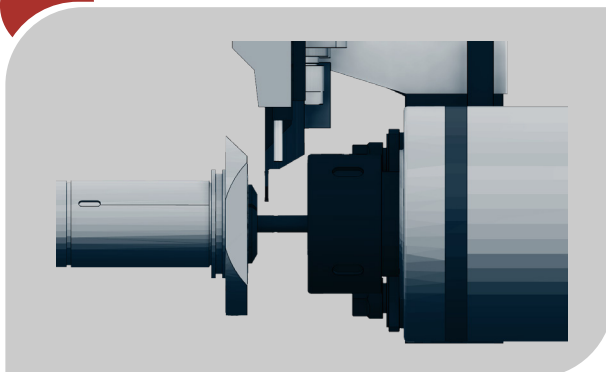


Radial Milling



Auxiliary Machining

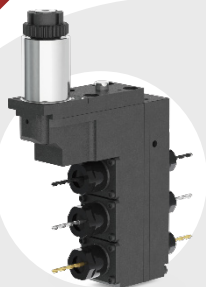
Synchronous Docking



Optional



01 ▶



**Opposing Drilling /
Milling Unit: 3×ER11 + 3**

02 ▶



**Polygon
Machining Unit**

03 ▶



**Skewed Machining
Unit: 3×ER16 (0–90°)**

04 ▶



Thread Whirling

05 ▶



**3 Live Tool Unit:
ER16×3**

06 ▶



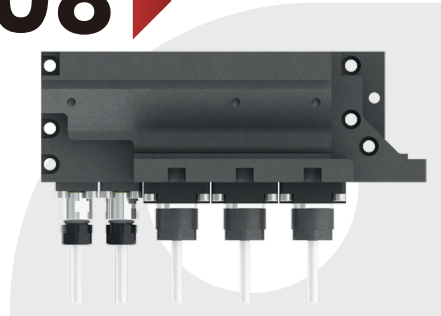
Milling Unit: ER16×1

07 ▶



Hobbing Tool Holder

08 ▶



**5 Spindle Milling
Unit: ER11×2 + ER16×3**

09 ▶



4 Sleeve Holder

10 ▶



Slotting Unit

Technical Specifications

SW-205
SW-266

Processing Parameters

Spindle

Max. Main Spindle Machining Diameter	20 mm(0.787 in)	26 mm(1.02 in)
Max. Sub Spindle Machining Diameter	20 mm(0.787 in)	26 mm(1.02 in)
Max. Bar Machining Diameter	Φ20 mm(Φ0.787 in)	Φ26 mm(Φ1.02 in)
Max. Machining Length	190 mm(7.48 in)	190 mm(7.48 in)
Max. Axial Drilling Diameter	10 mm	10 mm
Max. Axial Tapping Size	M8	M8
Max. Main Spindle Speed	10,000 rpm	10,000 rpm
Max. Sub Spindle Speed	12,000 rpm	12,000 rpm
Max. Radial Drilling Diameter	12 mm	12 mm
Max. Radial Tapping Size	M6	M6
Max. Radial Live Tools Speed	6000 rpm	6000 rpm
Rated Radial Live Tools Speed	5000 rpm	5000 rpm
Parts Catching Max. Length	100 mm(3.94 in)	100 mm(3.94 in)

Axis Travel

X1 Axis	200 mm(7.87 in)	200 mm(7.87 in)
X2 Axis	520 mm(20.47 in)	520 mm(20.47 in)
Z1 Axis	300 mm(11.81 in)	300 mm(11.81 in)
Z2 Axis	175 mm(6.89 in)	175 mm(6.89 in)
Y1 Axis	270 mm(10.63 in)	270 mm(10.63 in)
Y2 Axis	62 mm(2.44 in) (Optional)	62 mm(2.44 in) (Optional)
Rapid Feed X1	28 m/min	28 m/min
Rapid Feed Z1/Z2/X2/Y1/Y2	30 m/min	30 m/min

Motor Power

Main Spindle Motor	3.7KW	4.2KW
Sub Spindle Motor	2.5KW	3.7KW
Live Tool Motor	1KW	1KW
Cutting Oil Pump	0.75KW	0.75KW
Spindle Cooling	1KW	1KW
Lubrication	0.004KW	0.004KW
X1/Y1/Z2 Motors	0.75KW	0.75KW
Z1/X2 Motors	0.85KW	0.85KW

Toos

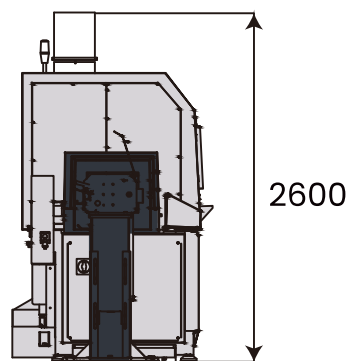
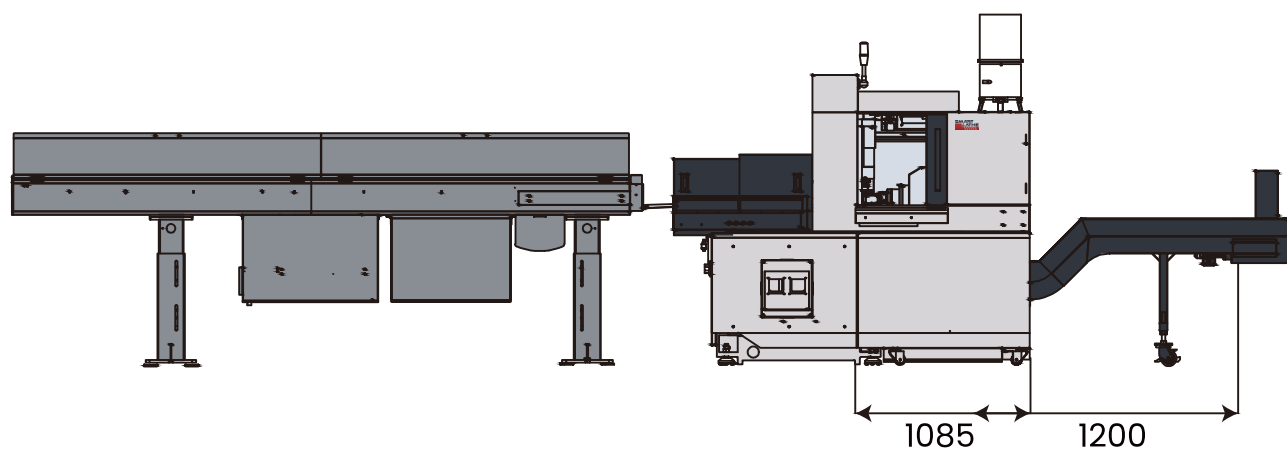
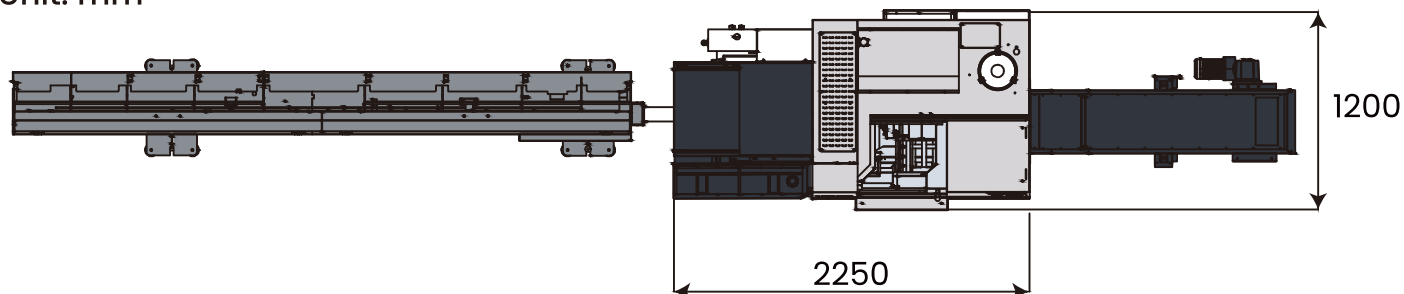
Number of Tools	6	6
Turning Tool Size	□12×12 mm	□12×12 mm
End Face Fixed Tool Holders	4×ER16	4×ER16
Radial Milling Live Tools	3×ER16	3×ER16
Sub-Spindle End Face fixed Tool Holders	4 *ER16 Turning	4 *ER16 Turning

	SW-205	SW-266
Clamp		
Main/Sub Spindle Collet	TSUGAMI B0265CCR	TSUGAMI B0265CCR
Guide Bush	TSUGAMI BS-20#-B	TSUGAMI BS-20#-B
Dimensions		
Footprint	2250x1200x2000 mm	2250x1200x2000 mm
Weight	2800 kg	2800 kg
Power Supply & Air Source		
Total Power	9.6KW	12KW
Voltage	AC 380V 50Hz	AC 380V 50Hz
Air Pressure	0.5-0.8 MPa	0.5-0.8 MPa
Air Flow	0.3 m³/min	0.3 m³/min
CNC System Specifications		
Standard Configuration	SYNTEC 10.4" Color LCD + Control Panel Display Language MPG, PCMCIA, USB, Ethernet Program Capacity / Tool Offsets ISO A Code Programming Interpolation (Linear, Circular, Polar, Cylindrical) Rigid Tapping Tool Radius Compensation Constant Surface Speed Thread Cutting (Single/Multi-start) Manual Jog Feed, Runtime Display, Part Counter Inch/Metric Switching, Decimal Input, Self-Diagnostics	

*The images and the specifications of the machine in this offer are indicative. The data is subject to change without prior notice.

Installation Dimensions

Unit: mm



Optional



Chip Conveyor

SW-326

SWISS TYPE



- Sliding headstock design
- Long bar feeding
- Multi-axis machining

Standard Configuration

13

**Core Features For
High-Precision
CNC Turning.**



Guide Bush



Double Spindle



**Lubricating
Oil Pump**



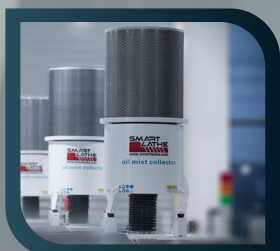
**High-Pressure
Oil Pump**



Oil Cooling Device



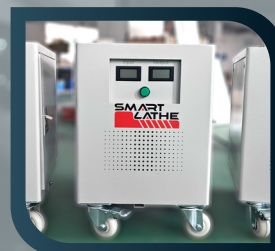
Oil mist Collector



Syntec System



Transformer



Coolant Tank



**Product
Conveyor Belt**



Toolbox



Servo Bar feeder

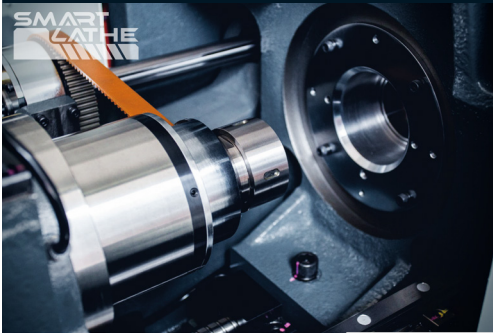


User Manual

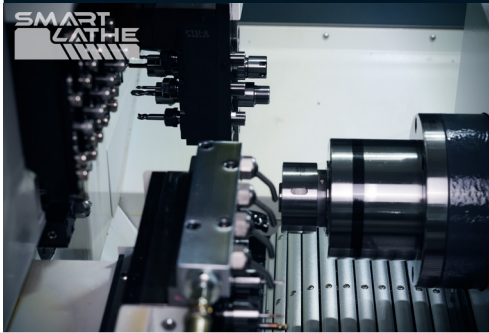


Standard Configuration

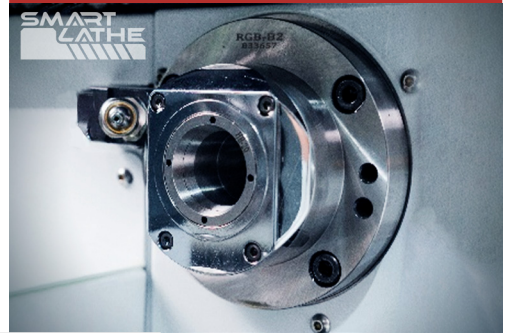
Main Spindle (standard)



Sub Spindle (standard)

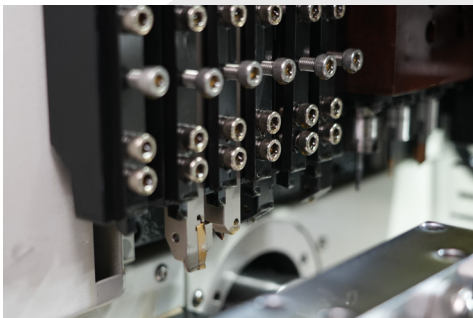


Guide Bush



○ $\Phi 1-\Phi 32$ $\square$ H2-H28 $\square$ S2-S23

01



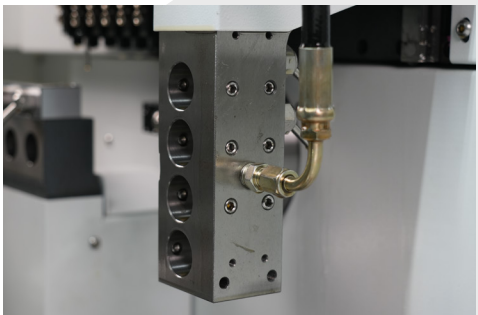
Main-spindle $6 \times \square 16 \times 16$ mm
Turning Tool Size

02



Main-spindle $3 \times \text{ER16} + 1 \times \text{ER20}$
Radial Milling Live Tools

03



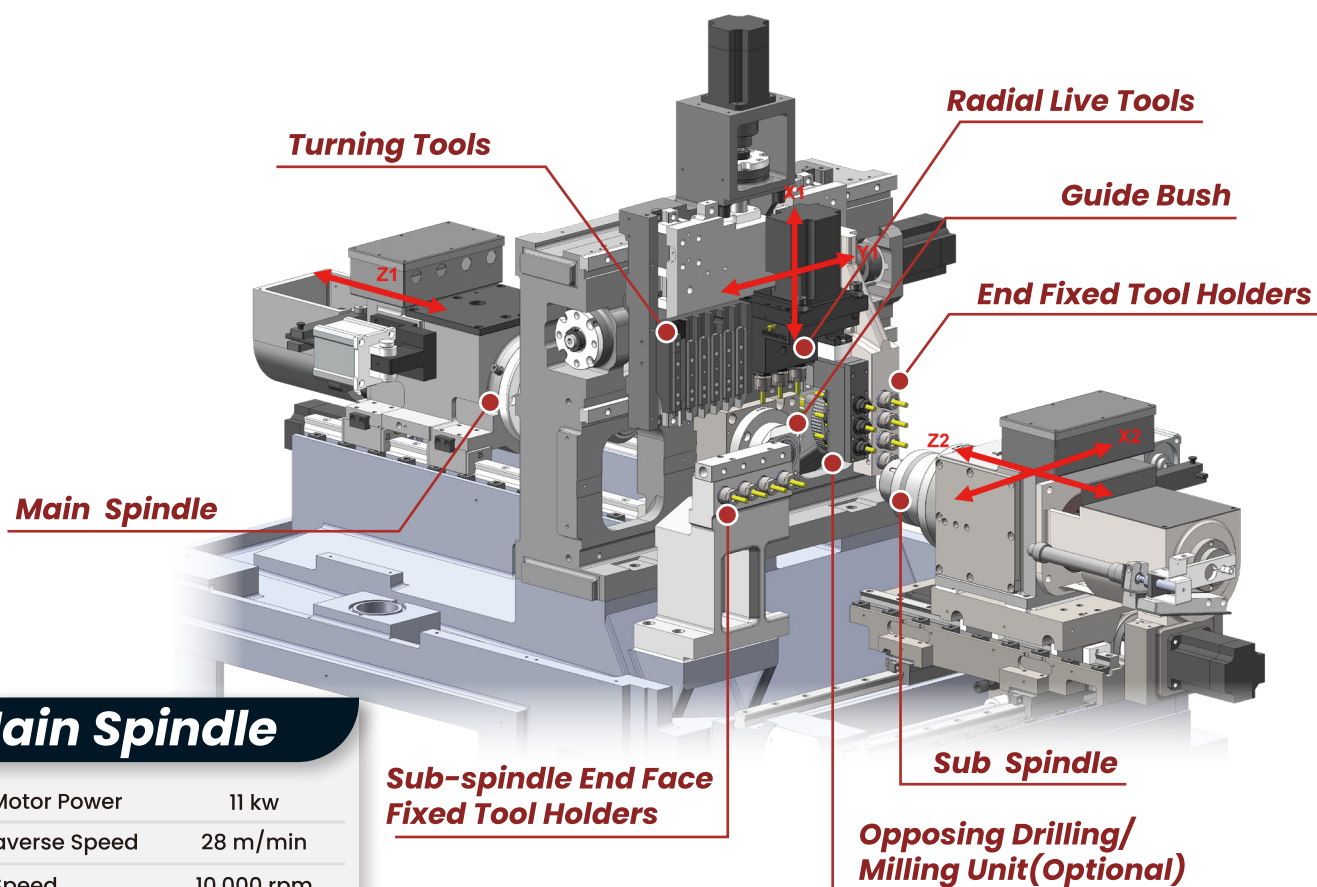
Main-spindle $4 \times \text{ER16}$
End Face Fixed Tool Holders

04



Sub-spindle $4 \times \text{ER16}$ Turning
End Face Fixed Tool Holders

Machine Tool Structure



Main Spindle

Spindle Motor Power	11 kw
Rapid Traverse Speed	28 m/min
Spindle Speed	10,000 rpm
Max. Machinable Bar Diameter	32 mm(1.26 in)
Z1 Travel	300 mm(11.81 in)

Radial Live Tools

Tool Detection Device	T07-T10
Max. Number of Holders	3 sets
Tool Size	ER16

Guide Bush

Size	○2-28 / □2-23 / Φ1-32
------	-----------------------

End Fixed Tool Holders

Max. Number of Tool Holders	8 sets
Tool Size	ER16

Sub-spindle End Face Fixed Tool Holders

Sub Spindle

Spindle Motor Power	4.2 kw
Rapid Traverse Speed	30 m/min
Spindle Speed	12,000 rpm
Max. Machinable Bar Diameter	32 mm(1.26 in)
Z2 Travel	520 mm(20.47 in)
X2 Travel	175 mm(6.89 in)
Docking Tool Number	T20

Opposing Drilling/Milling Unit(Optional)

Tool Detection Device	T31-T33
Max. Holders	6 Sets
Tool Size	ER11
Max Speed	6000 rpm

Sub Spindle

Opposing Drilling/Milling Unit(Optional)

Turning Tools

Max. Number of Turning Tool Holders	6 sets
Spindle Motor Power	6 sets
Rapid Traverse Speed	30 m/min
X1 Travel	200 mm(7.87 in)
Y1 Travel	270 mm(10.63 in)
Tool Detection Device	T01-T06
Tool Size	□16×16 mm

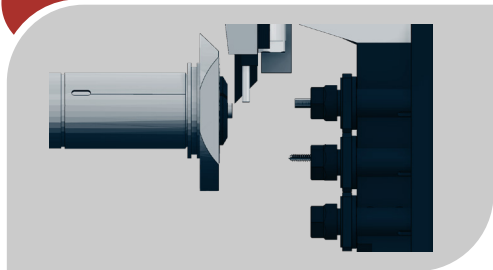
Sub-spindle End Face Fixed Tool Holders

Max. Tool Holders	4 Sets
4 Turning Tools	ER16
Live Tools(Optional)	ER16
Y2 Axis Live Tools	Optional
Tool Detection Device	T21-T24

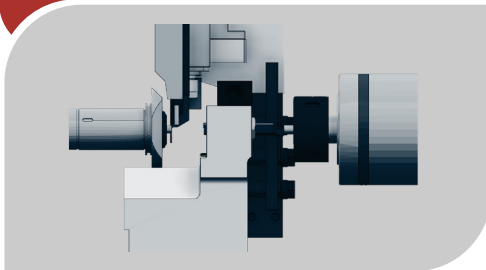
Machining Operations

Turning

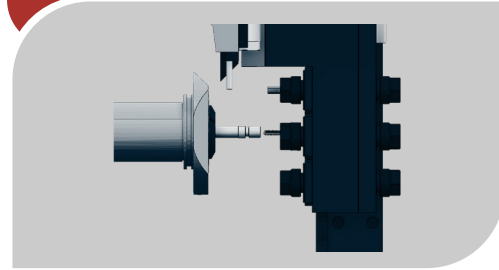
External Turning



Synchronous Machining

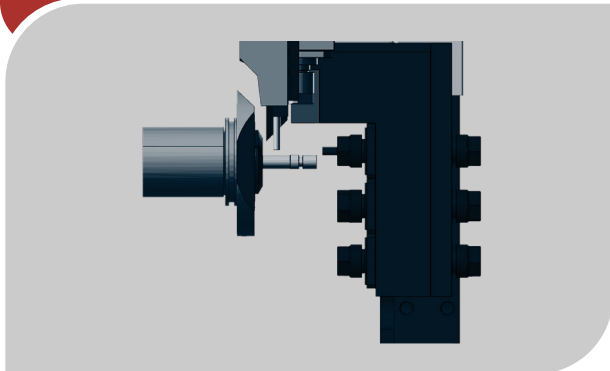


Tapping

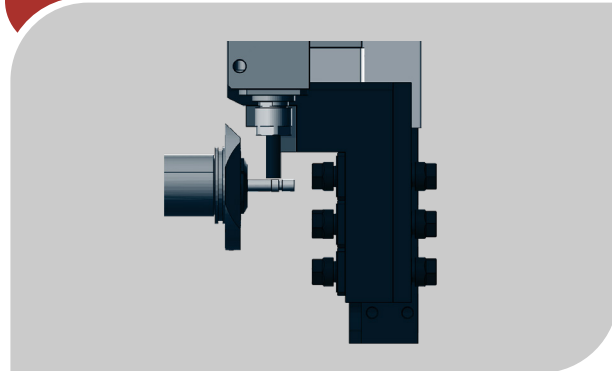


Milling

End Face Milling

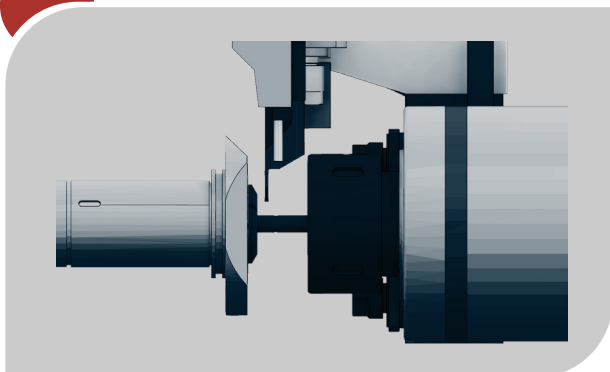


Radial Milling



Auxiliary Machining

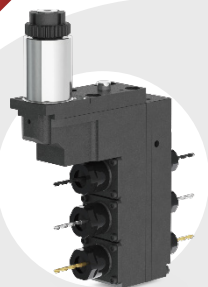
Synchronous Docking



Optional



01 ▶



**Opposing Drilling /
Milling Unit: 3×ER11 + 3**

02 ▶



**Polygon
Machining Unit**

03 ▶



**Skewed Machining
Unit: 3×ER16 (0–90°)**

04 ▶



Thread Whirling

05 ▶



**3 Live Tool Unit:
ER16×3**

06 ▶



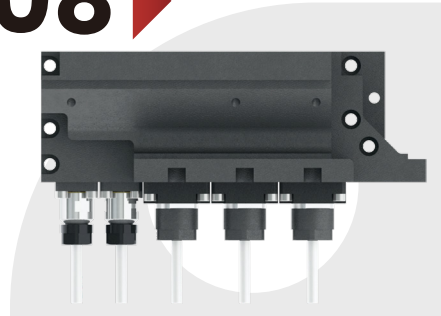
Milling Unit: ER16×1

07 ▶



Hobbing Tool Holder

08 ▶



**5 Spindle Milling
Unit: ER11×2 + ER16×3**

09 ▶



4 Sleeve Holder

10 ▶



Slotting Unit

Technical Specifications

Processing Parameters

Spindle		Motor Power	
Max. Main Spindle Machining Diameter	32 mm(1.26 in)	Main Spindle Motor	11KW
Max. Sub Spindle Machining Diameter	32 mm(1.26 in)	Sub Spindle Motor	4.2KW
Max. Bar Machining Diameter	Φ32 mm(Φ1.26 in)	Live Tool Motor	2KW
Max. Machining Length	160 mm(6.3 in)	Cutting Oil Pump	0.75KW
Max. Axial Drilling Diameter	10 mm	Spindle Cooling	1KW
Max. Axial Tapping Size	M8	Lubrication	0.004KW
Max. Main Spindle Speed	10,000 rpm	X1/Y1/Z2 Motors	0.75KW
Max. Sub Spindle Speed	12,000 rpm	Z1/X2 Motors	0.85KW
Max. Radial Drilling Diameter	12 mm	Tools	
Max. Radial Tapping Size	M6	Number of Tools	6
Max. Radial Live Tools Speed	6000 rpm	Turning Tool Size	□16×16 mm
Rated Radial Live Tools Speed	5000 rpm	End Face Fixed Tool Holders	4×ER16
Parts Catching Max. Length	100 mm(3.94 in)	Radial Milling Live Tools	3×ER16 + 1×ER20
		Sub-Spindle End Face Fixs Tool Holders	4 *ER16 Turning

Axis Travel

X1 Axis	200 mm(0.0787 in)
X2 Axis	520 mm(20.47 in)
Z1 Axis	300 mm(11.81 in)
Z2 Axis	175 mm(6.89 in)
Y1 Axis	270 mm(10.63 in)
Y2 Axis	62 mm (2.44 in)(Optional)
Rapid Feed X1	28 m/min
Rapid Feed Z1/Z2/X2/Y1/Y2	30 m/min

Clamp

Main/Sub Spindle Collet	TSUGAMI B032BC
Guide Bush	TSUGAMI B032BC

Dimensions

Footprint	2250x1450x2000 mm
Weight	3000 kg

Power Supply & Air Source

Total Power	19.8KW
Voltage	AC 380V 50Hz
Air Pressure	0.5-0.8 MPa
Air Flow	0.3 m³/min

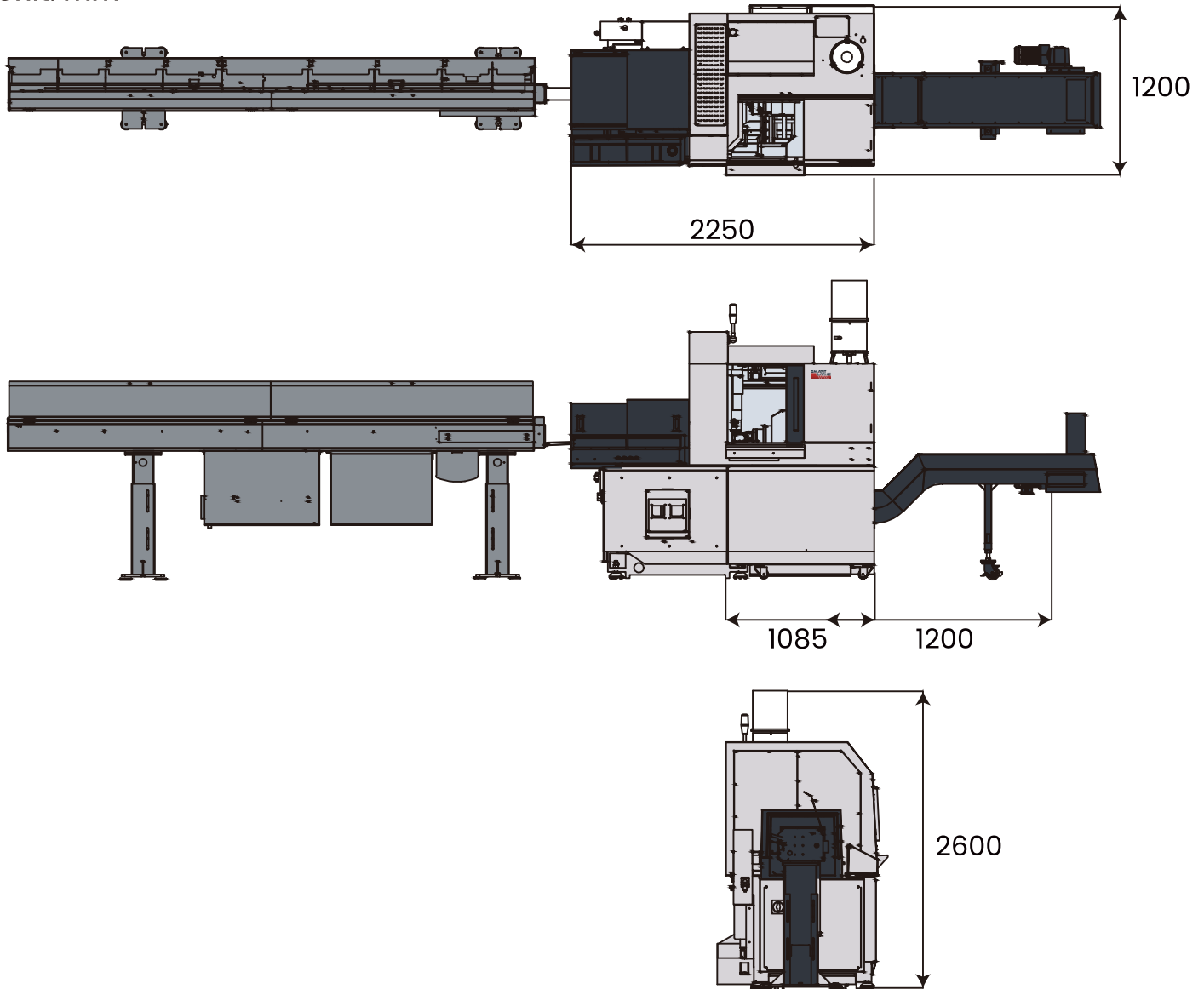
CNC System Specifications

Standard Configuration	SYNTEC 10.4" Color LCD + Control Panel Display Language MPG, PCMCIA, USB, Ethernet Program Capacity / Tool Offsets ISO A Code Programming Interpolation (Linear, Circular, Polar, Cylindrical) Rigid Tapping Tool Radius Compensation Constant Surface Speed Thread Cutting (Single/Multi-start) Manual Jog Feed, Runtime Display, Part Counter Inch/Metric Switching, Decimal Input, Self-Diagnostics
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*The images and the specifications of the machine in this offer are indicative. The data is subject to change without prior notice.

Installation Dimensions

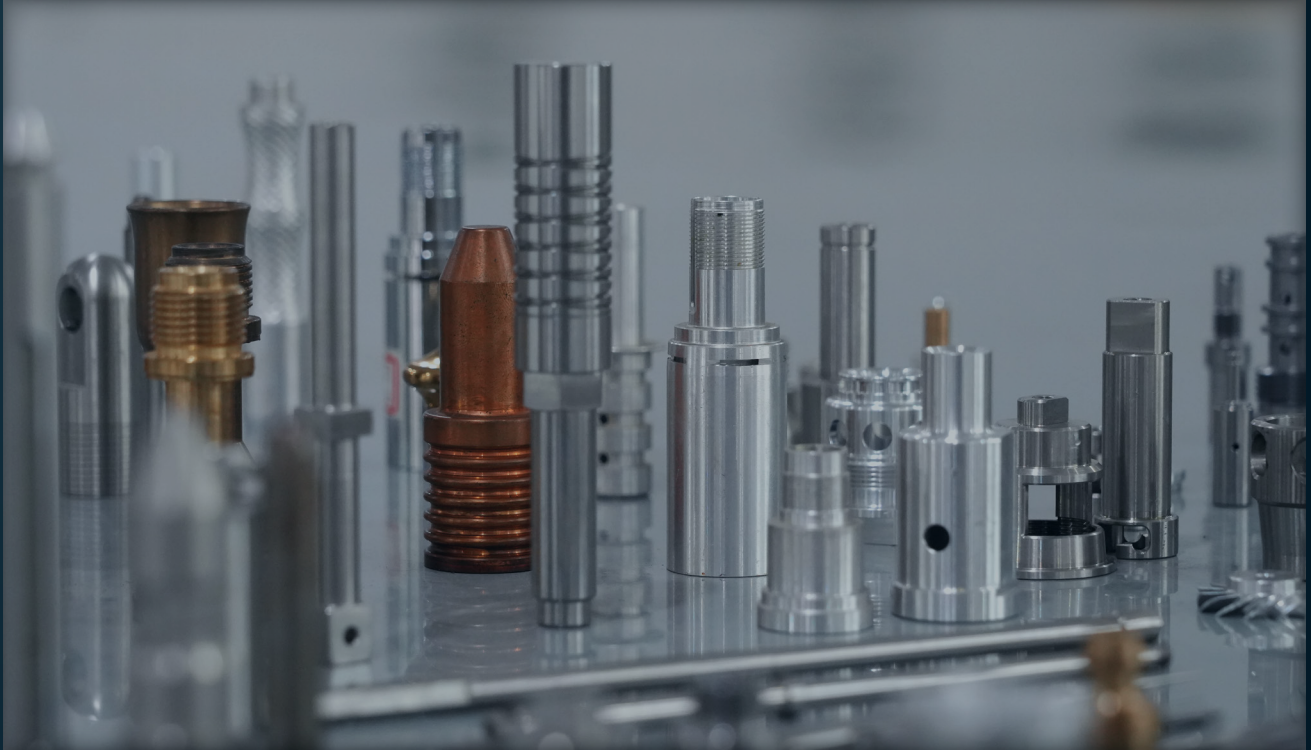
Unit: mm



Optional



Chip Conveyor



***BUILT FOR MICRO MACHINING.
POWERED BY SMARTLATHE.***

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