

# CNC Machining Center

Professional CNC solution

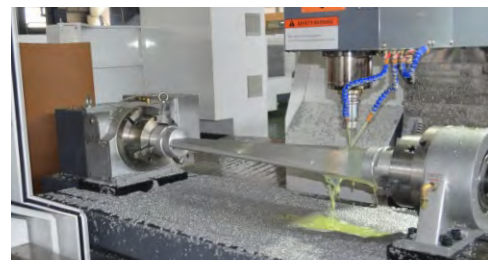
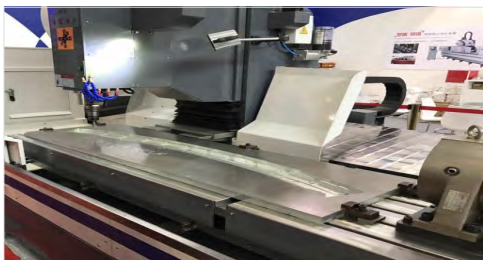


# SM40 SERIES

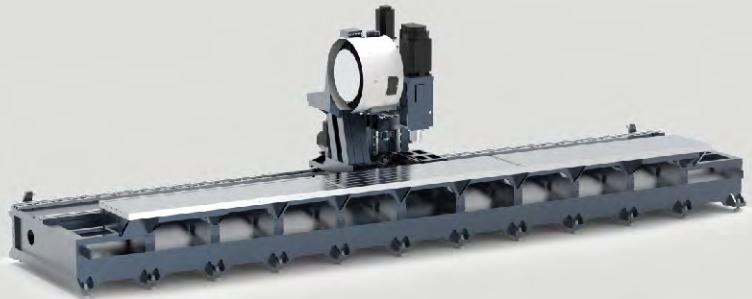
## CNC Profile Machining Center

### Advantages:

- Customized length
- Circular processing
- Multi-position



## SM40 series product standard configuration

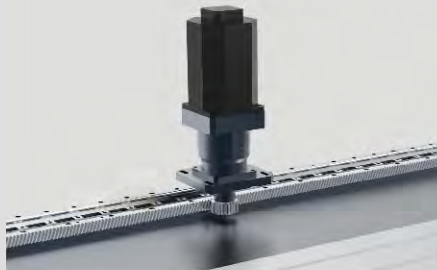


### Casting

Provide the best solution according to every case. Research and optimize different situations in aspects of machine rigidity, dynamic performance, material removing ability, and precision and efficiency, so as to ensure the machines produced can meet the highest quality standard.

The gear-rack has the advantages of big bearing capacity, high transmission speed, unlimited continuation, and super long strong transmission.

### Rack and Pinion (X axis)



The gear-rack drive has the advantages of big bearing capacity, high transmission speed, unlimited continuation, and super long stroke transmission.

### Ball Screw (Y/Z axis)

The ball screw drive has the advantages of high precision transmission, long use life span, good working stability, and high reliability.



## Features:

- Milling, drilling, tapping, routing, and chamfering functions
- Applicable for various lengths of aluminum, iron, steel, etc.
- Automatic chip conveyor
- CAT40 big plus spindle
- Protection door
- Disc-shape tool magazine
- Optional casting or welding base



## SM40 - 4500

### Technical data



<b>STROKE</b>	
Stroke for X axis	4500 mm
Stroke for Y axis	580 mm
Stroke for Z axis	450 mm
<b>SPINDLE</b>	
Spindle speed	12000 rpm
Spindle taper	CAT40 big plus
<b>TOOL</b>	
Tool magazine	Disc type
Capacity of tools magazine	30 pcs
Tool change time	3 sec
<b>MOVING SPEED</b>	
X moving speed	60 m/min
Y/Z moving speed	28/28 m/min
X/Y/Z feeding speed	15000 mm/min

<b>POWER OF MOTOR</b>	
Spindle driven motor	11 kw
X/Y/Z driven motor	3.0 kw
<b>LUBRICATING SYSTEM</b>	
Lubricating system	Automatic lubricating
Cooling system	Water cooling system
<b>PRECISION</b>	
Position precision of X axis	0.05 mm
Position precision of Y/Z axis	0.02 mm
Repeating position (X/Y/Z)	±0.01 mm
<b>SIZE OF MACHINE</b>	
Operation system	FANUC OI-MF
Height	2600mm
Area	8400x 3700 mm
Weight	15000kg

# SM40 - 6500

## Technical data



<b>STROKE</b>	
Stroke for X axis	6500 mm
Stroke for Y axis	580 mm
Stroke for Z axis	450 mm
<b>SPINDLE</b>	
Spindle speed	12000 rpm
Spindle taper	CAT40 big plus
<b>TOOL</b>	
Tool magazine	Disc type
Capacity of tools magazine	30 pcs
Tool change time	3 sec
<b>MOVING SPEED</b>	
X moving speed	60 m/min
Y/Z moving speed	28/28 m/min
X/Y/Z feeding speed	15000 mm/min

<b>POWER OF MOTOR</b>	
Spindle driven motor	11 kw
X/Y/Z driven motor	3.0 kw
<b>LUBRICATING SYSTEM</b>	
Lubricating system	Automatic lubricating
Cooling system	Water cooling system
<b>PRECISION</b>	
Position precision of X axis	0.05 mm
Position precision of Y/Z axis	0.02 mm
Repeating position (X/Y/Z)	±0.01 mm
<b>SIZE OF MACHINE</b>	
Operation system	FANUC Oi-MF
Height	2600mm
Area	11000 x 3700 mm
Weight	18000kg

# SM40 - 8500

## Technical data



<b>STROKE</b>	
Stroke for X axis	8500 mm
Stroke for Y axis	580 mm
Stroke for Z axis	450 mm
<b>SPINDLE</b>	
Spindle speed	12000 rpm
Spindle taper	CAT40 big plus
<b>TOOL</b>	
Tool magazine	Disc type
Capacity of tools magazine	30 pcs
Tool change time	3 sec
<b>MOVING SPEED</b>	
X moving speed	60 m/min
Y/Z moving speed	28/28 m/min
X/Y/Z feeding speed	15000 mm/min

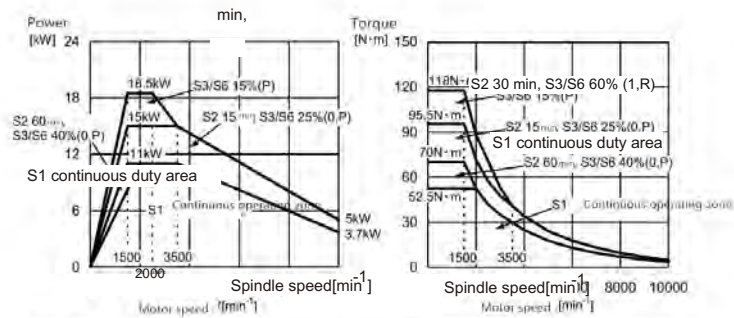
<b>POWER OF MOTOR</b>	
Spindle driven motor	11 kw
X/Y/Z driven motor	3.0 kw
<b>LUBRICATING SYSTEM</b>	
Lubricating system	Automatic lubricating
Cooling system	Water cooling system
<b>PRECISION</b>	
Position precision of X axis	0.05 mm
Position precision of Y/Z axis	0.02 mm
Repeating position (X/Y/Z)	±0.01 mm
<b>SIZE OF MACHINE</b>	
Operation system	FANUC Oi-MF
Height	2600mm
Area	13000 x 3700 mm
Weight	21000kg

# Spindle Motor Power & Torque

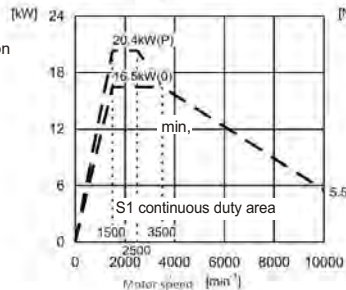
**FANUC**

**Spindle speed: 12000rpm**

βi1 12/10000-B

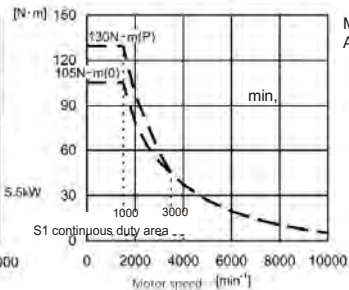


Maximum Output  
During Acceleration



Spindle speed [min<sup>-1</sup>]

Maximum Torque During  
Acceleration

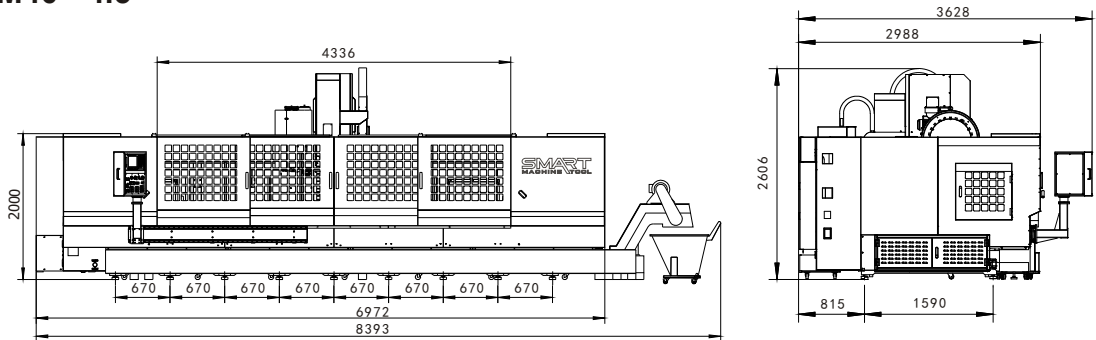


Spindle speed [min<sup>-1</sup>]

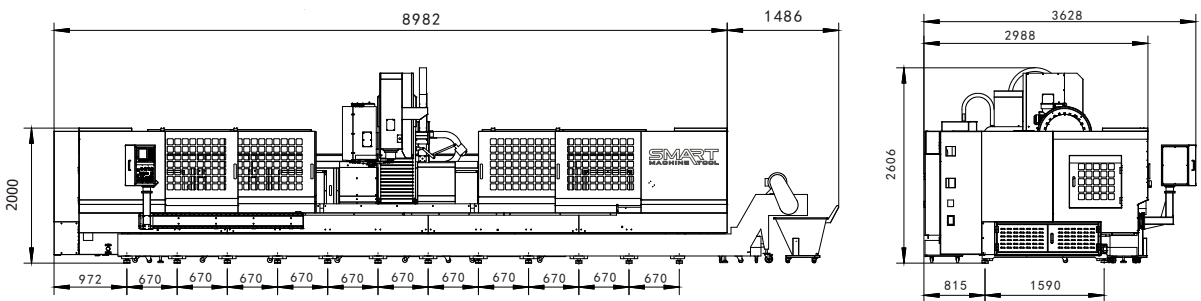
# External Dimensions

unit: mm

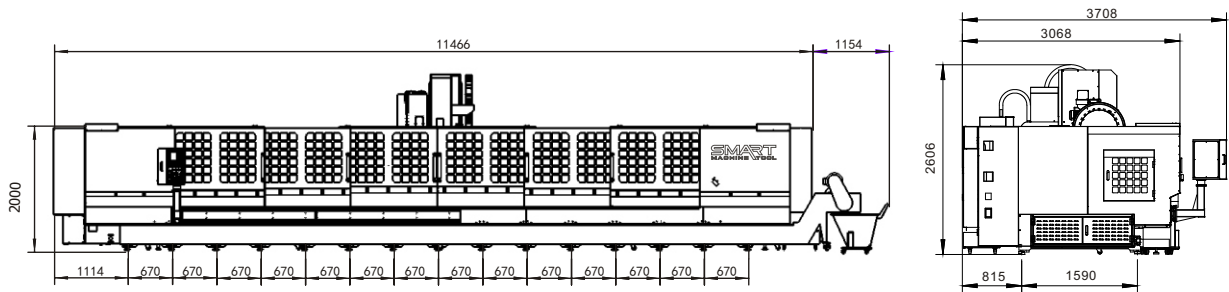
**SM40 - 4.5**



**SM40 - 6.5**



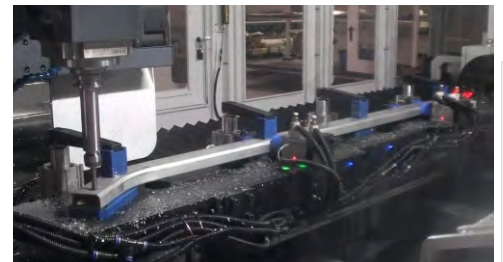
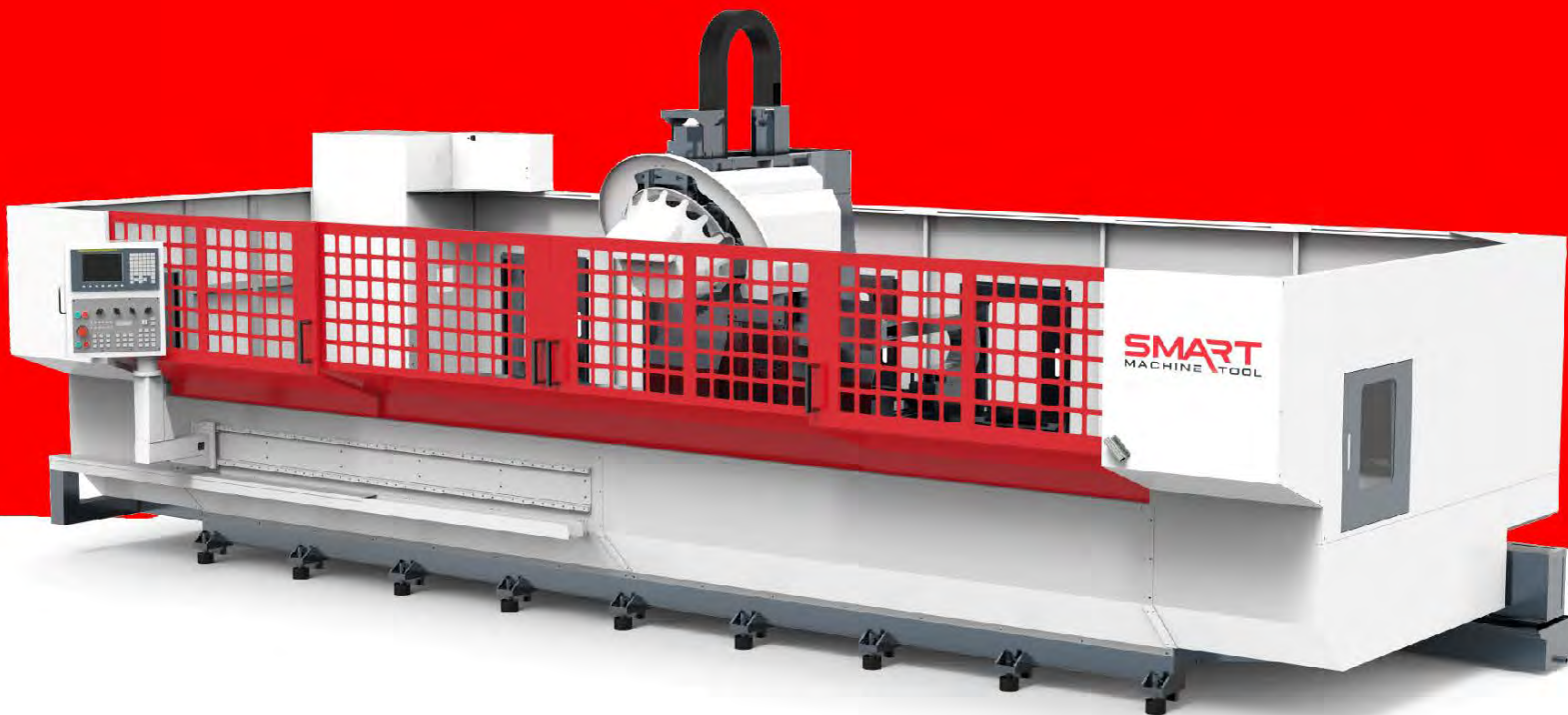
**SM40 - 8.5**



# SM30 SERIES CNC Profile Machining Center

## Advantages:

- Customized length
- Circular processing
- Multi-position



## SM30 series product standard configuration

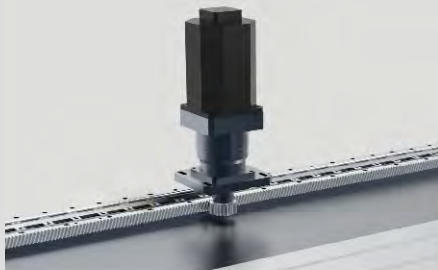


### Casting Base

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The gear-rack drive has the advantages of big bearing capacity, high transmission speed, unlimited continuation, and super long stroke transmission.

### Ball Screw (Y/Z axis)

The ball screw drive has the advantages of high precision transmission, long use life span, good working stability, and high reliability.



## Features:

- Milling, drilling, tapping, routing, and chamfering functions
- Applicable for various lengths of aluminum, iron, steel, etc.
- Automatic chip conveyor
- BBT30 spindle
- Protection door
- Arm-shape tool magazine



## SM30 - 2500

### Technical data



<b>STROKE</b>	
Stroke for X axis	2500 mm
Stroke for Y axis	400mm
Stroke for Z axis	400 mm
<b>SPINDLE</b>	
Spindle speed	12000 rpm
Spindle taper	BBT30
<b>TOOL</b>	
Tool magazine	Arm type
Capacity of tools magazine	16 pcs
Tool change time	4 sec
<b>MOVING SPEED</b>	
X moving speed	60 m/min
Y/Z moving speed	28/28 m/min
X/Y/Z feeding speed	15000 mm/min

<b>POWER OF MOTOR</b>	
Spindle driven motor	5.5 kw
X/Y/Z driven motor	X: 3.0 kw Y/Z: 1.8 kw
<b>LUBRICATING SYSTEM</b>	
Lubricating system	Automatic lubricating
Cooling system	Water cooling system
<b>PRECISION</b>	
Position precision of X axis	0.05 mm
Position precision of Y/Z axis	0.02 mm
Repeating position (X/Y/Z)	±0.01 mm
<b>SIZE OF MACHINE</b>	
Operation system	FANUC Oi-MF
Height	2700mm
Area	4600 x 3000 mm
Weight	8000kg

# SM30 - 4500

## Technical data



### STROKE

Stroke for X axis	4500 mm
Stroke for Y axis	400mm
Stroke for Z axis	400 mm

### SPINDLE

Spindle speed	12000 rpm
Spindle taper	BBT30

### TOOL

Tool magazine	Arm type
Capacity of tools magazine	16 pcs
Tool change time	4 sec

### MOVING SPEED

X moving speed	60 m/min
Y/Z moving speed	28/28 m/min
X/Y/Z feeding speed	15000 mm/min

### POWER OF MOTOR

Spindle driven motor	5.5 kw
X/Y/Z driven motor	X: 3.0 kw Y/Z: 1.8 kw

### LUBRICATING SYSTEM

Lubricating system	Automatic lubricating
Cooling system	Water cooling system

### PRECISION

Position precision of X axis	0.05 mm
Position precision of Y/Z axis	0.02 mm
Repeating position (X/Y/Z)	±0.01 mm

### SIZE OF MACHINE

Operation system	FANUC OI-MF
Height	2700mm
Area	7200 x 3000 mm
Weight	11000kg

# SM30 - 6500

## Technical data



### STROKE

Stroke for X axis	6500 mm
Stroke for Y axis	400mm
Stroke for Z axis	400 mm

### SPINDLE

Spindle speed	12000 rpm
Spindle taper	BBT30

### TOOL

Tool magazine	Arm type
Capacity of tools magazine	16 pcs
Tool change time	4 sec

### MOVING SPEED

X moving speed	60 m/min
Y/Z moving speed	28/28 m/min
X/Y/Z feeding speed	15000 mm/min

### POWER OF MOTOR

Spindle driven motor	5.5 kw
X/Y/Z driven motor	X: 3.0 kw Y/Z: 1.8 kw

### LUBRICATING SYSTEM

Lubricating system	Automatic lubricating
Cooling system	Water cooling system

### PRECISION

Position precision of X axis	0.05 mm
Position precision of Y/Z axis	0.02 mm
Repeating position (X/Y/Z)	±0.01 mm

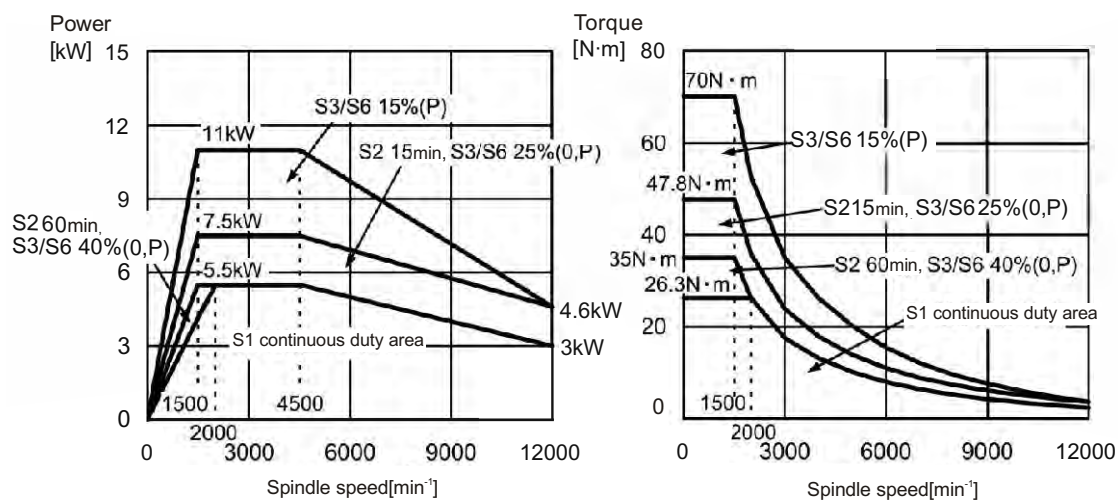
### SIZE OF MACHINE

Operation system	FANUC OI-MF
Height	2700mm
Area	9200 x 3000 mm
Weight	14000kg

# Spindle Motor Power & Torque

FANUC

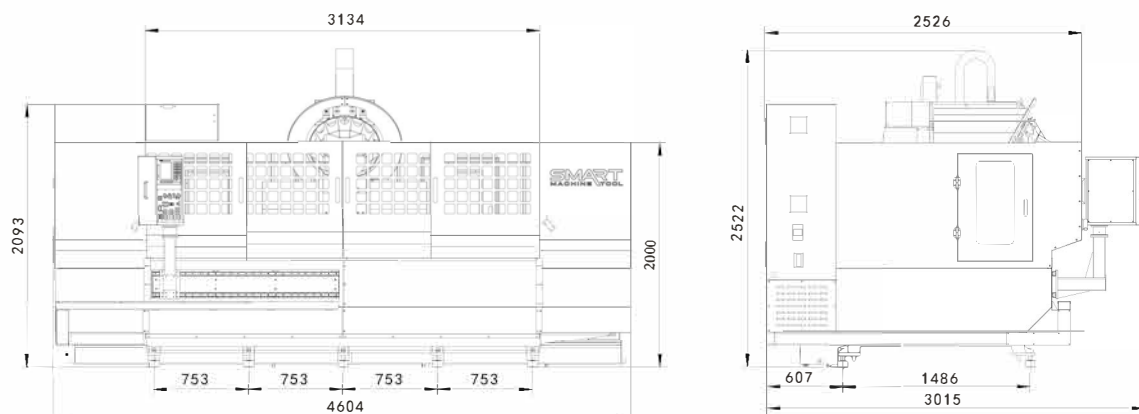
Spindle speed:12000rpm



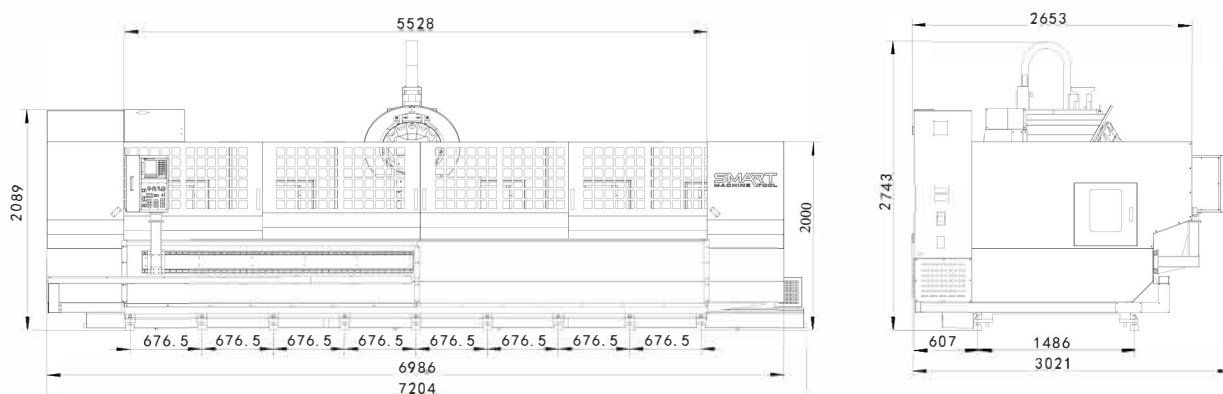
# External Dimensions

unit: mm

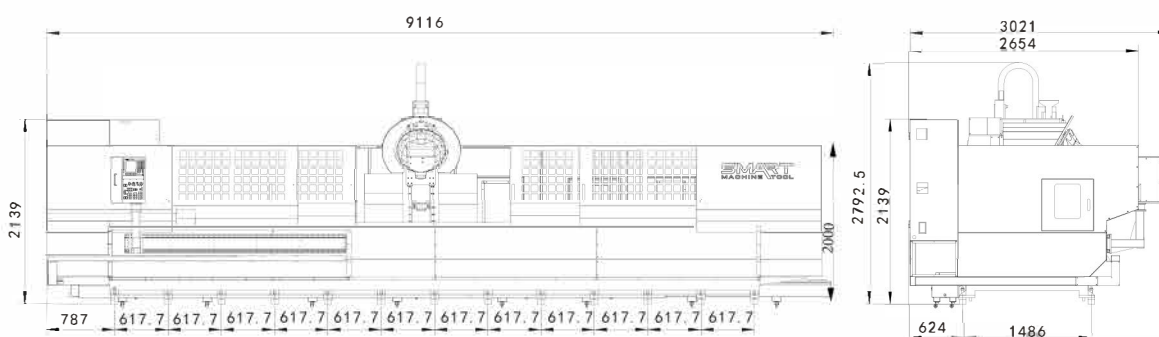
## SM30 - 2.5



## SM30 - 4.5



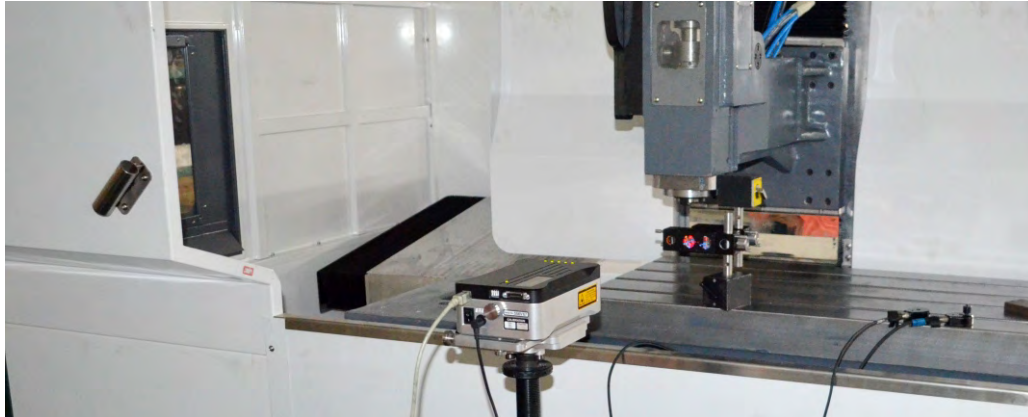
## SM30 - 6.5



# QC Detection Device

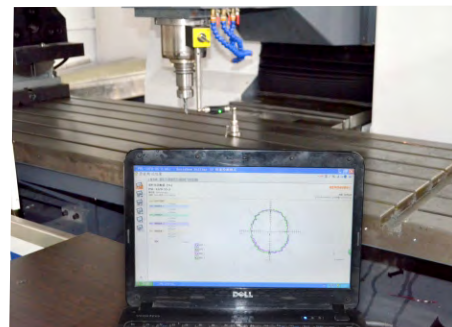
## Machining Precision Measurement

Uses a laser as the length criterion to measure the position precision, such as location precision and repeating precision, and geometric precision, such as turning angles and straightness, of the CNC equipment.

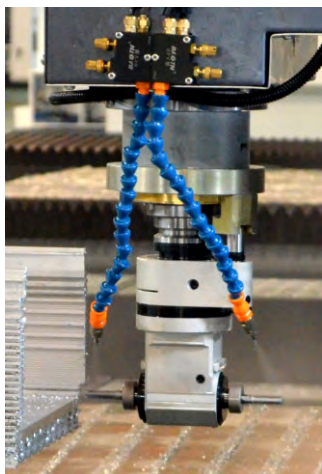


## Roundness Measurement

Measure the radius change when the ball bar turns around a fixed point. The data is then used to calculate the position precision overall measurement value, including roundness and deviation of roundness, based on the international standards of ISO 230-4 ASME B5.54.57 and GB17421.4.

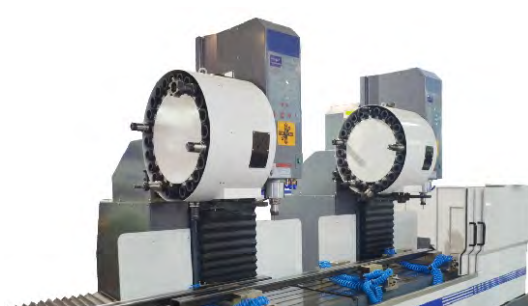


# Options



## Angle Head

Comes in single-direction or two-direction angle head. This complements the three-axis machining center, which can provide side-face processing and makes processing faster. Achieve multi-face processing after a single setup.

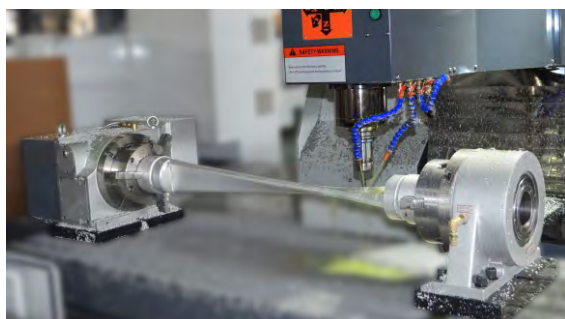


## Double-head

This dual head with dual system provides synchronous or asynchronous processing, heightens the working efficiency, and completes simultaneous processing of symmetric work pieces.

## Linear Scale

A measuring feedback device that works based on the optical principle of grating. It can check for a large area, make compensation to equipment precision, and heighten the locating and repeating precisions.



## 4-Axis Rotating Table

Retrofitting your machine with the four-axis rotating table can provide four-side and motion simulation processing. It is also used for processing curved surfaces and can achieve multi-face processing after a single setup.

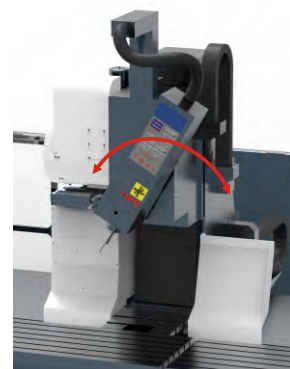
## Twin-Spindle

Retrofit one machine head with two spindles to achieve synchronous processing for mass production of small working pieces.



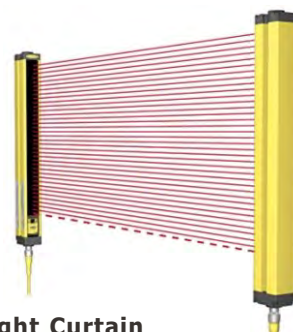
## 5-Axis Head

The 5-axis head includes 360-degree processing and provides five-axis motion simulation. This head is utilized for processing arc faces and curved surface products with high precision and efficiency.



## Tilting Head

The four-axis tilting head can be retrofitted for multi-angle and curved surface processing.



## Light Curtain

Retrofit your CNC machine with a security light curtain for safe production. The machine stops working once the safety area of the light curtain is exceeded, which can help avoid injury to operators during the time the machine is running.

# Business Network



**SMART**  
MACHINE TOOL

**Exclusively Imported to North America**

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