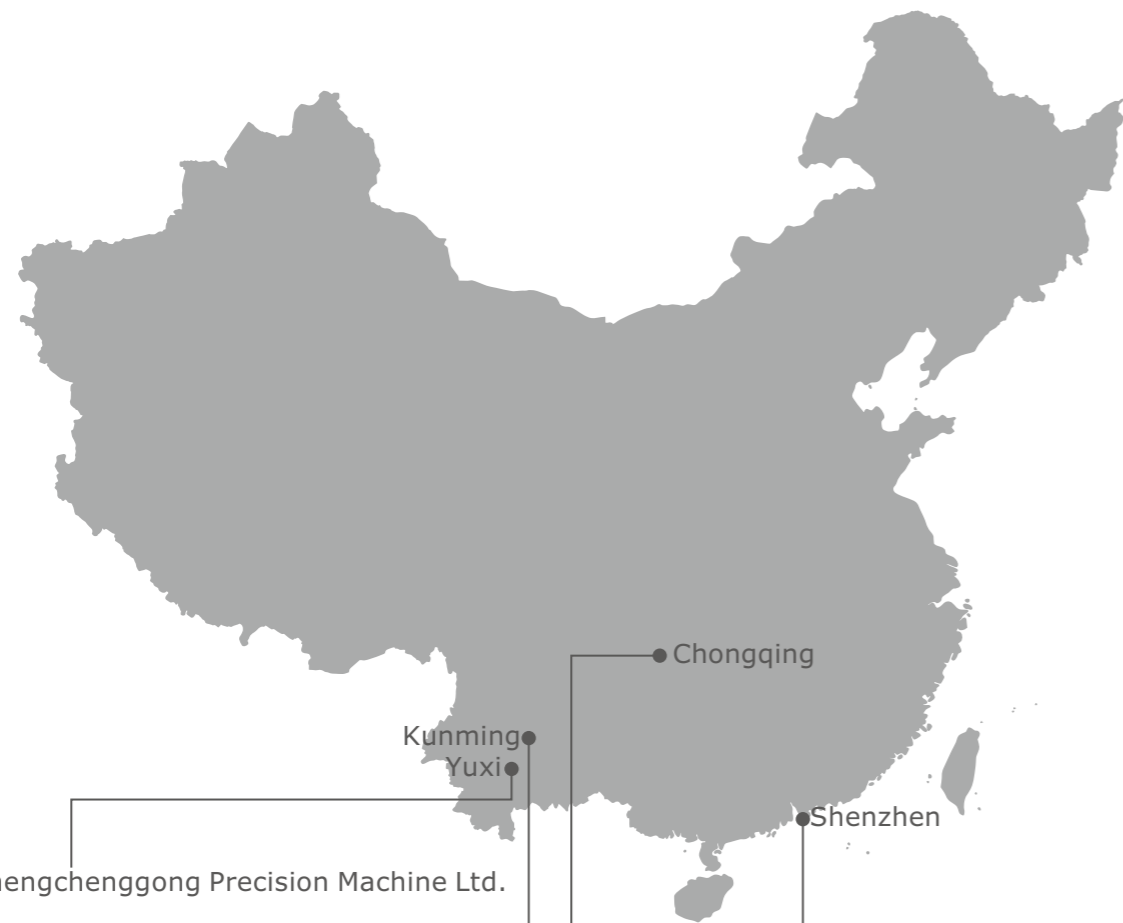




**TAIZHENG MACHINE TOOL UNION**

**在明精工**



Yunnan Zhengchengong Precision Machine Ltd.

Kunming Taigong Precision Machine Co., Ltd.  
Kunming Tailian Precision Machinery Co., Ltd.  
Kunming Taipin Smart Equipment Co., Ltd.

Chongqing Taizheng Precision Machine Ltd.

Chongqing

Kunming  
Yuxi

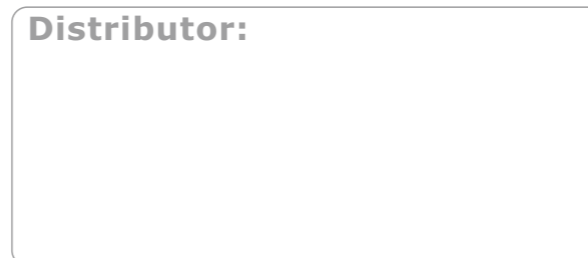
Shenzhen

Smartech Machinery and Equipment Co., Ltd.  
UNO CNC and Automation Co., Ltd.

**UNO CNC and Automation Co., Ltd.**

Tel: +86-755 3687 2540 Fax: +86-755-8347 2096  
Web: www.unocnc.com www.unocnc.com.cn  
Mob: +86-13631601181 (WhatsApp, Line)  
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**Distributor:**



**TURNING CENTER**  
— series

**Heavy Duty &  
High Accuracy**

Introducing the most powerful  
turning centers we ever designed

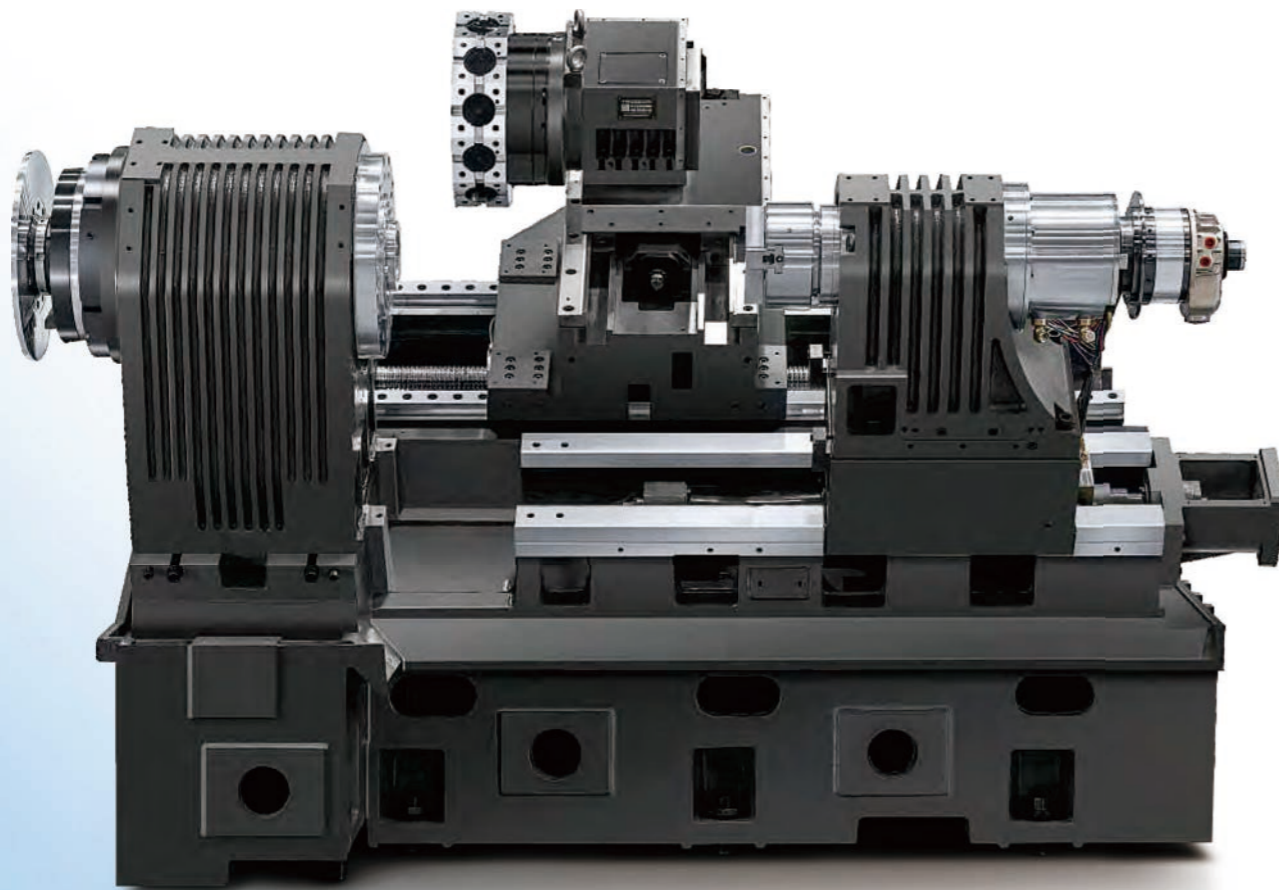
## BOX-WAY RH-25 SERIES

### Heavy-duty & High-precision Machining Champion

The demands placed on your business become tougher every day, as modern manufacturers are tasked with meeting ever-tightening tolerances, and problem-solving to deliver the desired result by strict deadlines. Our machining centers, was designed to enhance machine cutting performance, machining accuracy and efficiency, nomatter how complicated the part's shape or surface is.

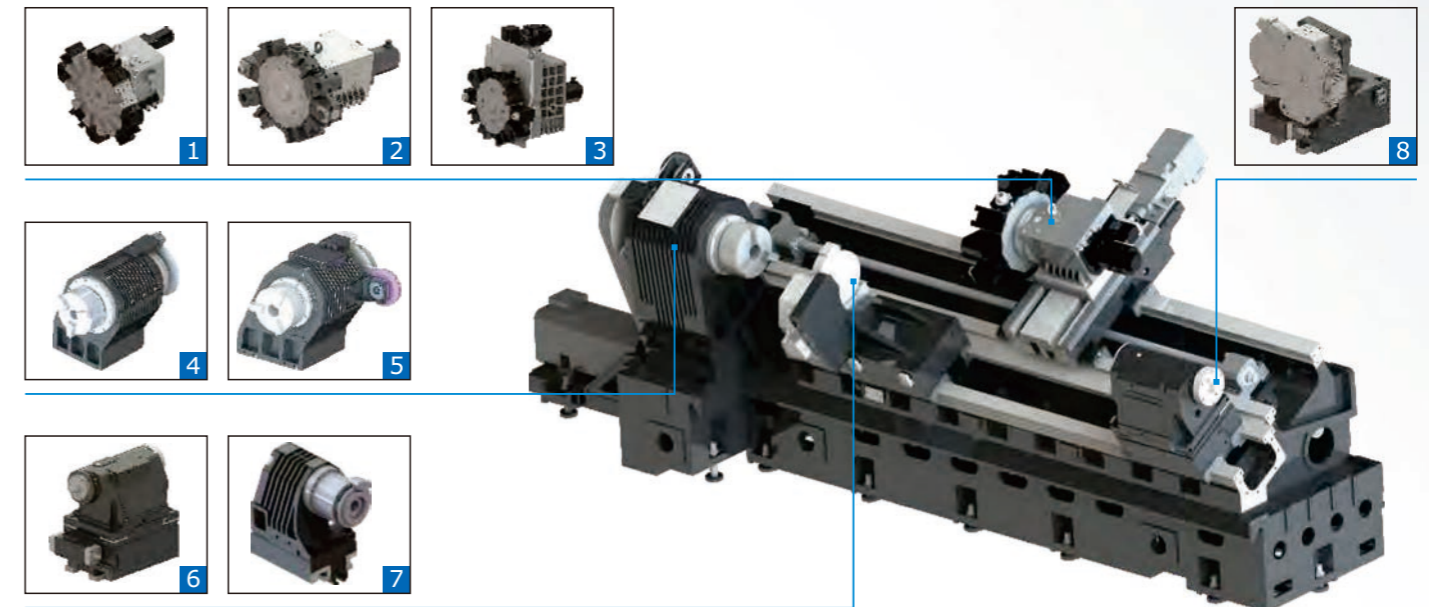
While our turning centers range in machining capacity, we design each one with quality, reliability, ease and safety of operation in mind.

To ensure that our clients have the most suitable solution for their needs with the lowest cost, we offer a wide range of turning centers. Thanks to our Production-On-Demand manufacturing philosophy, our turning centers have covered the turning diameter from 360 to 640 mm, turning length from 340 mm to 3000 mm.



Box-way RH-25HM with Sub-spindle

### Optional Functions of Box-way RH-25 Series



- 1 12-tool servo-type turret
- 2 12-tool power turret (with milling function)
- 3 12-tool power turret with built-in Y axis
- 4 Mechanical spindle with belt drive
- 5 Electrical spindle (motor built-in)
- 6 Tailstock (hydraulic / with servo drive)
- 7 Sub-spindle
- 8 Hydraulic self-center steady rest

#### Rich Experience on Box-way Building

Box-way has much bigger surface to distribute the load, compared with linear guideway, box way is much better at shock absorption, very suitable for intermittent cutting and heavy-duty cutting. With rich experience on hand craping accumulated in the last two decades, our technicians could minimize the impact of inaccuracy caused by stick-slip.

#### Heavy-duty Turning Center

Our structure is designed with oversized strengthened gibs inside, in addition to wide box-type guideway on XZ axis, very suitable for heavy-duty cutting, including turning and milling of various applications.

#### Insurance of High Accuracy

With second timing treatment to remove internal stresses, the structure and dimension of casting is stabilized, the error of deformation cause by stresses is significantly reduced.

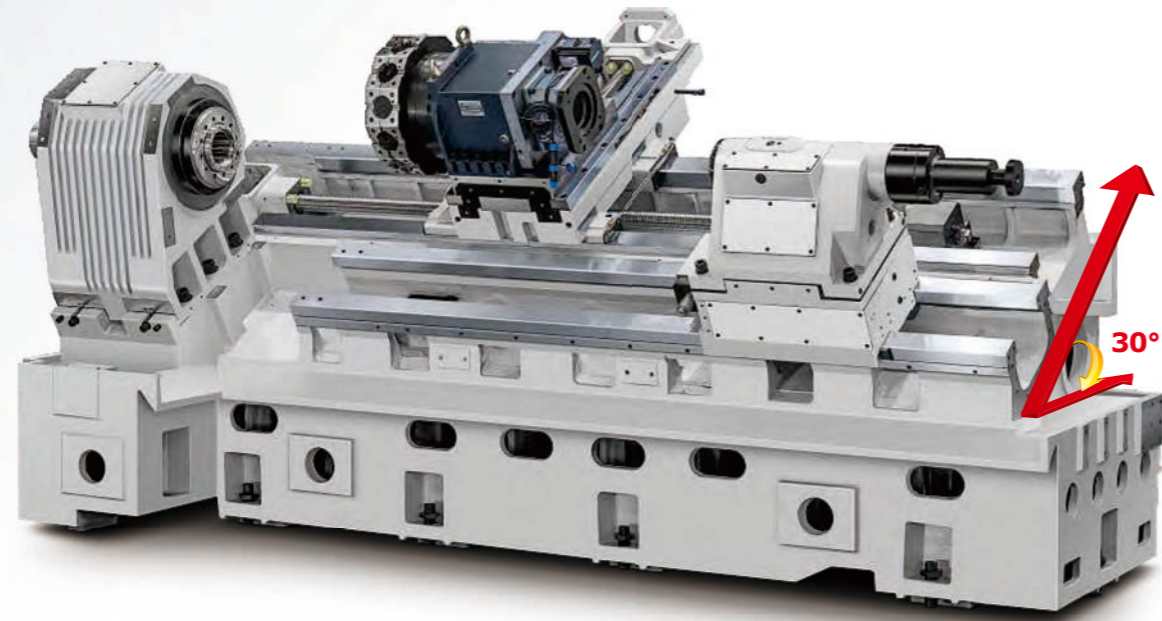
#### Materials and Machining of Casting

The materials of our cast iron is HT-300, which has excellent mechanical properties, This material ensures the stability and rigidity of the machine. Finish machining of the castings is carried out on imported, high precision universal machining center from Spain Correa.

#### High-precision Ball Screws

Ball screws of P4 accuracy grade, with big diameter to withstand heavy load. They are ideal for heavy-duty cutting conditions and ensure long machine service life.

## BOX-WAY RH-25 SERIES



Box-way RH-25HM-1500 with Programmable Tailstock

### 30° Slant Bed Design

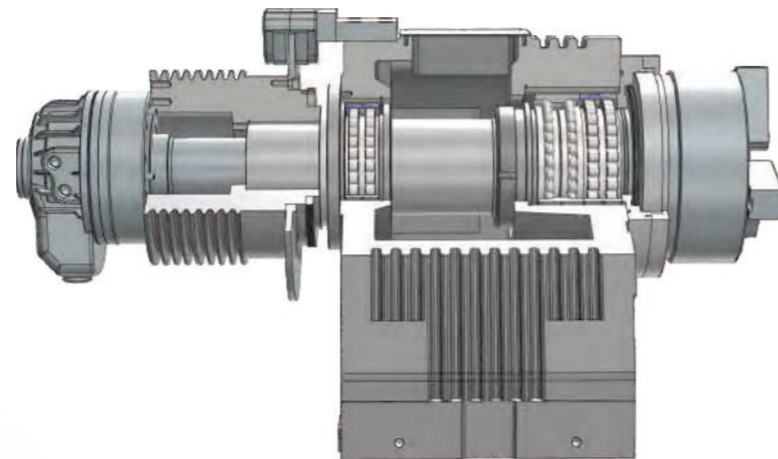
The integral type lathe bed makes the machine more rigid and stable. The 30 degree slant bed is very convenient to discharge chips.



Super-high Precision Grinding Machine



Temperature Monitoring during Spindle Testing

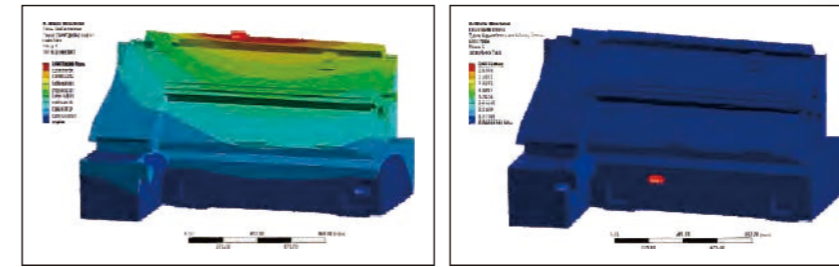


Bearing Layout of RH-25 Series

### NN-type Bearing Layout for Precision and Heavy-duty Cutting

With bearing layout of NN type (double-row cylindrical roller bearings + double-row angular contact ball bearings + double-row cylindrical roller bearings), the spindle of RH-25 series is perfect for heavy-duty cutting. The advanced design of our spindles provides high axial-thrust capability, yet generates minimal heat.

With our strict quality inspection standard, every single spindle is inspected thoroughly for precision standard check of um grade.



### Designed with latest FEM technology

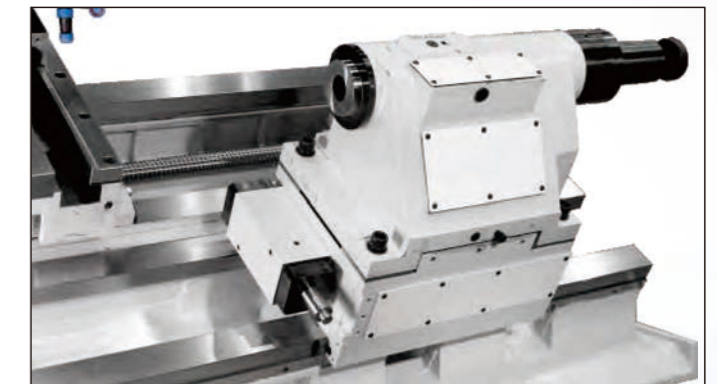
All UNO CNC machine are designed with the latest technology of FEM analysis, which gives a mathematical method for solving the problem of deformation during various kinds of machining and stressed conditions.

Multiple layers of reinforcing ribs are arranged inside the bed, combined with a powerful mechanical spindle to achieve optimal cutting rigidity.



### Experienced Craftsman for Hand Scraping

The main contact surfaces of the machine, such as the base for head stock, the bottom of bearing support and motor housing, etc., are manually scraped, so as to have bigger touching area and improve the strength of the structure.



### Fully programmable hydraulic tailstock

Tailstock could move along with Z-axis, via connection with saddle of turret. Connection can be activated via NC program, or controlled directly with the foot switch.



### Box-way on XZ axes

With much bigger surface to distribute the load on box-way, RH-25H series is perfect for heavy-duty cutting. Compared with roller type linear guideway, box way is much better at shock absorption, particularly suitable for intermittent turning.



### Telescopic Waycovers made by Keyarrow

Telescopic stainless steel protection of guideway produced by top supplier in the market, taking advantage of the expertise of professional producer, improving the serving life of not just waycover itself but also ball screws and bearings.

## RH SERIES (Box Way)

Model	RH-20H-400	RH-20H-500	RH-25H-750	RH-25HA-750	RH-25H-1000
<b>Capacity</b>					
Max. Swing Dia.	Φ460 mm	Φ450 mm	Φ730 mm	Φ730 mm	Φ730 mm
Max. Turning Dia	Φ400 mm	Φ350 mm	Φ640 mm	Φ640 mm	Φ640 mm
Max Turning Dia. over Turret	Φ260 mm	Φ300 mm	Φ440 mm	Φ440 mm	Φ440 mm
Max Turning Length	400 mm	520 mm	740 mm	680 mm	1020 mm
<b>Spindle</b>					
Spindle type	A2-6	A2-6	A2-8	A2-11	A2-8
Optional Chuck	8"	8"	10"(12")	12"(15")	10"(12")
Spindle Motor recommended	11-15 KW	11-15 KW	15-22 KW	15-22 KW	15-22 KW
Spindle Speed	3000 rpm	4000 rpm	2500 rpm	1800 rpm	2500 rpm
Spindle Bore Diameter	Φ66 mm	Φ66 mm	Φ87 mm	Φ102 mm	Φ87 mm
Max. Bar Capacity	Φ52 mm	Φ52 mm	Φ75 mm	Φ91 mm	Φ75 mm
<b>Feeding</b>					
X/Z Ball Screw	3210/3210	3210/4010	4008/5010	4008/5010	4008/5010
X/Z Guide Way	Box way	Box way	Box way	Box way	Box way
X Travel	245 mm	220 mm	330 mm	330 mm	330 mm
Torque of X-axis motor recommended	22 N.M	22 N.M	30 N.M	30 N.M	30 N.M
Z Travel	420 mm	560 mm	940 mm	1240 mm	1240 mm
Torque of Z-axis motor recommended	22 N.M	22 N.M	30 N.M	30 N.M	30 N.M
<b>Turret</b>					
Number of Tools	8T/12T	10T	12T	12T	12T
Turret Disc	BOT	BOT	BOT	BOT	BOT
Type of Turret	Servo / Hydraulic	Servo / Hydraulic	Servo / Hydraulic	Servo / Hydraulic	Servo / Hydraulic
Diameter of Boring Tool Holder	25/32	25/32	32/40	32/40	32/40
Section of Turning Tool	25*25	25*25	25*25	25*25	25*25
Center height of Turret recommended	80mm	145mm	125mm	125mm	125mm
<b>Tailstock</b>					
Diameter of quill	75 mm	75 mm	100 mm	100 mm	100 mm
Stroke of quill	80 mm	80 mm	80 mm	80 mm	80 mm
Stroke of tailstock	300 mm	300 mm	785 mm	785 mm	1085 mm
Taper of tailstock quill	MT 4#	MT 4#	MT 5#	MT 5#	MT 5#
<b>Accuracy</b>					
X/Z-axis Positioning Accuracy	0.005/0.006 mm	0.005/0.006 mm	0.005/0.006 mm	0.005/0.006 mm	0.005/0.008 mm
X/Z-axis Repeatability	0.003/0.005 mm	0.003/0.005 mm	0.003/0.005 mm	0.003/0.005 mm	0.003/0.006 mm
<b>Others</b>					
Bed type	Integral 45°	Integral 45°	Integral 30°	Integral 30°	Integral 30°
Weight	4800kg	5500kg	5800kg	5800kg	6300kg

## RH SERIES (Box Way)

RH-25HA-1000	RH-25H-1500	RH-25HA-1500	RH-25H-2000	RH-25HA-2000	RH-25H-3000	RH-25HA-3000
Φ730 mm	Φ730 mm	Φ730 mm	Φ730 mm	Φ730 mm	Φ730 mm	Φ730 mm
Φ640 mm	Φ640 mm	Φ640 mm	Φ640 mm	Φ640 mm	Φ640 mm	Φ640 mm
Φ440 mm	Φ440 mm	Φ440 mm	Φ440 mm	Φ440 mm	Φ440 mm	Φ440 mm
960 mm	1640 mm	1580 mm	2240 mm	2180 mm	3140 mm	3080 mm
A2-11	A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
12"(15")	10"(12")	12"(15")	10"(12")	12"(15")	10"(12")	12"(15")
15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW
1800 rpm	2500rpm	1800rpm	2500rpm	1800rpm	2500rpm	1800rpm
Φ102 mm	Φ87 mm	Φ102 mm	Φ87 mm	Φ102 mm	Φ87 mm	Φ102 mm
Φ88 mm	Φ75 mm	Φ88 mm	Φ75 mm	Φ88 mm	Φ75 mm	Φ88 mm
4008/5010	4008/5010	4008/5010	4008/5010	4008/5010	4008/5010	4008/5010
Box way	Box way	Box way	Box way	Box way	Box way	Box way
330 mm	330 mm	330 mm	330 mm	330 mm	330 mm	330 mm
30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M
1240 mm	1840 mm	1840 mm	2440 mm	2440 mm	3340 mm	3340 mm
30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M
12T	12T	12T	12T	12T	12T	12T
BOT	BOT	BOT	BOT	BOT	BOT	BOT
Servo / Hydraulic	Servo / Hydraulic	Servo / Hydraulic	Servo / Hydraulic	Servo / Hydraulic	Servo / Hydraulic	Servo / Hydraulic
32/40	32/40	32/40	32/40	32/40	32/40	32/40
25*25	25*25	25*25	25*25	25*25	25*25	25*25
125mm	125mm	125mm	125 mm	125 mm	125 mm	125 mm
100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
80 mm	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm
1085 mm	1685 mm	1685 mm	2285 mm	2285 mm	3185 mm	3185 mm
MT 5#	MT 5#	MT 5#	MT 5#	MT 5#	MT 5#	MT 5#
0.005/0.008 mm	0.005/0.01 mm	0.005/0.01 mm	0.005/0.012 mm	0.005/0.012 mm	0.005/0.018 mm	0.005/0.018 mm
0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm
Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°
6300kg	7300kg	7300kg	8000kg	8000kg	9800kg	9800kg

## RH SERIES (Box Way M series)

\* M means with milling function

Model	RH-20H-400M	RH-20H-500M	RH-25HM-750	RH-25HAM-750	RH-25HM-1000
<b>Capacity</b>					
Max. Swing Dia.	Φ600 mm	Φ630 mm	Φ730 mm	Φ730 mm	Φ730 mm
Max. Turning Dia	Φ450 mm	Φ380 mm	Φ560 mm	Φ560 mm	Φ560 mm
Max Turning Dia. over Turret	Φ350 mm	Φ350 mm	Φ440 mm	Φ440 mm	Φ440 mm
Max Turning Length	350 mm	465 mm	630 mm	570 mm	930 mm
<b>Spindle</b>					
Spindle type	A2-6	A2-6	A2-8	A2-11	A2-8
Optional Chuck	8"	8"	10"(12")	12"(15")	10"(12")
Spindle Motor recommended	11-15 KW	11-15 KW	15-22 KW	15-22 KW	15-22 KW
Spindle Speed	3000 rpm	3000 rpm	2500rpm	1800rpm	2500rpm
Spindle Bore Diameter	Φ61 mm	Φ66 mm	Φ87 mm	Φ102 mm	Φ87 mm
Max. Bar Capacity	Φ52 mm	Φ52 mm	Φ75 mm	Φ91 mm	Φ75 mm
<b>Feeding</b>					
X/Z Ball Screw	3210/3210	3210/4010	4008/5010	4008/5010	4008/5010
X/Z Guide Way	Box way	Box way	Box way	Box way	Box way
X Travel	245 mm	220 mm	330 mm	330 mm	330 mm
Torque of X-axis motor recommended	22 N.M	22 N.M	30 N.M	30 N.M	30 N.M
Z Travel	420 mm	560 mm	940 mm	940 mm	1240 mm
Torque of Z-axis motor recommended	22 N.M	22 N.M	30 N.M	30 N.M	30 N.M
X/Z Drive type	Direct-drive	Direct-drive	Direct-drive	Direct-drive	Direct-drive
<b>Turret</b>					
Optional Turret (Special configuration)	BMT55	BMT55	BMT65	BMT65	BMT65
Type of milling tool	ER-25	ER-25	ER-32	ER-32	ER-32
Speed of Live Tool	4000	4000	4000	4000 / 5000	4000 / 5000
Power of Live Tool	4.5	4.5	5.5	5.5	5.5
Diameter of Boring Tool Holder	25/32	25/32	32/40	32/40	32/40
Section of Turning Tool	25*25	25*25	25*25	25*25	25*25
<b>Tailstock</b>					
Diameter of quill	75 mm	75 mm	100 mm	100 mm	100 mm
Stroke of quill	80 mm	80 mm	80 mm	80 mm	80 mm
Stroke of tailstock	300 mm	300 mm	785 mm	785 mm	1085 mm
Taper of tailstock quill	MT 4#	MT 4#	MT 5#	MT 5#	MT 5#
<b>Accuracy</b>					
X/Z-axis Positioning Accuracy	0.005/0.006 mm	0.005/0.006 mm	0.005/0.006 mm	0.005/0.006 mm	0.005/0.008 mm
X/Z-axis Repeatability	0.003/0.005 mm	0.003/0.005 mm	0.003/0.005 mm	0.003/0.005 mm	0.003/0.006 mm
<b>Others</b>					
Bed type	Integral 45°	Integral 45°	Integral 30°	Integral 30°	Integral 30°
Weight	4800kg	5500kg	6000kg	6000kg	6600kg

## RH SERIES (Box Way M series)

\* M means with milling function

RH-25HAM-1000	RH-25HM-1500	RH-25HAM-1500	RH-25HM-2000	RH-25HAM-2000	RH-25HM-3000	RH-25HAM-3000
Φ730 mm	Φ730 mm	Φ730 mm	Φ730 mm	Φ730 mm	Φ730 mm	Φ730 mm
Φ560 mm	Φ560 mm	Φ560 mm	Φ560 mm	Φ560 mm	Φ560 mm	Φ560 mm
Φ440 mm	Φ440 mm	Φ440 mm	Φ440 mm	Φ440 mm	Φ440 mm	Φ440 mm
870 mm	1530 mm	1470 mm	2120 mm	2070 mm	3020 mm	2960 mm
A2-11	A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
12"(15")	10"(12")	12"(15")	10"(12")	12"(15")	10"(12")	12"(15")
15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW
1800rpm	2500rpm	1800rpm	2500rpm	1800rpm	2500rpm	1800rpm
Φ102 mm	Φ87 mm	Φ102 mm	Φ87 mm	Φ102 mm	Φ87 mm	Φ102 mm
Φ88 mm	Φ75 mm	Φ88 mm	Φ75 mm	Φ88 mm	Φ75 mm	Φ88 mm
4008/5010	4008/5010	4008/5010	4008/5010	4008/5010	4008/5010	4008/5010
Box way	Box way	Box way	Box way	Box way	Box way	Box way
330 mm	330 mm	330 mm	330 mm	330 mm	330 mm	330 mm
30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M
1240 mm	1840 mm	1840 mm	2440 mm	2440 mm	3340 mm	3340 mm
30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M
Direct-drive	Direct-drive	Direct-drive	Direct-drive	Direct-drive	Direct-drive	Direct-drive
BMT65	BMT65	BMT65	BMT65	BMT65	BMT65	BMT65
ER-32	ER-32	ER-32	ER-32	ER-32	ER-32	ER-32
4000 / 5000	4000 / 5000	4000 / 5000	4000 / 5000	4000 / 5000	4000 / 5000	4000 / 5000
5.5	5.5	5.5	5.5	5.5	5.5	5.5
32/40	32/40	32/40	32/40	32/40	32/40	32/40
25*25	25*25	25*25	25*25	25*25	25*25	25*25
100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
80 mm	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm
1085 mm	1685 mm	1685 mm	2285 mm	2285 mm	3185 mm	3185 mm
MT 5#	MT 5#	MT 5#	MT 5#	MT 5#	MT 5#	MT 5#
0.005/0.008 mm	0.005/0.01 mm	0.005/0.01 mm	0.005/0.012 mm	0.005/0.012 mm	0.005/0.018 mm	0.005/0.018 mm
0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm
Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°
6600kg	7600kg	7600kg	8400kg	8400kg	10000kg	10000kg

## RH SERIES (Box Way MY series)

\* MY means with milling function and Y axis

Model	RH-20H-400MY	RH-20H-500MY	RH-25HMY-750	RH-25HAMY-750	RH-25HMY-1000
<b>Capacity</b>					
Max. Swing Dia.	Φ600 mm	Φ630 mm	Φ900 mm	Φ900 mm	Φ900 mm
Max. Turning Dia	Φ400 mm	Φ380 mm	Φ600 mm	Φ600 mm	Φ600 mm
Max Turning Dia. over Turret	Φ340 mm	Φ380 mm	Φ600 mm	Φ600 mm	Φ600 mm
Max Turning Length	360 mm	500 mm	650 mm	590 mm	950 mm
<b>Spindle</b>					
Spindle type	A2-6	A2-6	A2-8	A2-11	A2-8
Optional Chuck	8"	8"	10"(12")	12"(15")	10"(12")
Spindle Motor recommended	11-15 KW	11-15 KW	15-22 KW	15-22 KW	15-22 KW
Spindle Speed	3000 rpm	3000 rpm	2500rpm	1800rpm	2500rpm
Spindle Bore Diameter	Φ61 mm	Φ61 mm	Φ87 mm	Φ102 mm	Φ87 mm
Max. Bar Capacity	Φ52 mm	Φ52 mm	Φ75 mm	Φ91 mm	Φ75 mm
<b>Feeding</b>					
X/Z/Y Ball Screw	3210/3210/2508	3210/4010/3210	4008/5010	4008/5010	4008/5010
X/Z/Y Guide Way	Box way	Box way	Box way	Box way	Box way
X/Z Travel	330/500 mm	330/500mm	330/940 mm	330/940 mm	330/1240 mm
Torque of X/Z/Y-axis motor recommended	22/22/12 N.M	22/22/12 N.M	30/30/22 N.M	30/30/22 N.M	30/30/22 N.M
X/Z/Y Drive type	Direct-drive	Direct-drive	Direct-drive	Direct-drive	Direct-drive
<b>Turret</b>					
Number of Tools	12T	12T	12T	12T	12T
Specification of Tool	BMT40	BMT55	BMT65	BMT65	BMT65
Type of milling tool	ER-20	ER-32	ER-32	ER-32	ER-32
Speed of Live Tool	4000	4000	4000	4000 / 5000	4000 / 5000
Power of Live Tool	4.5	4.5	5.5	5.5	5.5
Diameter of Boring Tool Holder	25/32	25/32	32/40	32/40	32/40
Section of Turning Tool	25*25	25*25	25*25	25*25	25*25
Y-axis Travel	±30 mm	±30 mm	±60 mm	±60 mm	±60 mm
Y-axis Guideway	Box way	Box way	Box way	Box way	Box way
Center height of Turret	80/100mm	100mm	125mm	125mm	125mm
<b>Tailstock</b>					
Diameter of quill	75 mm	75 mm	100 mm	100 mm	100 mm
Stroke of quill	80 mm	80 mm	80 mm	80 mm	80 mm
Stroke of tailstock	300 mm	400 mm	785 mm	785 mm	1085 mm
Taper of tailstock quill	MT 4#	MT 4#	MT 5#	MT 5#	MT 5#
<b>Accuracy</b>					
X/Z-axis Positioning Accuracy	0.005/0.006 mm	0.005/0.006 mm	0.005/0.006 mm	0.005/0.006 mm	0.005/0.008 mm
X/Z-axis Repeatability	0.003/0.005 mm	0.003/0.005 mm	0.003/0.005 mm	0.003/0.005 mm	0.003/0.006 mm
<b>Others</b>					
Bed type	Integral 45°	Integral 45°	Integral 30°	Integral 30°	Integral 30°
Weight	4800kg	5500kg	6300kg	6300kg	6900kg

## RH SERIES (Box Way MY series)

\* MY means with milling function and Y axis

RH-25HAMY-1000	RH-25HMY-1500	RH-25HAMY-1500	RH-25HMY-2000	RH-25HAMY-2000	RH-25HMY-3000	RH-25HAMY-3000
Φ900 mm	Φ900 mm	Φ900 mm	Φ900 mm	Φ900 mm	Φ900 mm	Φ900 mm
Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm
Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm
890 mm	1550 mm	1490 mm	2100 mm	2040 mm	3040 mm	2980 mm
A2-11	A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
12"(15")	10"(12")	12"(15")	10"(12")	12"(15")	10"(12")	12"(15")
15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW	15-22 KW
1800rpm	2500rpm	1800rpm	2500rpm	1800rpm	2500rpm	1800rpm
Φ102 mm	Φ87 mm	Φ102 mm	Φ87 mm	Φ102 mm	Φ87 mm	Φ102 mm
Φ88 mm	Φ75 mm	Φ88 mm	Φ75 mm	Φ88 mm	Φ75 mm	Φ88 mm
4008/5010	4008/5010	4008/5010	4008/5010	4008/5010	4008/5010	4008/5010
Box way	Box way	Box way	Box way	Box way	Box way	Box way
330/1240 mm	330/1840 mm	330/1840 mm	330/2440 mm	330/2440 mm	330/3340 mm	330/3340 mm
30/30/22 N.M	30/30/22 N.M	30/30/22 N.M	30/30/22 N.M	30/30/22 N.M	30/30/22 N.M	30/30/22 N.M
Direct-drive	Direct-drive	Direct-drive	Direct-drive	Direct-drive	Direct-drive	Direct-drive
12T	12T	12T	12T	12T	12T	12T
BMT65	BMT65	BMT65	BMT65	BMT65	BMT65	BMT65
ER-32	ER-32	ER-32	ER-32	ER-32	ER-32	ER-32
4000 / 5000	4000 / 5000	4000 / 5000	4000 / 5000	4000 / 5000	4000 / 5000	4000 / 5000
5.5	5.5	5.5	5.5	5.5	5.5	5.5
32/40	32/40	32/40	32/40	32/40	32/40	32/40
25*25	25*25	25*25	25*25	25*25	25*25	25*25
±60 mm	±60 mm	±60 mm	±60 mm	±60 mm	±60 mm	±60 mm
Box way	Box way	Box way	Box way	Box way	Box way	Box way
125mm	125mm	125mm	125mm	125mm	125mm	125mm
100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
80 mm	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm
1085 mm	1685 mm	1685 mm	2285 mm	2285 mm	3185 mm	3185 mm
MT 5#	MT 5#	MT 5#	MT 5#	MT 5#	MT 5#	MT 5#
0.005/0.008 mm	0.005/0.01 mm	0.005/0.01 mm	0.005/0.012 mm	0.005/0.012 mm	0.005/0.018 mm	0.005/0.018 mm
0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm	0.003/0.006 mm
Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°	Integral 30°
6900kg	7900kg	7900kg	8700kg	8700kg	10500kg	10500kg

# LINEAR WAY TCK AND CK SERIES

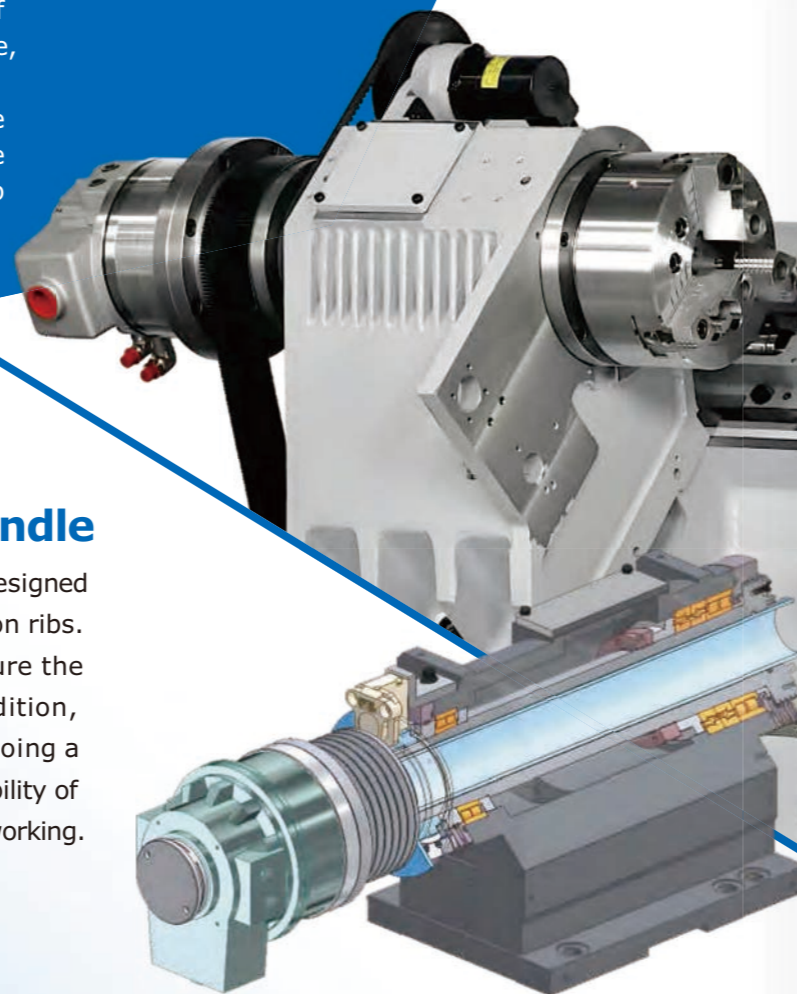


30°

## Slant Bed Design

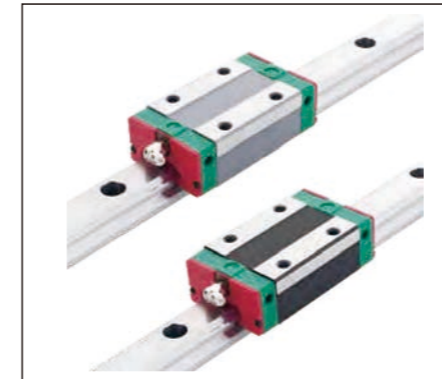
The design of the 30° slant-bed with a low center of gravity, provides an extremely stable base for the spindle, turret and tailstock.

This slant-bed structure is designed with one-piece structure. It has features of low center of gravity, large swing diameter, high rigidity, and convenience for chip removal.



## Professional high-precision spindle

To reduce the thermal deformation, the spindle box is designed with symmetrical structure, as well as heat dissipation ribs. Precision boring and grinding processes help to ensure the roundness and concentricity of spindle box. In addition, assembling under constant temperature and undergoing a long period of test running help to eliminate the possibility of abnormal temperature rise of the bearing during actual working.



■ P Grade Linear Roller Guideway

P-grade linear roller guide rails from Hiwin, PMI and THK. With precise manufacturing technology, high-hardness and wear-resistant materials, the positioning accuracy and repeatability of machine could be kept for long time without maintenance.



■ Hydraulic power chuck

Our hydraulic power chucks offer high rigidity, infallible precision, and stability, allowing our clients to increase efficiency and productivity while being cost-effective.



■ Programmable Tailstock

The taper of the tailstock is designed into an inner quill type with high precision, and the base of it can be moved manually or programmably, making it easy to operate and precise in positioning.



■ Power Turret for Milling

Our turrets are designed with high-rigidity and equipped with static turning tool and live milling tool. The power turret makes turning and milling, drilling and tapping done in one clamping.



■ Y-axis Power Turret

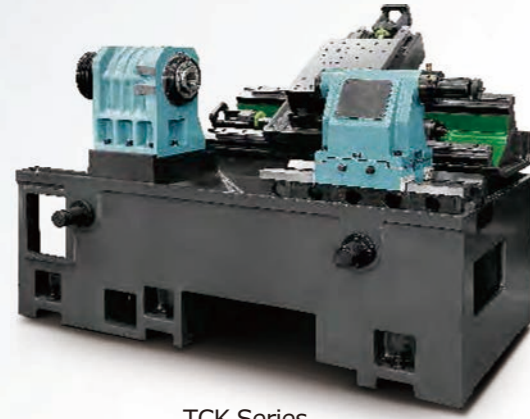
Y-axis built-in power turret, with additional Y axis, we could make complex surfaces in turning center, as well as drilling and tapping of off-center holes.



■ Tool Setter

With the automatic tool setter detecting the tool tip wear and compensating the tool position, the repeatability of the machine can reach 5µm, and machine downtime is effectively reduced.

# LINEAR WAY TCK AND CK SERIES



TCK Series



CK Series



	TCK-series					CK-series	
Model	TCK-42L	TCK-36A	TCK-36B	TCK-45L	TCK-45L	CK-5052	CK-5052
<b>Chuck Size</b>	A2-5	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8
<b>Capacity</b>							
Max. Swing Dia.	Φ420 mm	Φ460 mm	Φ460 mm	Φ560 mm	Φ560 mm	Φ570 mm	Φ570 mm
Max. Turning Dia.	Φ420 mm	Φ460 mm	Φ460 mm	Φ450 mm	Φ450 mm	Φ500 mm	Φ500 mm
Max Turning Dia. over Turret	Φ160 mm	Φ170 mm	Φ170 mm	Φ210 mm	Φ210 mm	Φ280 mm	Φ280 mm
Max Turning Length	330 mm	350 mm	330 mm	500 mm	480 mm	520 mm	490 mm
<b>Spindle</b>							
Spindle type	A2-5	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8
Optional Chuck	6"	6"	8"	8"	10"	8"	10"
Spindle Motor recommended	7.5-11 KW	7.5-11 KW	11/15 KW	11/15 KW	15/18.5 KW	11/15 KW	15/18.5 KW
Spindle Speed	5000 rpm	5000 rpm	4000 rpm	4200 rpm	3000 rpm	4200 rpm	3000 rpm
Spindle Bore Diameter	Φ56 mm	Φ56mm	Φ66mm	Φ66mm	Φ86 mm	Φ66 mm	Φ86 mm
Max. Bar Capacity	Φ45mm	Φ42mm	Φ52mm	Φ52 mm	Φ72 mm	Φ52 mm	Φ72 mm
<b>Feeding</b>							
X/Z Ball Screw	3210/3208	3210/3210	3210/3210	3210/3210	3210/3210	3210/4010	3210/4010
X/Z Travel	350/480 mm	210/400 mm	210/400 mm	250/610 mm	250/610 mm	270/610 mm	270/610 mm
X/Z Guide Way	35/35	35/35	35/35	45/45	45/45	45/45	45/45
X/Z Rapid Moving	24/24	24/24	24/24	24/24	24/24	24/24	24/24
<b>Turret</b>							
Type of Turret Disc	BOT	BOT	BOT	BOT	BOT	BOT	BOT
Tool positions	12T	12T	12T	12T	12T	12T	12T
Turning Tool Section	16*16/20*20 mm	20*20 mm	20*20 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm
Boring Tool Holder	Φ20/25 mm	Φ20/25 mm	Φ20/25 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm
<b>Tailstock</b>							
Diameter of quill	-	65 mm	65 mm	80 mm	80 mm	80 mm	80 mm
Stroke of quill	-	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm
Stroke of tailstock	-	300 mm	300 mm	450 mm	450 mm	480 mm	480 mm
Taper of tailstock quill	-	MT 4#	MT 4#	MT 4#	MT 4#	Morse 5#	Morse 5#
<b>Accuracy</b>							
X/Z Positioning Accuracy		0.005/0.005 mm		0.005/0.006 mm		0.005/0.006 mm	
X/Z-axis Repeatability		0.003/0.003 mm		0.003/0.005 mm		0.003/0.005 mm	
<b>Others</b>							
Weight	2800 kg	3250 kg	3250 kg	4200 kg	4200 kg	4350 kg	4350 kg

CK-series										
CK-5075	CK-5075	CK-50100	CK-50100	CK-63100	CK-63150	CK-63150	CK-63200	CK-63200	CK-63300	CK-63300
A2-6	A2-8	A2-6	A2-8	A2-8	A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
Φ570 mm	Φ570 mm	Φ570 mm	Φ570 mm	Φ650 mm	Φ650 mm	Φ650 mm	Φ650 mm	Φ650 mm	Φ650 mm	Φ650 mm
Φ500 mm	Φ500 mm	Φ500 mm	Φ500 mm	Φ630 mm	Φ630 mm	Φ630 mm	Φ630 mm	Φ630 mm	Φ630 mm	Φ630 mm
Φ280 mm	Φ280 mm	Φ280 mm	Φ280 mm	Φ400 mm	Φ360 mm	Φ360 mm	Φ360 mm	Φ360 mm	Φ360 mm	Φ360 mm
750 mm	720 mm	1000 mm	1000 mm	1000 mm	1500 mm	1500 mm	2000 mm	2000 mm	3000 mm	3000 mm
A2-6	A2-8	A2-6	A2-8	A2-8	A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
8"	8"	8"	8"	10"	10"	12"	10"	12"	10"	12"
11/15 KW	15/18.5 KW	11-15 KW	15-18.5 KW	11-15 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW
4200 rpm	3000 rpm	4200 rpm	3000 rpm	2600rpm	2600rpm	2000rpm	2600rpm	2000rpm	2600rpm	2000rpm
Φ66 mm	Φ86 mm	Φ66 mm	Φ86 mm	Φ87 mm	Φ87 mm	Φ105 mm	Φ87 mm	Φ105 mm	Φ87 mm	Φ105 mm
Φ52 mm	Φ72 mm	Φ52 mm	Φ72 mm	Φ72 mm	Φ72 mm	Φ90 mm	Φ72 mm	Φ90 mm	Φ72 mm	Φ90 mm
3210/4010	3210/4010	3210/4010	3210/4010	4005/5010	4010/5512	4010/5512	4010/5512	4010/5512	4010/6316	4010/6316
270/810 mm	270/810 mm	270/1060 mm	270/1060 mm	350/1120 mm	350/1620 mm	350/1620 mm	350/2120 mm	350/2120 mm	350/3120 mm	350/3120 mm
45/45	45/45	45/45	45/45	55/55	55/55	55/55	55/55	55/55	55/55	55/55
24/24	24/24	24/24	24/24	24/24	24/24	24/24	24/24	24/24	24/24	24/24
BOT	BOT	BOT	BOT	BOT	BOT	BOT	BOT	BOT	BOT	BOT
12T	12T	12T	12T	12T	12T	12T	12T	12T	12T	12T
25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm
Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm
80 mm	80 mm	80 mm	80 mm	100 mm	140 mm	140 mm	140 mm	140 mm	140 mm	140 mm
80 mm	80 mm	80 mm	80 mm	120 mm	140 mm	140 mm	140 mm	140 mm	140 mm	140 mm
720 mm	720 mm	720 mm	720 mm	1250 mm	1560 mm	1560 mm	2130 mm	2130 mm	3130 mm	3130 mm
Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#
0.005/0.006 mm		0.005/0.008 mm		0.005/0.01 mm		0.005/0.012 mm		0.005/0.015 mm		
0.003/0.005 mm		0.003/0.005 mm		0.005/0.005 mm		0.005/0.006 mm		0.005/0.008 mm		
5180 kg	5180 kg	6200 kg	6200 kg	7000 kg	7400 kg	7500 kg	8600 kg	8700 kg	9800 kg	9800 kg

## LINEAR WAY TCK AND CK SERIES (M type)

\* M means with milling function

Model	TCK-series				CK-series		
	TCK-36AM	TCK-36BM	TCK-45LM	TCK-45LM	CK-5052-M	CK-5052-M	CK-5075-M
<b>Chuck Size</b>	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8	A2-6
<b>Capacity</b>							
Max. Swing Dia.	Φ540 mm	Φ540 mm	Φ560 mm	Φ560 mm	Φ570 mm	Φ570 mm	Φ570 mm
Max. Turning Dia	Φ380 mm	Φ380 mm	Φ450 mm	Φ450 mm	Φ370 mm	Φ370 mm	Φ370 mm
Max Turning Dia. over Turret	Φ260 mm	Φ260 mm	Φ210 mm	Φ210 mm	Φ280 mm	Φ280 mm	Φ280 mm
Max Turning Length	290 mm	290 mm	500 mm	495 mm	460 mm	450 mm	690 mm
<b>Spindle</b>							
Spindle type	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8	A2-6
Optional Chuck	6"	8"	8"	10"	8"	10"	8"
Spindle Motor recommended	7.5-11 KW	11/15 KW	11/15 KW	15/18.5 KW	11/15 KW	15/18.5 KW	11/15 KW
Spindle Speed	5000rpm	4200rpm	4200rpm	3000rpm	4200rpm	3000rpm	4200rpm
Spindle Bore Diameter	Φ66 mm	Φ66 mm	Φ66 mm	Φ86 mm	Φ66 mm	Φ86 mm	Φ66 mm
Max. Bar Capacity	Φ42 mm	Φ52 mm	Φ52 mm	Φ72 mm	Φ52 mm	Φ72 mm	Φ52 mm
<b>Feeding</b>							
X/Z Ball Screw	3210/3210	3210/3210	3210/4010	3210/4010	3210/4010	3210/4010	3210/4010
X Travel	210 mm	210 mm	250 mm	250 mm	270 mm	270 mm	270 mm
Torque of X-axis motor recommended	22 N.M	22 N.M	22 N.M	22 N.M	22 N.M	22 N.M	22 N.M
X/Z Guide Way	35/35	35/35	45/45	45/45	45/45	45/45	45/45
Z Travel	400 mm	400 mm	610 mm	610 mm	610 mm	610 mm	810 mm
Torque of Z-axis motor recommended	22 N.M	22 N.M	22 N.M	22 N.M	22 N.M	22 N.M	22 N.M
X/Z Drive type	Direct connection			Direct connection			
<b>Turret</b>							
Optional Turret (Special configuration)	BMT45	BMT45	BMT45	BMT45	BMT55	BMT45	BMT55
Type of milling tool	ER-20	ER-20	ER-25	ER-25	ER-25/32	ER-25/32	ER-25/32
Center height of Turret recommended	80 mm	80 mm	100 mm	100 mm	100 mm	100 mm	100 mm
Tool positions	12T	12T	12T	12T	12T	12T	12T
Turning Tool Section	16*16/20*20 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm
Boring Tool Holder	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm
Power of live driving motor	2.7 kw	2.7 kw	4.5 kw	4.5 kw	4.5 kw	4.5 kw	4.5 kw
Speed of Live Milling Function	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm
<b>Tailstock</b>							
Diameter of quill	65 mm	65 mm	80 mm	80 mm	80 mm	80 mm	80 mm
Stroke of quill	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm
Stroke of tailstock	300 mm	300 mm	450 mm	450 mm	480 mm	480 mm	720 mm
Taper of tailstock quill	Morse 4#	Morse 4#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#
<b>Accuracy</b>							
X-axis Positioning Accuracy	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
Z-axis Positioning Accuracy	0.005 mm	0.005 mm	0.006 mm	0.006 mm	0.006 mm	0.006 mm	0.006 mm
X-axis Repeatability	0.003 mm	0.003 mm	0.003 mm	0.003 mm	0.003 mm	0.003 mm	0.003 mm
Z-axis Repeatability	0.003 mm	0.003 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
<b>Others</b>							
Weight	3250 kg	3250 kg	4200 kg	4200 kg	4350 kg	4350 kg	5180 kg

## LINEAR WAY TCK AND CK SERIES (M type)

\* M means with milling function

CK-series									
CK-5075-M	CK-50100M	CK-50100M	CK-63100M	CK-63150-M	CK-63150-M	CK-63200-M	CK-63200-M	CK-63300-M	CK-63300-M
A2-8	A2-6	A2-8		A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
Φ570 mm	Φ570 mm	Φ570 mm	Φ650 mm	Φ650 mm	Φ650 mm	Φ650 mm	Φ650 mm	Φ650 mm	Φ650 mm
Φ370 mm	Φ370 mm	Φ370 mm	Φ520 mm	Φ520 mm	Φ520 mm	Φ520 mm	Φ520 mm	Φ520 mm	Φ520 mm
Φ280 mm	Φ280 mm	Φ280 mm	Φ360 mm	Φ360 mm	Φ360 mm	Φ360 mm	Φ360 mm	Φ360 mm	Φ360 mm
680 mm	950 mm	936 mm	900 mm	1500mm	1460mm	2000mm	1960mm	3000mm	2960mm
A2-8	A2-6	A2-8	A2-8	A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
10"	8"	10"	10"	10"	10"	10"	12"	10"	12"
15/18.5 KW	11/15 KW	15-18.5KW	15-18.5KW	15-18.5KW	15-18.5KW	15-18.5KW	15-18.5KW	15-18.5KW	15-18.5KW
3000rpm	4200rpm	3000rpm	2600rpm	2600rpm	2000rpm	2600rpm	2000rpm	2600rpm	2000rpm
Φ86 mm	Φ66 mm	Φ87 mm	Φ87 mm	Φ87 mm	Φ105 mm	Φ87 mm	Φ105 mm	Φ87 mm	Φ105 mm
Φ72 mm	Φ62 mm	Φ72 mm	Φ72 mm	Φ72 mm	Φ90 mm	Φ72 mm	Φ90 mm	Φ72 mm	Φ90 mm
3210/4010	3210/4010	3210/4010	4005/5012	4010/5512	4010/5512	4010/5512	4010/5512	4010/6316	4010/6316
270 mm	270 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm
22 N.M	22 N.M	22 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M
45/45	45/45	45/45	55/55	55/55	55/55	55/55	55/55	55/55	55/55
810 mm	1060 mm	1060 mm	1000 mm	1620 mm	1620 mm	2120 mm	2120 mm	3120 mm	3120 mm
22 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M	30 N.M
Direct connection									
BMT55	BMT55	BMT55	BMT-65	SHD20L-330	SHD20L-330	SHD20L-330	SHD20L-330	SHD20L-330	SHD20L-330
ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32
100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
12T	12T	12T	12T	12T	12T	12T	12T	12T	12T
25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm
Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm	Φ25/32 mm
4.5 kw	4.5 kw	4.5 kw	4.5 kw	4.5 kw	4.5 kw	4.5 kw	4.5 kw	4.5 kw	4.5 kw
4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm
80 mm	80 mm	80 mm	100 mm	140 mm	140 mm	140 mm	140 mm	140 mm	140 mm
80 mm	80 mm	80 mm	120 mm	140 mm	140 mm	140 mm	140 mm	140 mm	140 mm
720 mm	960 mm	960 mm	1250 mm	1560 mm	1560 mm	2130 mm	2130 mm	3130 mm	3130 mm
Morse 5	Morse 5	Morse 5	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#
0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
0.006 mm	0.008 mm	0.008 mm	0.008 mm	0.01 mm	0.01 mm	0.012 mm	0.012 mm	0.015 mm	0.015 mm
0.003 mm	0.003 mm	0.003 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.006 mm	0.006 mm	0.008 mm	0.008 mm
5180 kg	6200 kg	6200 kg	7000 kg	7400 kg	7500 kg	8600 kg	8700 kg	9800 kg	9800 kg

## LINEAR WAY TCK AND CK SERIES (MY type)

\* MY means with milling function and Y axis

Model	TCK-series				CK-series		
	TCK-36MY	TCK-36MY	TCK-45MY	TCK-45MY	CK-5052-MY	CK-5052-MY	CK-5075-MY
Chuck Size	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8	A2-6
<b>Capacity</b>							
Max. Swing Dia.	Φ540 mm	Φ540 mm	Φ560 mm	Φ560 mm	Φ650 mm	Φ650 mm	Φ650 mm
Max. Turning Dia	Φ300 mm	Φ300 mm	Φ450 mm	Φ450 mm	Φ370 mm	Φ370 mm	Φ370 mm
Max Turning Dia. over Turret	Φ260 mm	Φ260 mm	Φ210 mm	Φ210 mm	Φ370 mm	Φ370 mm	Φ370 mm
Max Turning Length	300 mm	295 mm	500 mm	495 mm	450 mm	420 mm	680 mm
<b>Spindle</b>							
Spindle type	A2-5	A2-6	A2-6	A2-8	A2-6	A2-8	A2-6
Optional Chuck	6"	8"	8"	10"	8"	10"	8"
Spindle Motor recommended	7.5-11 KW	11/15 KW	11/15 KW	15/18.5 KW	11/15 KW	15/18.5 KW	11/15 KW
Spindle Speed	5000rpm	4200rpm	4200rpm	3000rpm	4200rpm	3000rpm	4200rpm
Spindle Bore Diameter	Φ56 mm	Φ66 mm	Φ66 mm	Φ86 mm	Φ66 mm	Φ86 mm	Φ66 mm
Max. Bar Capacity	Φ42 mm	Φ52 mm	Φ52 mm	Φ72 mm	Φ52 mm	Φ72 mm	Φ52 mm
<b>Feeding</b>							
X/Z Ball Screw	3210/3210	3210/3210	3210/4010	3210/4010	3210/4010	3210/4010	3210/4010
X Travel	210 mm	210 mm	250 mm	250 mm	270 mm	270 mm	270 mm
Torque of X-axis motor recommended	9 N.M	9 N.M	11 N.M	11 N.M	22 N.M	22 N.M	22 N.M
X/Z Guide Way	35/35	35/35	45/45	45/45	45/45	45/45	45/45
Z Travel	400	400	610	610	610 mm	610 mm	810 mm
Torque of Z-axis motor recommended	9 N.M	9 N.M	11 N.M	11 N.M	30 N.M	30 N.M	30 N.M
<b>Turret</b>							
Optional Turret (Special configuration)	BMT45	BMT45	BMT55	BMT55	BMT55	BMT55	BMT55
Type of milling tool	ER-20	ER-20	ER-25	ER-25	ER-25/32	ER-25/32	ER-25/32
Y-axis Travel	±35 mm	±35 mm	±50 mm	±50 mm	±50 mm	±50 mm	±50 mm
Center height of Turret recommended	127 mm	127 mm	160-170 mm	160-170 mm	160-170 mm	160-170 mm	160-170 mm
Tool positions	12T	12T	12T	12T	12T	12T	12T
Turning Tool Section	20*20 mm	20*20 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm
Boring Tool Holder	Φ20/25mm	Φ20/25mm	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm
Power of live driving motor	2.7kw	2.7kw	4.5kw	4.5kw	4.5kw	4.5kw	4.5kw
Speed of Live Milling Function	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm
<b>Tailstock</b>							
Diameter of quill	65 mm	65 mm	80 mm	80 mm	80 mm	80 mm	80 mm
Stroke of quill	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm	80 mm
Stroke of tailstock	300 mm	300 mm	450 mm	450 mm	480 mm	480 mm	720 mm
Taper of tailstock quill	Morse 4#	Morse 4#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#
<b>Accuracy</b>							
X-axis Positioning Accuracy	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
Z-axis Positioning Accuracy	0.005 mm	0.005 mm	0.006 mm	0.006 mm	0.006 mm	0.006 mm	0.006 mm
X-axis Repeatability	0.003 mm	0.003 mm	0.003 mm	0.003 mm	0.003 mm	0.003 mm	0.003 mm
Z-axis Repeatability	0.003 mm	0.003 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
<b>Others</b>							
Weight	3250 kg	3250 kg	4200 kg	4200 kg	4350 kg	4350 kg	5180 kg

## LINEAR WAY TCK AND CK SERIES (MY type)

\* MY means with milling function and Y axis

Model	CK-series									
	CK-5075-MY	CK-50100-MY	CK-50100MY	CK-63100MY	CK-63150-MY	CK-63150-MY	CK-63200-Y	CK-63200-MY	CK-63300-MY	CK-63300-MY
Chuck Size	A2-8	A2-6	A2-8	A2-8	A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
<b>Capacity</b>										
Max. Swing Dia.	Φ650 mm	Φ650 mm	Φ650 mm	Φ780 mm	Φ780 mm	Φ780 mm	Φ780 mm	Φ780 mm	Φ780 mm	Φ780 mm
Max. Turning Dia	Φ370 mm	Φ520 mm	Φ520 mm	Φ600 mm	Φ530 mm	Φ530 mm	Φ530 mm	Φ530 mm	Φ530 mm	Φ530 mm
Max Turning Dia. over Turret	Φ370 mm	Φ370 mm	Φ370 mm	Φ600 mm	Φ500 mm	Φ500 mm	Φ500 mm	Φ500 mm	Φ500 mm	Φ500 mm
Max Turning Length	650 mm	960 mm	960 mm	940 mm	1450 mm	1410 mm	1950 mm	1910 mm	2950 mm	2910 mm
<b>Spindle</b>										
Spindle type	A2-8	A2-6	A2-8	A2-8	A2-8	A2-11	A2-8	A2-11	A2-8	A2-11
Optional Chuck	10"	8"	10"	10"	10"	12"	10"	12"	10"	12"
Spindle Motor recommended	15/18.5 KW	11/15 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW	15/18.5 KW
Spindle Speed	3000rpm	4200rpm	3000rpm	2600rpm	2600rpm	2000rpm	2600rpm	2000rpm	2600rpm	2000rpm
Spindle Bore Diameter	Φ86 mm	Φ66 mm	Φ86 mm	Φ87 mm	Φ87 mm	Φ105 mm	Φ87 mm	Φ105 mm	Φ87 mm	Φ105 mm
Max. Bar Capacity	Φ72 mm	Φ52 mm	Φ72 mm	Φ72 mm	Φ72 mm	Φ90 mm	Φ72 mm	Φ90 mm	Φ72 mm	Φ90 mm
<b>Feeding</b>										
X/Z Ball Screw	3210/4010	3210/4010	3210/4010	4005/5010	4010/5512	4010/5512	4010/5512	4010/5512	4010/6316	4010/6316
X Travel	270 mm	270 mm	270 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm
Torque of X-axis motor recommended	22 N.M	22 N.M	22 N.M	30 N.M	21 N.M	21 N.M	21 N.M	21 N.M	21 N.M	21 N.M
X/Z Guide Way	45/45	45/45	45/45	55/55	55/55	55/55	55/55	55/55	55/55	55/55
Z Travel	810 mm	810 mm	810 mm	1120 mm	1620 mm	1620 mm	2120 mm	2120 mm	3120 mm	3120 mm
Torque of Z-axis motor recommended	30 N.M	30 N.M	30 N.M	30 N.M	21 N.M	21 N.M	21 N.M	21 N.M	21 N.M	21 N.M
<b>Turret</b>										
Optional Turret (Special configuration)	BMT55	BMT55	BMT55	BMT65	BMT65	BMT65	BMT65	BMT65	BMT65	BMT65
Type of milling tool	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32	ER-25/32
Y-axis Travel	±50 mm	±50 mm	±50 mm	±60 mm	±60 mm	±60 mm	±60 mm	±60 mm	±60 mm	±60 mm
Center height of Turret recommended	160-170 mm	160-170 mm	160-170 mm	215 mm	215 mm	215 mm	215 mm	215 mm	125 mm	125 mm
Tool positions	12T	12T	12T	12T	12T	12T	12T	12T	12T	12T
Turning Tool Section	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm	25*25 mm
Boring Tool Holder	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm	Φ25/32mm
Power of live driving motor	4.5kw	4.5kw	4.5kw	4.5kw	4.5kw	4.5kw	4.5kw	4.5kw	4.5kw	4.5kw
Speed of Live Milling Function	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm	4000 rpm
<b>Tailstock</b>										
Diameter of quill	80 mm	80 mm	80 mm	100 mm	140 mm	140 mm	140 mm	140 mm	140 mm	140 mm
Stroke of quill	80 mm	80 mm	80 mm	120 mm	140 mm	140 mm	140 mm	140 mm	140 mm	140 mm
Stroke of tailstock	720 mm	720 mm	720 mm	1250 mm	1560 mm	1560 mm	2130 mm	2130 mm	3130 mm	3130 mm
Taper of tailstock quill	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#	Morse 5#
<b>Accuracy</b>										
X-axis Positioning Accuracy	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
Z-axis Positioning Accuracy	0.006 mm	0.008 mm	0.008 mm	0.008 mm	0.01 mm	0.01 mm	0.012 mm	0.012 mm	0.015 mm	0.015 mm
X-axis Repeatability	0.003 mm	0.003 mm	0.003 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm
Z-axis Repeatability	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.005 mm	0.006 mm	0.006 mm	0.008 mm	0.008 mm
<b>Others</b>										
Weight	5180 kg	6200 kg	6200 kg	7000 kg	7400 kg	7500 kg	8600 kg	8700 kg	9800 kg	9800 kg

## DUAL-SPINDLE SERIES

\* DS means with double spindles

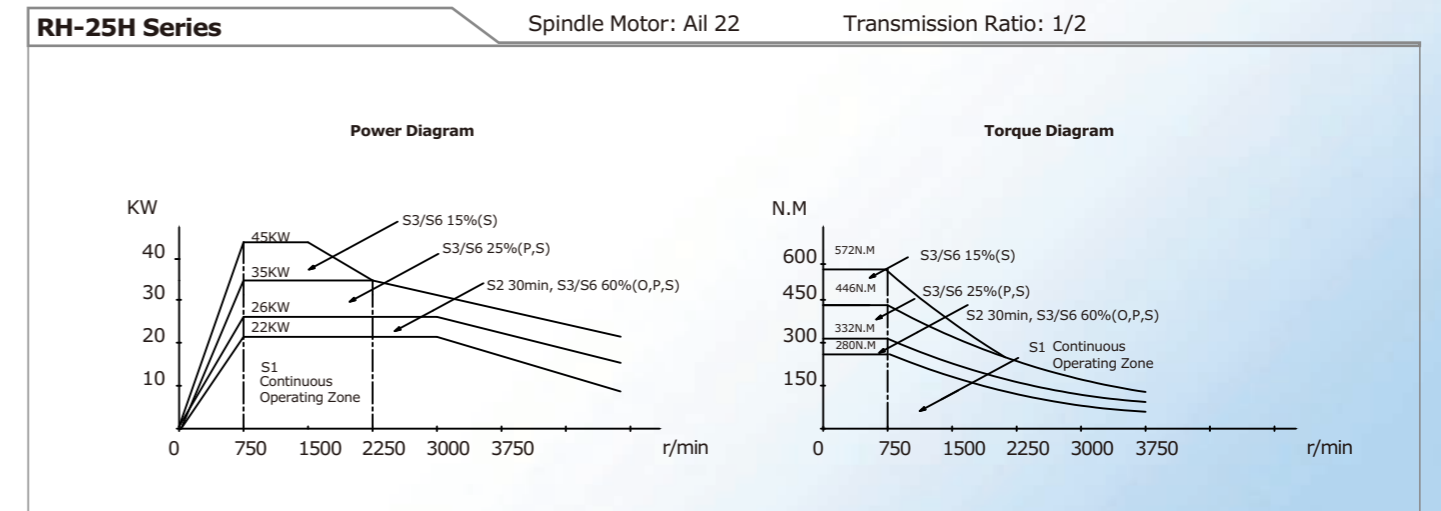
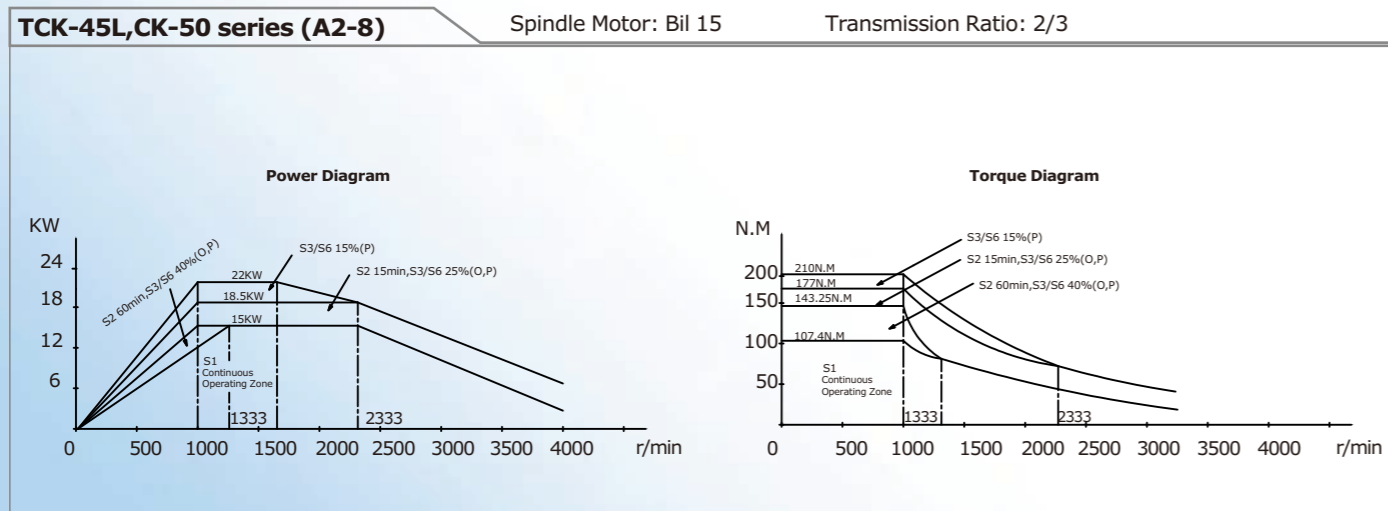
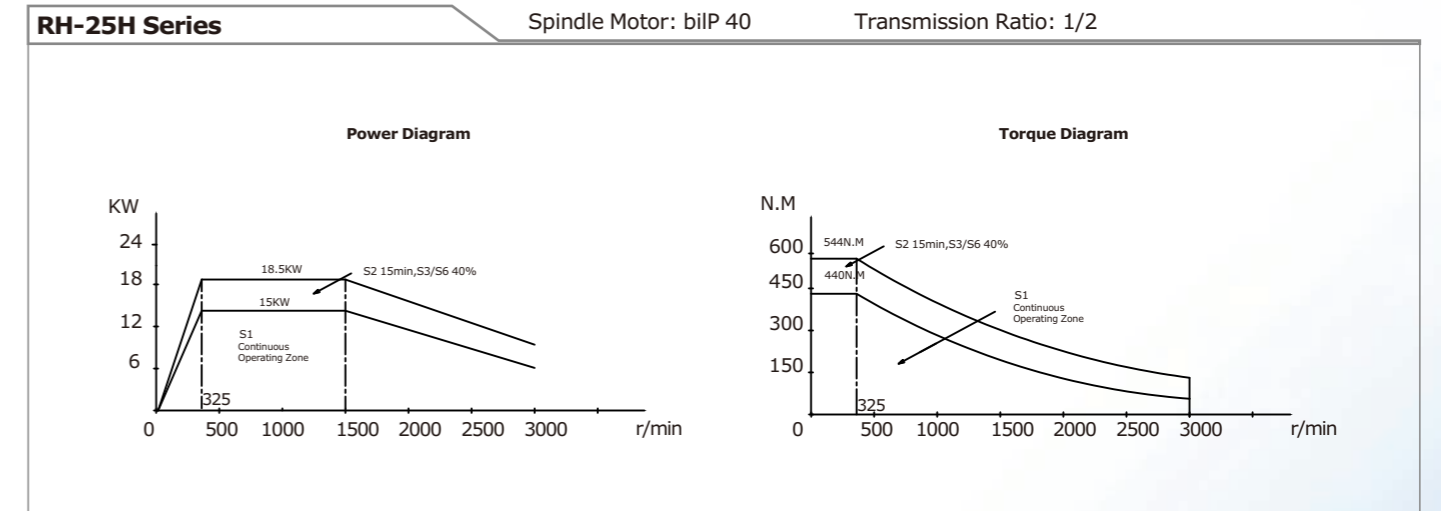
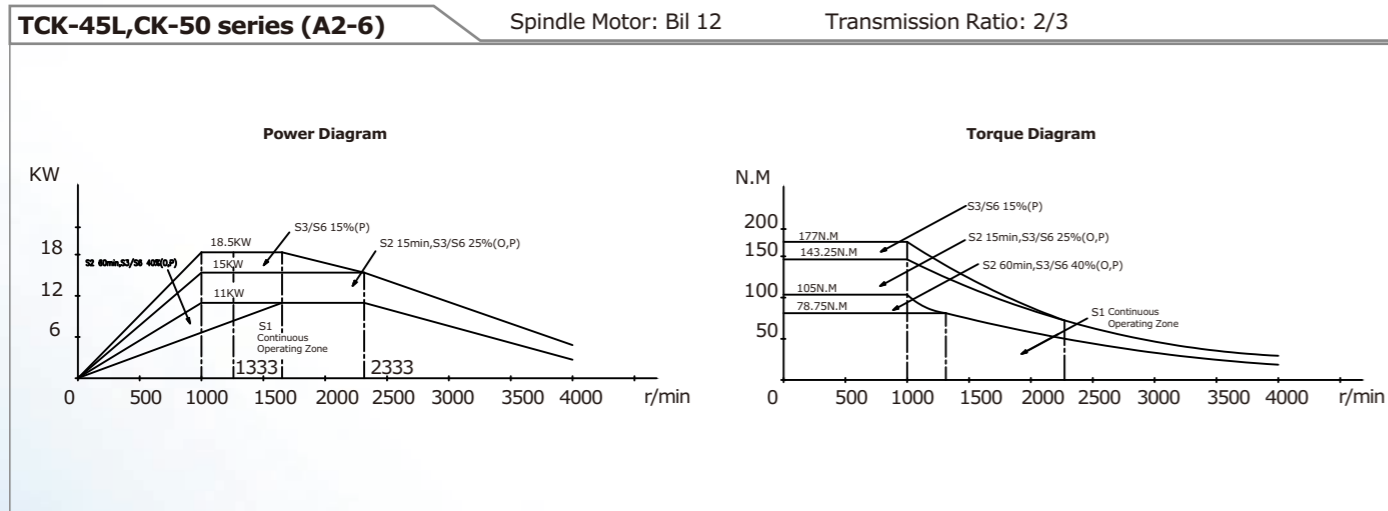
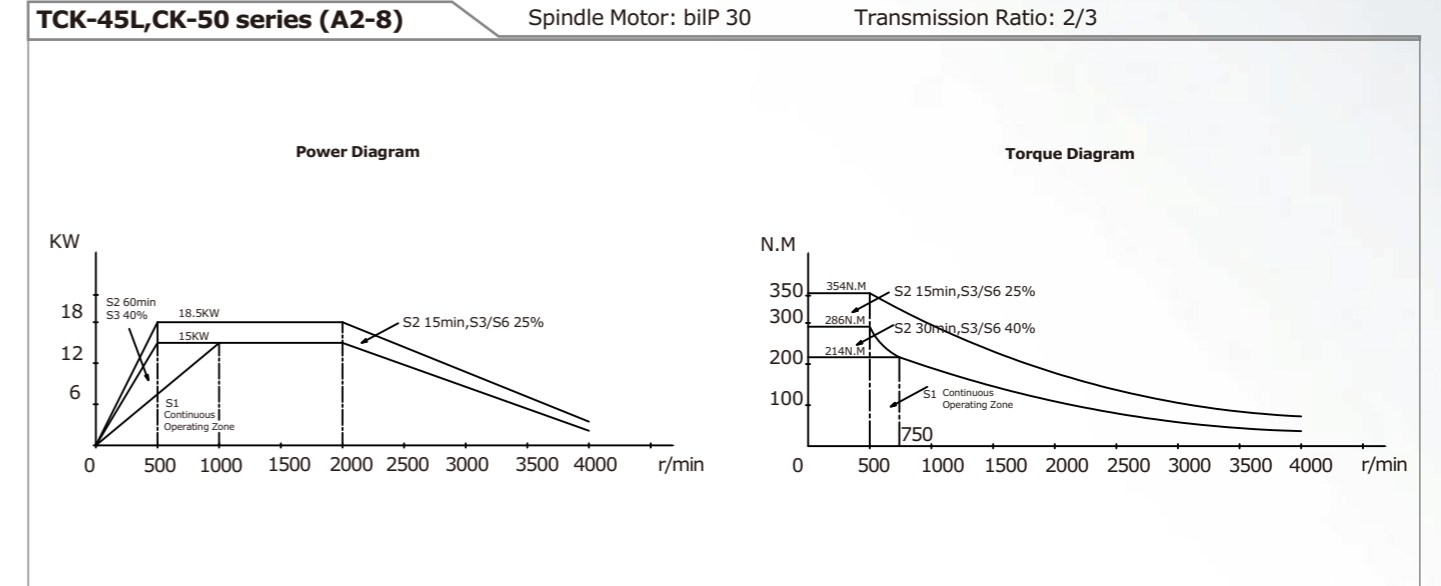
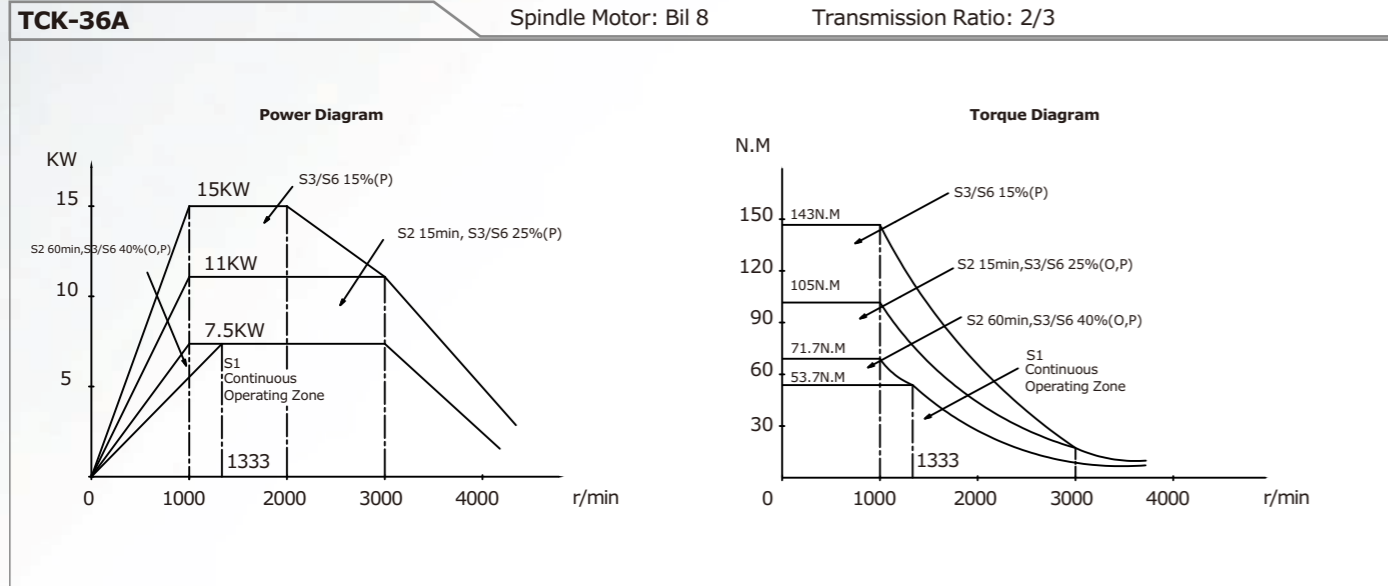
Model	CK-5052-DS	CK-5075-DS	CK-50100-DS	CK-63150-DS
<b>Capacity</b>				
Max. Swing Dia.	Φ650 mm	Φ650 mm	Φ650 mm	Φ700 mm
Max. Turning Dia.	Φ250 mm	Φ370 mm	Φ370 mm	Φ460 mm
Max Turning Dia. over Turret	Φ250 mm	Φ370 mm	Φ370 mm	Φ430 mm
Max Turning Length	420 mm	650 mm	910 mm	1460 mm
<b>Main Spindle</b>				
Spindle type	A2-6	A2-6	A2-8	A2-8
Optional Chuck	8"	8"	10"	10" (12")
Spindle Motor recommended	11/15 KW	11/15 KW	11/15 KW	15/18.5 KW
Spindle Speed	4200rpm	6000rpm	3000rpm	2600rpm
Spindle Bore Diameter	Φ66 mm	Φ66 mm	Φ86 mm	Φ87 mm
Max. Bar Capacity	Φ52 mm	Φ52 mm	Φ72 mm	Φ75 mm
<b>Sub Spindle</b>				
Spindle type	A2-5	A2-5	A2-5	A2-6
Optional Chuck	6"	6"	6"	8"
Spindle Bore Diameter	Φ56 mm	Φ56 mm	Φ56 mm	Φ61 mm
Max. Bar Capacity	Φ42 mm	Φ42 mm	Φ42 mm	Φ52 mm
Spindle Speed	5000rpm	5000rpm	5000rpm	4000rpm
Spindle Power	11.3KW(220V) /12.5KW(380V)	11.3KW(220V) /12.5KW(380V)	11.3KW(220V) /12.5KW(380V)	19KW(220V) /22KW(380V)
<b>Feeding</b>				
X/Z1/Z2 Ball Screw	3210/4010/3210	3210/4010/3210	3210/4010/4010	4010/5512/4010
X/Z1/Z2 Guide Way	Linear	Linear	Linear	Linear
X Travel	270 mm	270 mm	270 mm	350 mm
Z1 Travel	610 mm	810 mm	1060 mm	1620 mm
Z2 Travel	350 mm	680 mm	935 mm	1320 mm
Torque of X/Z1/Z2 motor	22/22/12 N.M	22/22/12 N.M	22/22/12 N.M	22/30/22 N.M
X/Z1/Z2 Drive type	Direct-drive	Direct-drive	Direct-drive	Direct-drive
Rapid Moving	24/24/20	24/24/20	24/24/20	24/24/20
Feed Rate	12/12/12	12/12/12	12/12/12	12/12/12
<b>Turret</b>				
Type of Turret	BMT55	BMT55	BMT55	BMT55
Tool Number	12T	12T	12T	12T
Section of Turning Tool	25*25	25*25	25*25	25*25
Diameter of Boring Tool Holder	25/32/40	25/32/40	25/32/40	25/32/40
Speed of Live Tool	4000rpm	4000rpm	4000rpm	4000rpm
Power of Live Tool	4.5kw	4.5kw	4.54kw	4.5kw
Live Tool	ER25/ER32	ER25/ER32	ER25/ER32	ER25/ER32
Y-axis Trave	±45 mm	±45 mm	±45 mm	±45 mm
Y-axis Guideway	Box-way	Box-way	Box-way	Box-way
<b>Others</b>				
Bed Type	Integral 30°	Integral 30°	Integral 30°	Integral 30°

## DUAL-SPINDLE SERIES

\* DS means with double spindles

	RH-25HAF-750MY	RH-25HAF-1000MY	RH-25HAF-1500MY	RH-25HAF-2000MY
	Φ880 mm	Φ880 mm	Φ880 mm	Φ880 mm
	Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm
	Φ600 mm	Φ600 mm	Φ600 mm	Φ600 mm
	620 mm	890 mm	1520 mm	2090 mm
	A2-8	A2-8	A2-8	A2-8
	10" (12")	10" (12")	10" (12")	10" (12")
	22/30KW	22/30KW	22/30KW	22/30KW
	3000rpm	3000rpm	3000rpm	3000rpm
	Φ87 mm	Φ87 mm	Φ87 mm	Φ87 mm
	Φ75 mm	Φ75 mm	Φ75 mm	Φ75 mm
	A2-6	A2-6	A2-6	A2-6
	8"	8"	8"	8"
	Φ61 mm	Φ61 mm	Φ61 mm	Φ61 mm
	Φ52 mm	Φ52 mm	Φ52 mm	Φ52 mm
	4000rpm	4000rpm	4000rpm	4000rpm
	19KW(220V) /22KW(380V)	19KW(220V) /22KW(380V)	19KW(220V) /22KW(380V)	19KW(220V) /22KW(380V)
	4008/5010/4010 mm	4008/5010/4010 mm	4008/5010/4010 mm	4008/5010/4010 mm
	Box way	Box way	Box way	Box way
	330 mm	330 mm	330 mm	330 mm
	940 mm	1240 mm	1840 mm	2440 mm
	580 mm	880 mm	1480 mm	2080 mm
	30/30/22 N.M	30/30/22 N.M	30/30/22 N.M	30/30/22 N.M
	Direct-drive	Direct-drive	Direct-drive	Direct-drive
	16/16/14	16/16/14	16/16/14	16/16/14
	12/12/12	12/12/12	12/12/12	12/12/12
	BMT65	BMT65	BMT65	BMT65
	12T	12T	12T	12T
	25*25	25*25	25*25	25*25
	25/32/40	25/32/40	25/32/40	25/32/40
	4000rpm	4000rpm	4000rpm	4000rpm
	4.5kw	4.5kw	4.5kw	4.5kw
	ER32/ER40	ER32/ER40	ER32/ER40	ER32/ER40
	±60 mm	±60 mm	±60 mm	±60 mm
	Box-way	Box-way	Box-way	Box-way
	Integral 30°	Integral 30°	Integral 30°	Integral 30°

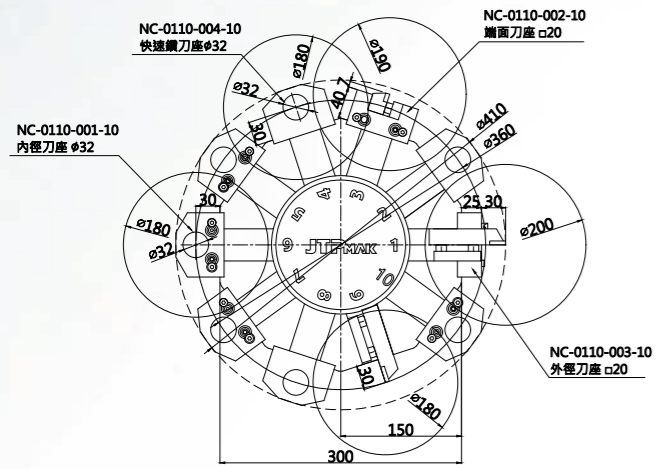
# Torque-Power Diagrams



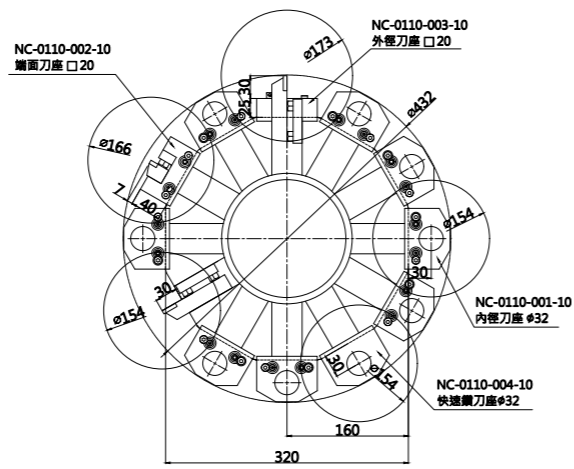
# Tool Interference Diagram

## Servo Turret

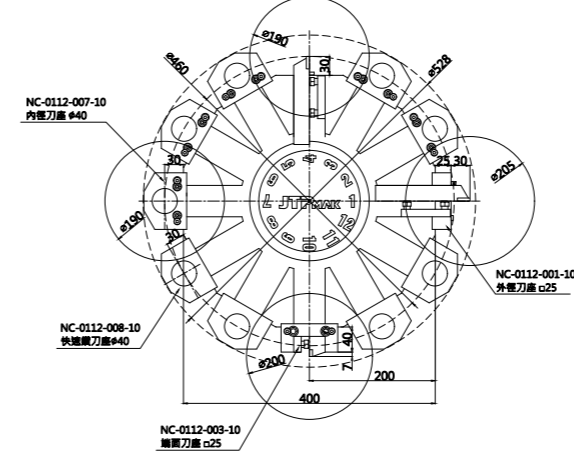
**NC-80-V10\_300**  
TCK-36A



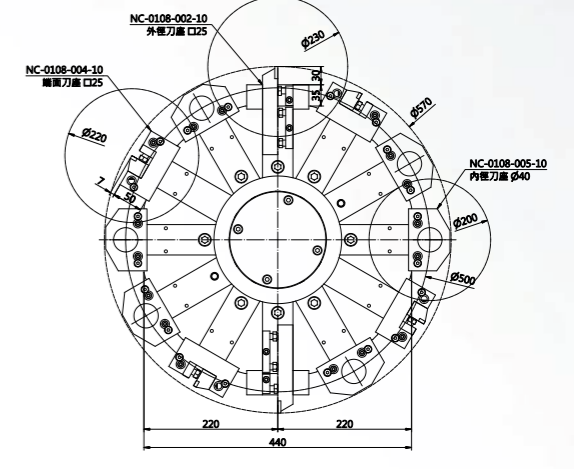
**NC-80-V12\_320**  
TCK-36A



**NC-100-V12-400**  
TCK-45M,CK-5052M,CK-5075M

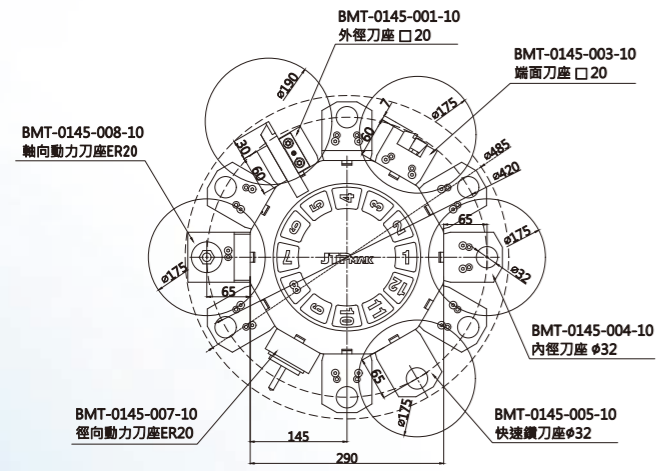


**NC-125-V12LH-440**  
RH-25H, CK-63 series

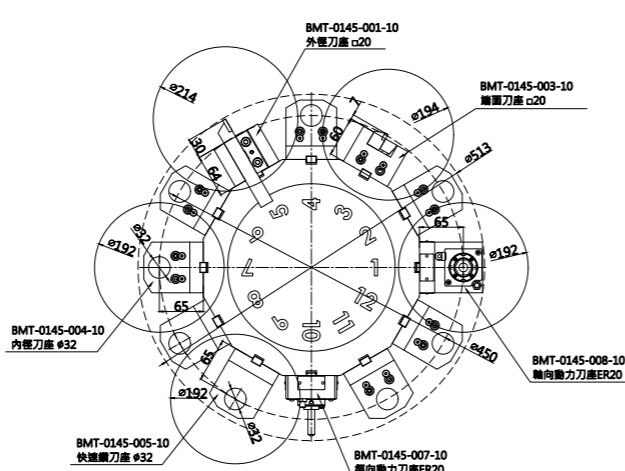


## Power Turret

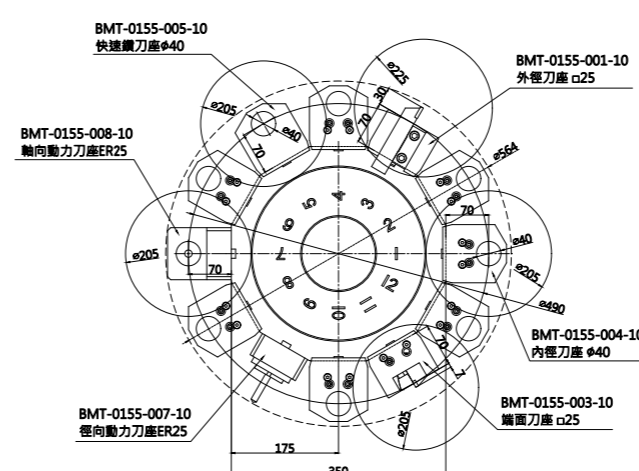
**BMT-S45-V12\_290**  
TCK-36AM



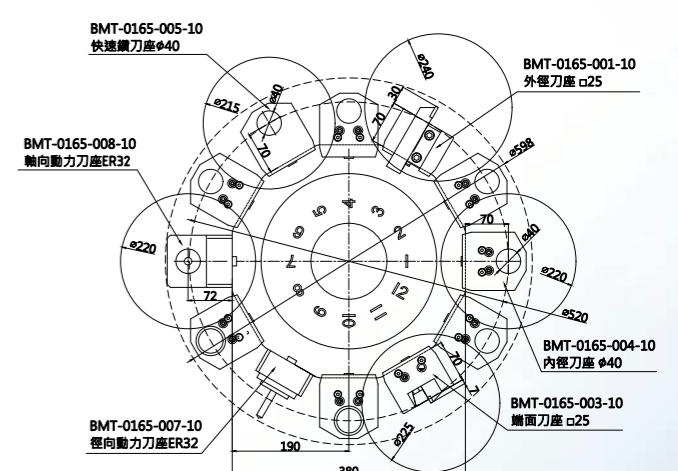
**BMT-45-V12L\_320**  
TCK-36AM



**BMT-55-V12\_350**  
TCK-45M,CK-5052M,CK-5075M

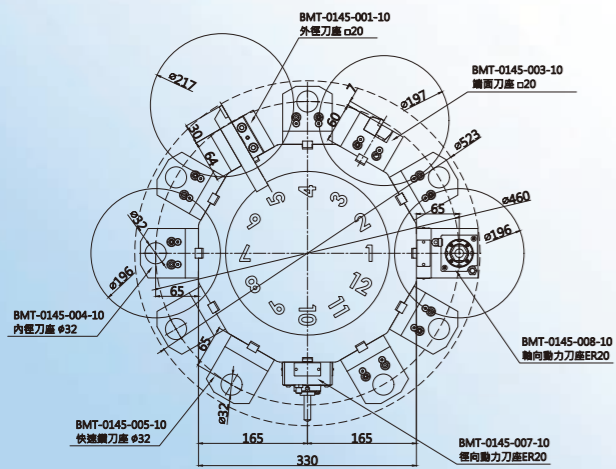


**BMT-65-V12\_380**  
RH-25HM, CK-63M series

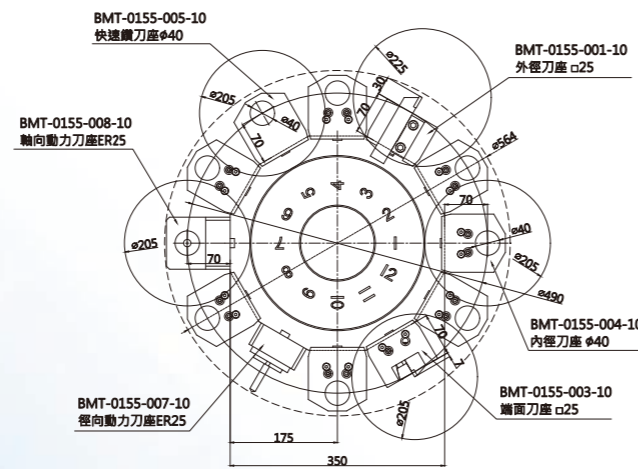


## Y-axis power turret

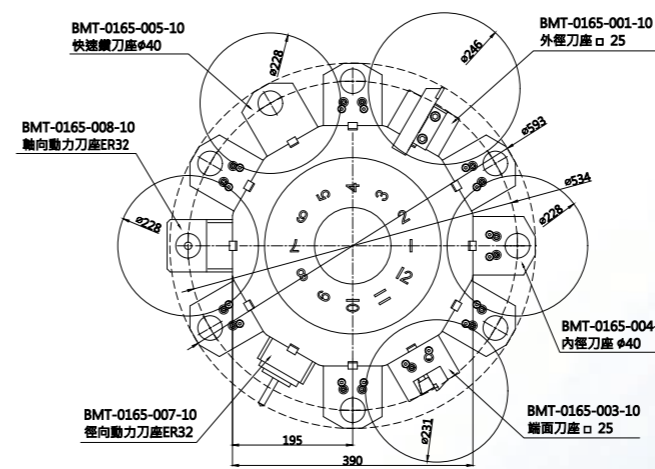
**BMT-45MY-V12L\_330**  
TCK-36MY



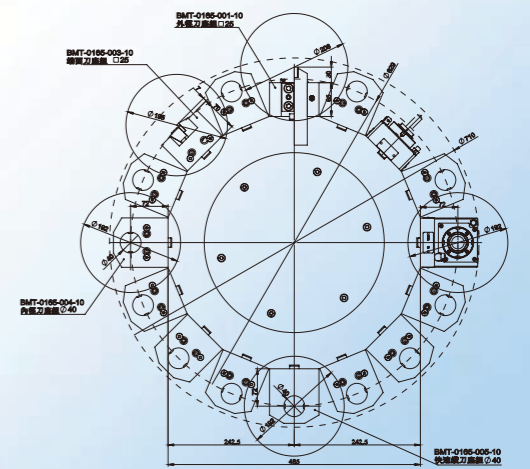
**BMT-55MY-V12\_350**  
TCK-45MY,CK-5052MY,CK-5075MY



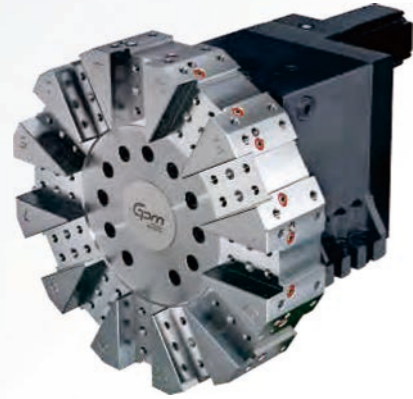
**BMT-65MY-V12L\_390**  
RH-25HMY, CK-63MY series



**BMT-65MY-V16L\_485**  
RH-25HMY, CK-63MY series



■ BOT Series Block Tooling System



- 20
- 25
- 32
- 40

- 20(12-Station turret)
- 25
- 32
- 40

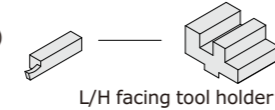
- Φ6
- Φ8
- Φ10
- Φ12
- Φ16
- Φ20
- Φ25
- Φ32
- Φ40

- MT#1
- MT#2
- MT#3

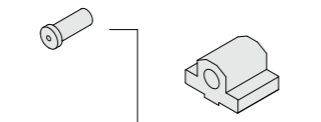
- Φ16
- Φ20
- Φ25
- Φ32
- Φ40



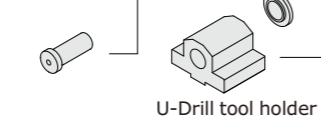
O. D. Tool Clamper



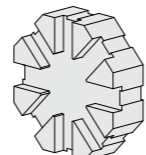
L/H facing tool holder



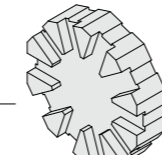
Boring bar tool holder



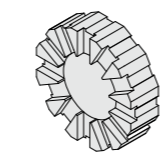
U-Drill tool holder



8-Station

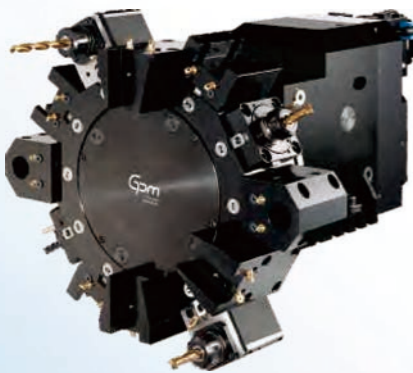


10-Station



12-Station

■ BMT Series Tooling System Tooling System



- 20
- 25
- 32
- 40

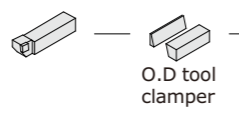
- Φ8
- Φ10
- Φ12
- Φ16
- Φ20
- Φ25
- Φ32
- Φ40

- MT#1
- MT#2
- MT#3

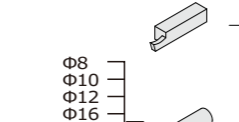
- Φ8
- Φ10
- Φ12
- Φ16
- Φ20
- Φ25
- Φ32
- Φ40

- 20
- 32
- 40

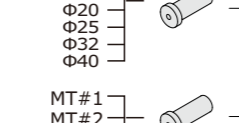
- 20
- 32
- 40



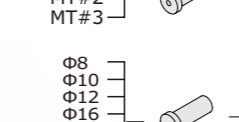
O.D. tool clamper



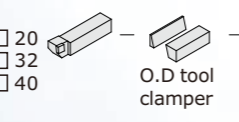
Facing tool holder



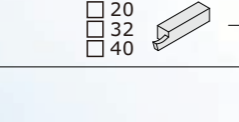
Boring bar tool holder



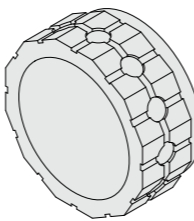
U-Drill tool holder



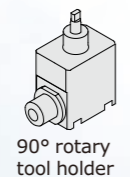
O.D. tool clamper



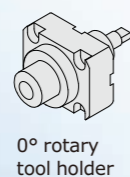
O.D. holder



12-Station Power Turret [BMT Series]



90° rotary tool holder



0° rotary tool holder

Optional functions



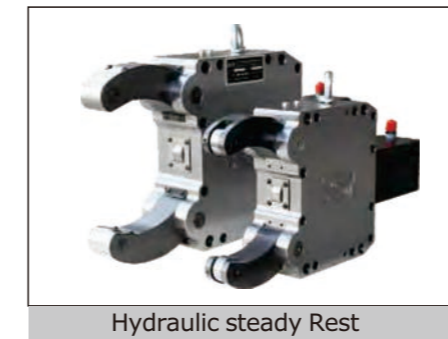
Live milling tools



Collet Chuck



Bar Feeder



Hydraulic steady Rest



Tool Setter



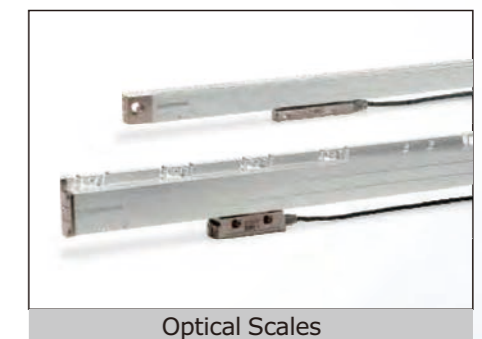
Oil Mist Collector



Coolant through milling tool



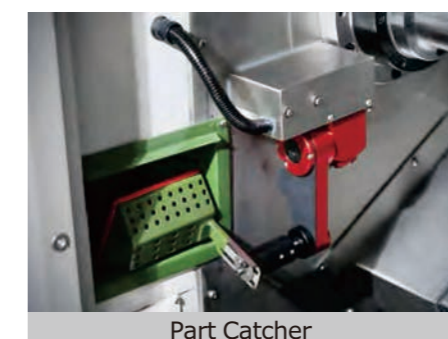
VDI Power Turret



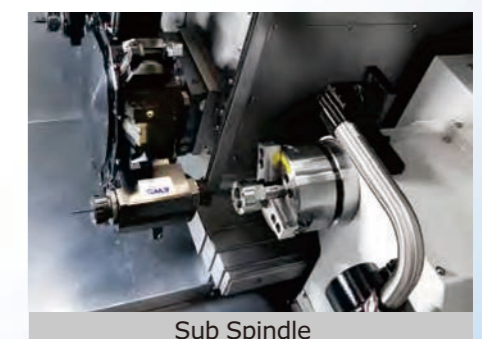
Optical Scales



Workpiece Probe



Part Catcher



Sub Spindle

Optional functions

- Siemens, GSK, Syntec, Mitsubishi controller
- Coolant through milling tool (10 or 20 bar)
- Steady rest (hydraulic / manual)
- Automatic tool setter
- Live milling tools
- Collet chuck
- Bar feeder
- Workpiece probe
- Oil mist collector
- Part catcher
- Linear optical scales
- Turret of VDI standard
- Oil skimmer
- Automatic door
- Voltage Transformer
- Voltage regulator
- CE safety standards
- 2-stage gearbox

## CNC FLAT-BED LATHE SERIES



Flat-bed Box-way TK-61 series

### Standard Accessories

- Syntec CNC controller
- Spindle servo + X/Z servo
- Manual tailstock
- Half splash guard
- Pendant operation box
- Manual pulse generator(MPG)
- Vertical 4-position tool post
- 3-jaw manual chuck
- Work light & alarm light
- Standard tool box
- Operation manual
- Leveling pads & screw
- Automatic lubrication system
- Coolant equipment
- Protection of X & Z ball screw
- Heat exchanger on electric cabinet
- RS232 interface

### Optional Accessories

- Fanuc, GSK, Siemens CNC controller
- 3-jaw chuck in hydraulic type
- 4-jaw chuck in manual types
- Double chuck
- Horizontal 6/8-tool turret
- Vertical 6-position tool post
- hydraulic tailstock
- Live center
- Chip conveyor + cart
- Steady rest (roller type)
- Boring attachment
- Mist collector
- Full splash guard
- Headstock oil cooler
- Hydraulic brake for spindle
- Hydraulic steady rest
- Air conditioner on electric cabinet
- Frequency conversion spindle motor
- Transformer

### Standard Components



Syntec CNC controller



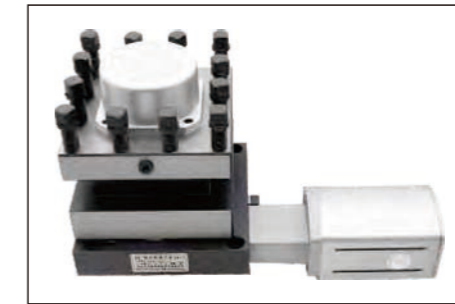
3-jaw manual chuck



Automatic lubrication system



Manual pulse generator(MPG)



Electrical 4-position tool post



P4 grade Ball Screw

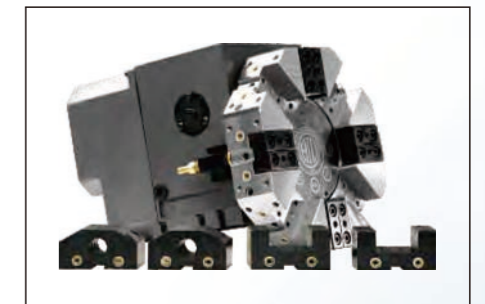
### Optional Functions and Accessories



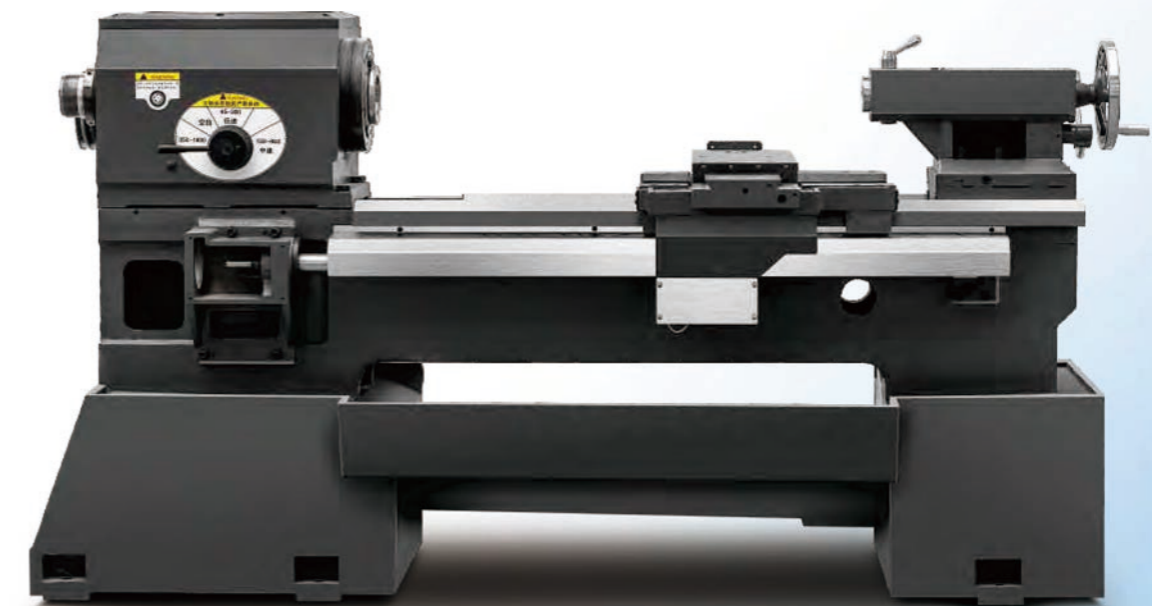
Fanuc CNC controller



Hydraulic Steady Rest



8-tool horizontal turret



Structure of Flat-bed TK-6150

## FLAT-BED LATHE (BELT-DRIVE SPINDLE)

Model	C-40	TK-6150H (500)	TK-6150H (1000)	TK-6150H (1500)	TK-6150H (2000)	TK-6150H (3000)
<b>Capacity</b>						
Max. Swing over Bed	Φ420mm	Φ500mm	Φ500mm	Φ500mm	Φ500mm	Φ500mm
Max. Swing over Slide	Φ230mm	Φ285mm	Φ285mm	Φ285mm	Φ285mm	Φ285mm
Max. Turning Length	650mm	350mm	850mm	1350mm	1850mm	2850mm
Distance between Centers	750mm	500mm	1000mm	1500mm	2000mm	3000mm
Bar Capacity	Φ64mm	Φ80/102mm	Φ80/102mm	Φ80/102mm	Φ80/102mm	Φ80/102mm
X-axis Travel	220mm	330mm	330mm	330mm	330mm	330mm
Z-axis Travel	750mm	500mm	1000mm	1500mm	2000mm	3000mm
<b>Bed</b>						
Guideway width	350mm	400mm	400mm	400mm	400mm	400mm
Middle Slide Width	200mm	220mm	220mm	220mm	220mm	220mm
<b>Spindle</b>						
Spindle Type	A2-6					A2-8
Spindle Taper	Metric: 70# (1:20)					Metric: 90-5/ 109-5
Spindle Bore Diameter	Φ66mm					Φ82/Φ105mm
Spindle motor	5.5kw					7.5kw
Spindle Speed	Stepless 100-2500 rpm					Stepless 20-2000 / 20-1600 rpm
<b>Tool post</b>						
Tool Post /Turret	Vertical 4T					Vertical 4T *(Horizontal 6/8-tool)
Tool Capacity	4T					4T/6T/8T
Turning Tool Section	20*20mm					25*25mm
Boring Tool Diameter	20/25mm					20/25/32mm
<b>Feed Rate</b>						
X Ball Screw	2505	2505	2505	2505	2505	2505
Z Ball Screw	3206	4010	4010	4010	5010	5010
X-axis Motor	6~9N.M	6~9N.M	6~9N.M	6~9N.M	6~9N.M	6~9N.M
Z-axis Motor	8~11N.M	8~11N.M	8~11N.M	8~11N.M	8~11N.M	8~11N.M
X-axis Rapid Speed	5000mm/min	5000mm/min	5000mm/min	5000mm/min	5000mm/min	5000mm/min
Z-axis Rapid Speed	8000mm/min	8000mm/min	8000mm/min	8000mm/min	8000mm/min	8000mm/min
<b>Tailstock</b>						
Quill Diameter	Φ65mm	Φ75mm	Φ75mm	Φ75mm	Φ75mm	Φ75mm
Quill stroke	120mm	150mm	150mm	150mm	150mm	150mm
Center taper	MT4	MT5	MT5	MT5	MT5	MT5
<b>Others</b>						
Length	2372mm	2350mm	2850mm	3350mm	3850mm	3850mm
Width×Height	1600×1500mm	1500×1800mm	1500×1800mm	1500×1800mm	1500×1800mm	1500×1800mm
Weight	1800kg	2500kg	2800kg	3100kg	3600kg	3600kg

## FLAT-BED LATHE (BELT-DRIVE SPINDLE)

	TK-6163H (500)	TK-6163H (1000)	TK-6163H (1500)	TK-6163H (2000)	TK-6163H (3000)
	Φ630mm	Φ630mm	Φ630mm	Φ630mm	Φ630mm
	Φ410mm	Φ410mm	Φ410mm	Φ410mm	Φ410mm
	350mm	850mm	1350mm	1850mm	2850mm
	500mm	1000mm	1500mm	2000mm	3000mm
	Φ80/102mm	Φ80/102mm	Φ80/102mm	Φ80/102mm	Φ80/102mm
	330mm	330mm	330mm	330mm	330mm
	500mm	1000mm	1500mm	2000mm	3000mm
	400mm	400mm	400mm	400mm	400mm
	220mm	220mm	220mm	220mm	220mm
			A2-8		
			Metric: 90-5/ 109-5		
			Φ82/Φ105mm		
			7.5kw		
			Stepless 20-2000 / 20-1600 rpm		
			Vertical 4T *(Horizontal 6/8-tool)		
			4T/6T/8T		
			25*25mm		
			20/25/32mm		
	2505	2505	2505	2505	2505
	4010	4010	4010	5010	5010
	6~9N.M	6~9N.M	6~9N.M	6~9N.M	6~9N.M
	8~11N.M	8~11N.M	8~11N.M	8~11N.M	8~11N.M
	5000mm/min	5000mm/min	5000mm/min	5000mm/min	5000mm/min
	8000mm/min	8000mm/min	8000mm/min	8000mm/min	8000mm/min
	Φ75mm	Φ75mm	Φ75mm	Φ75mm	Φ75mm
	150mm	150mm	150mm	150mm	150mm
	MT5	MT5	MT5	MT5	MT5
	2350mm	2850mm	3350mm	3850mm	4850mm
	1580×1800mm	1580×1800mm	1580×1800mm	1580×1800mm	1580×1800mm
	2500kg	2900kg	3200kg	3600kg	4100kg

## FLAT-BED LATHE (GEAR-DRIVE HEAD)

Model	TK-6150B	TK-6150B	TK-6150B	TK-6150B	TK-6150C	TK-6150C	TK-6150C	TK-6150C
	(1000)	(1500)	(2000)	(3000)	(1000)	(1500)	(2000)	(3000)
<b>Capacity</b>	<b>(Standard Version)</b>							
Max. Swing over Bed	Φ500mm				Φ500mm			
Max. Swing over Slide	Φ285mm				Φ285mm			
Max. Turning Length	850mm				850mm	1350mm	1850mm	2850mm
Distance between Centers	1000mm	1500mm	2000mm	3000mm	1000mm	1500mm	2000mm	3000mm
Bar Capacity	Φ80mm				Φ102mm			
X-axis Travel	330mm				330mm			
Z-axis Travel	1000mm	1500mm	2000mm	2000mm	1000mm	1500mm	2000mm	3000mm
<b>Bed</b>								
Guideway width	400mm				400mm			
Middle Slide Width	220mm				220mm			
<b>Splindle</b>								
Spindle Type	A2-8				A2-8			
Spindle Taper	Metric: 90-5				Metric: 90-5			
Spindle Bore Diameter	Φ82mm (High rigidity Φ77mm Optional)				Φ105mm			
Spindle motor	7.5kw (11kw)	7.5kw (11kw)	11kw	11kw	11kw	15kw/18kw	15kw/18kw	15kw/18kw
Spindle Speed	Gear-drive, 3-shift : 65-210 / 195-620 / 510-1600 rpm				Gear-drive, 3-shift : 12-100 / 70-300 / 260-1200 rpm			
<b>Tool post</b>								
Tool Post /Turret	Vertical 4T (Horizontal 6/8-tool)				Vertical 4T (Horizontal 6/8-tool)			
Tool Capacity	4T/6T/8T				4T/6T/8T			
Turning Tool Section	25*25mm				25*25mm			
Boring Tool Diameter	20/25/32mm				20/25/32mm			
<b>Feed Rate</b>								
X Ball Screw	2505				2505			
Z Ball Screw	4010	4010	5010	4010	4010	5010	5010	
X-axis Motor	6~9N.m				6~9N.m			
Z-axis Motor	8~11N.m				8~11N.m			
X-axis Rapid Speed	5000mm/min				5000mm/min			
Z-axis Rapid Speed	8000mm/min				8000mm/min			
<b>Tailstock</b>								
Quill Diameter	Φ75mm				Φ75mm			
Quill stroke	150mm				150mm			
Center taper	MT5				MT5			
<b>Others</b>								
Length	2850mm	3350mm	3850mm	4850mm	2850mm	3350mm	3850mm	4850mm
Width×Height	1500×1800mm				1500×1800mm			
Weight	2800kg	3200kg	3600kg	4000kg	2800kg	3200kg	3600kg	4000kg

## FLAT-BED LATHE (GEAR-DRIVE HEAD)

TK-6163B	TK-6163B	TK-6163B	TK-6163B	TK-6163	TK-6163	TK-6163	TK-6163	TK-6163	TK-6163	TK-6163
(1000)	(1500)	(2000)	(3000)	(1000)	(1500)	(2000)	(3000)	(1500)	(2000)	(3000)
<b>(50 mm Heightened Version)</b>										
Φ630mm				Φ630mm				Φ800mm		
Φ410mm				Φ350mm				Φ480mm		
850mm	1350mm	1850mm	2850mm	850mm	1350mm	1850mm	2850mm	1350mm	1850mm	2850mm
1000mm	1500mm	2000mm	3000mm	1000mm	1500mm	2000mm	3000mm	1500mm	2000mm	3000mm
Φ75mm				Φ98mm				Φ98mm		
330mm				400mm				560mm		
1000mm	1500mm	2000mm	3000mm	1000mm	1500mm	2000mm	3000mm	1500mm	2000mm	3000mm
400mm				550mm				600mm		
220mm				300mm				330mm		
A2-8				A2-11				A2-11		
Metric: 90-5				Metric: 120-5				Metric 120# (1:20)		
Φ77mm (High rigidity)				Φ100mm				Φ100mm		
7.5kw (11kw)				7.5kw (11kw)	11kw	11kw	11kw	15kw/18kw		
Gear-drive, 3-shift : 6 5-210 / 195-620 / 510-1600 rpm				Gear-drive, 3-shift : 40-125 / 110-350 / 290-950 rpm				Gear-drive, 3-shift :40-125 / 110-350 / 290-950 rpm		
Vertical 4T (Horizontal 6/8-tool)				Vertical 4T (Horizontal 6/8-tool)				Vertical 4T (Horizontal 6/8-tool)		
4T/6T/8T				4T/6T/8T				4T/6T/8T		
25*25mm				32*32mm				40*40mm		
20/25/32mm				20/25/32mm				20/25/32/40mm		
2505				3205				3205		
4010	4010	5010	5010	5010	5010	5010	6310	6310	6310	6310
6~9N.m				6~9N.m				10~15N.m		
8~11N.m				8~11N.m				20~28N.m		
5000mm/min				5000mm/min				5000mm/min		
8000mm/min				8000mm/min				8000mm/min		
Φ75mm				Φ100mm				Φ100mm		
150mm				150mm				250mm		
MT5				MT5				MT6		
2850mm	3350mm	3850mm	4850mm	3550mm	4050mm	4550mm	4350mm	4850mm	5350mm	5850mm
1600×1800mm				1600×1800mm				1600×2000mm		
2900kg	3250kg	3600kg	4100kg	4000kg	4500kg	5100kg	5600kg	5900kg	6500kg	7000kg



After development of 25 years, we have become a union with 7 production bases and 18 branches, with its headquarters located at 'spring city' Kunming.

Our union is specialized in the research and development of various types of CNC machine tools, closely focusing on market demand and customer satisfaction. Through continuous learning, absorption and independent innovation of advanced concepts on machine tool design and production, and continuous introduction of advanced machine tool manufacturing process and technical equipment home and abroad, we have formed a complete and scientific production process, quality assurance system, as well as the ability to develop dozens of series and hundreds of models, with production capacity of about 8000 sets of structures per year.

Main products: vertical machining centers, double-column milling machines, gantry-moving machining center, beam-moving machining centers, CNC boring and milling machines, horizontal machining centers, horizontal turning centers, vertical turning centers.

Advantages: We have a highly efficient team of over 400 craftsmen with more than 20 years of experience in processing, scraping, assembling and testing, and we strive for perfection in every component and every production process. We also have advanced and high-precision testing equipment such as Three-Coordinate Measuring Machines, Straightness Measuring Instrument, Laser Interferometer, Ballbars, etc., which strictly test and control the quality of the manufacturing process, thereby ensuring stable and reliable quality of products and the improvement of production efficiency.

**Corporate strategy**

Become an one-stop solution supplier of metal processing equipments

**Product positioning**

Replace imports of second-level manufacturers from USA, Taiwan and South Korea

**Development direction**

Devision and specialization of each step, developping a scientific production process

**Corporate mission**

Creat success for every client who trusts us



Kunming factory



Yuxi 1st factory

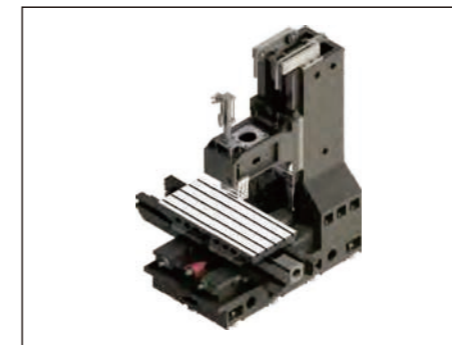


Chongqing factory

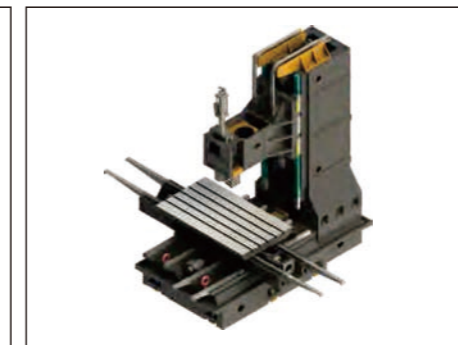


Yuxi 2nd factory

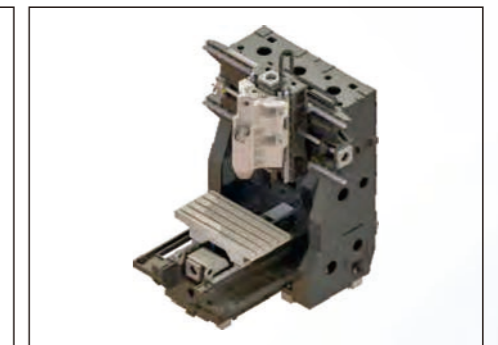
**Typical products:**



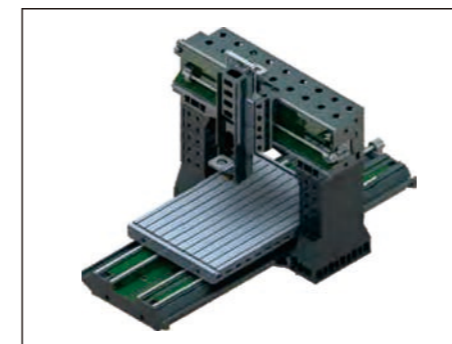
Box-Way VMC



Linear Way VMC



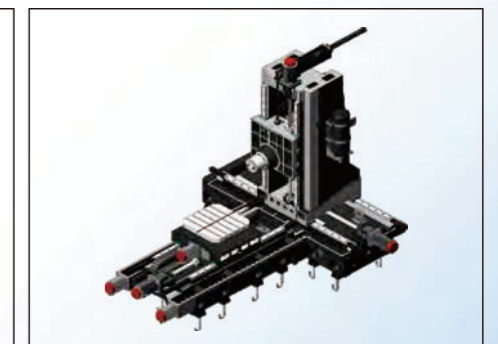
Gantry-type Machining Center



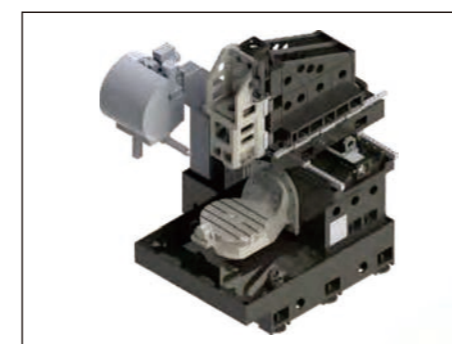
Double-Column Machining Center



Horizontal Machining Center



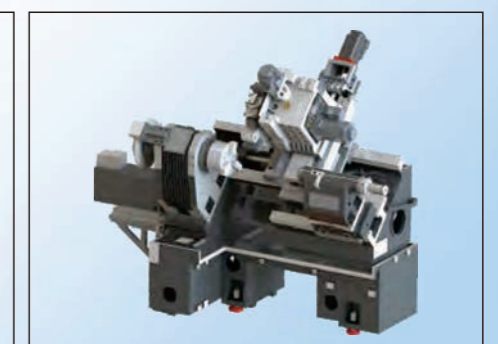
Horizontal Machining Center



5-axis Machining Center



Vertical Turning Center



Horizontal Turning Center

## Good machines are made of good components

Our good supply chain contributes to our continued reputation for high quality.

We enjoys good relationships with most of the top-level component suppliers around the world, for each kind of component, we have several suppliers to compete with each other, to help make sure the supply of key components to be efficient and stable, our suppliers include :

1. Germany Rexroth, R+W, INA, FAG, ZF,
2. Spanish Korta, Ipiranga, MILKO (EMENA),
3. Japan NSK, THK, Sino-Japanese Nika Yoki (Herg)
4. Taiwan Hiwin, PMI, Royal, Posa, Spinture, Spinder, Detron, Parkson, GSA plus, Deta, Poju (S&Y), Chen Sound, Keyarrow,
5. American Pioneer, Timken, Sino-American Byjur (JV), etc.

All the suppliers has their agents / representatives and stocks in our union, which makes the delivery time of popular models of frames within one week. popular models of complete machine within 40 days.



## Good machines are made of high-quality castings

Our maintaining of high quality level owe to our partners of foundries.

Our high class GG25-GG35 casting products are low sulfur and low carbon. Casting parts were once subject to Metallurgic Analysis according to European Laboratory. The results show that a material hardness of above 200 HBW Brinell and a homogeneous distribution of the graphite structure can be guaranteed. Right now we not only meet the demand of famous Chinese machine tool OEMS but also serve for the clients from Spain, Germany, Italy, Japanese and Czech, etc.

### Casting capabilities:

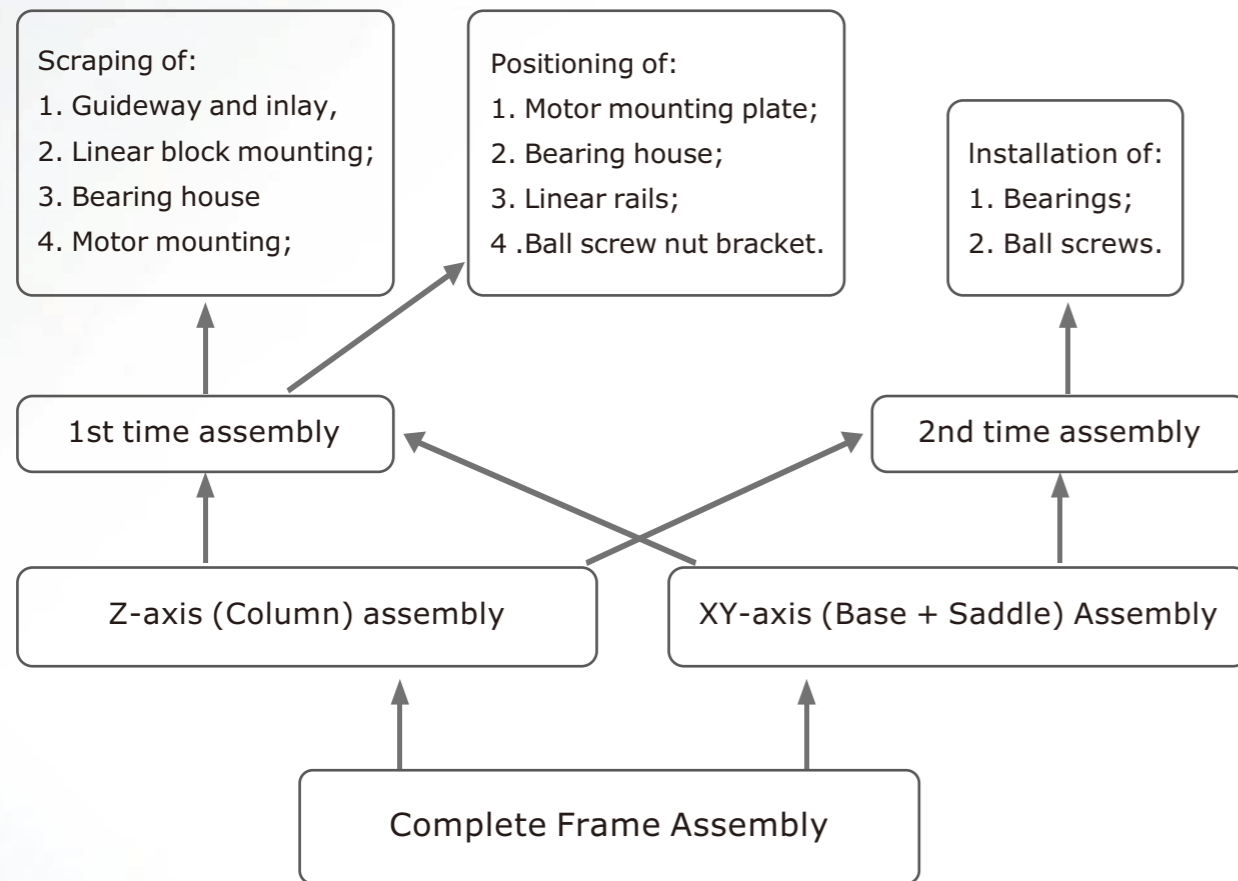
- Maximum unit weight of casting: 50 tons
- Yearly producing capability: 80,000 tons
- 4 sets of 40t/h resin bonded sand treatment systems with hydraulic up/down mechanism, six mixing mills
- 2 sets of 15t/h automatic cupolas
- 2 sets of 3m x 12m sand shot-blasting rooms
- 2 sets of 3m x 12m automatically electrical furnace for heat treatment

### Quality Control Testing Equipment:

- Direct reading spectrograph
- Metalloscope
- Complete physical and chemical analyzing and testing as well as flaw detection equipment



## Good machines are built by high-efficiency and collaborative teams, with scientific process control.



The concept of Detailed Division Of Labor is implemented throughly in the structure of our frame union and the process of machine toolframe production.

1. Each small assembly process are devided into smaller work steps, each smaller step is implemented by sevevral independent and collaborative teams;
2. Each assembly team is responsible for the result of their own step, and responsible to the acceptance of next procedure;
3. All the results of each small steps are well documented in data base and could be easily tracked in the future when necessary;
4. All the suppliers of components, all the independent assembly teams, are involved in the aftersales service of domestic market, which made them try to find the best way to make their step perfect at the begining before machine is delivered, instead of solving the problem at clients' factory.

## Good machines are built with good mother machines.

More than 30 sets of imported machining equipments and grinding equipments, mostly from Europe, ensure the accuracy of our products.

Castings machined and grinded by high-quality mother machines imported from Europe and Taiwan:

- 1) More than 20 sets of double-column machining centers and universal bed mills from Nicolas Correa (Spain);
- 2) Horizontal machining center of DMG from Germany;
- 3) Bridge type grinding machine from FAVERTTO (Italy) ;
- 4) Bridge type grinding machine from DANOBAT (Spain);
- 5) 8 sets of double-column grinding machines and universal grinding machines from Taiwan.

