



CHTEM

FULLTONTECH

PERFECT BORING&MILLING

- Planer Type Boring Mills
Mandrinadora Tipo Planer
- Floor Type Boring Mills
Mandrinadora Tipo Suelo
- Table Type Boring Mills
Mandrinadora Tipo Mesa
- Gantry Milling Machine
Fresadora De Pórtico

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CHTEM is a leading professional manufacturer of heavy-duty and extra-heavy-duty fine CNC machine tools in China. Our hit products are CNC floor type boring-milling machine, CNC Planer-type boring-milling machine and CNC Gantry-type boring-milling machine.

Our products can be found in every corner of the world, covering nuclear power industry, wind generator industry, hydropower equipment industry as well as forging and pressing equipment industry, to name a few.

Being consistent with the concept of Be Specialized in Our Profession, we have been able to pull together all resources within our company and many elites in the industry to focus on the development and research of boring machines. As a result of years of hard work, we are possessed of the best capability of designing, developing, inspecting and manufacturing all series of CNC and Digital readout boring machines. Moreover, our products are recognized and certified by ISO9001 Quality System and Certification of Europe.

To realize the dream of making CHTEM an internationally well-known brand, staff from each floor is devoting themselves into the development and fabrication of heavy duty machines.

CHTEM supported by abundant economic strength, guided by sophisticated technical strength and scientific managing system, is honored and pleased to be at your service.



**Professional, Integrity, Service
—Your Trustworthy Partner!**

Planer Type Boring Mills

Mandrinadora Tipo Planer

Floor Type Boring Mills

Mandrinadora Tipo Suelo

Table Type Boring Mills

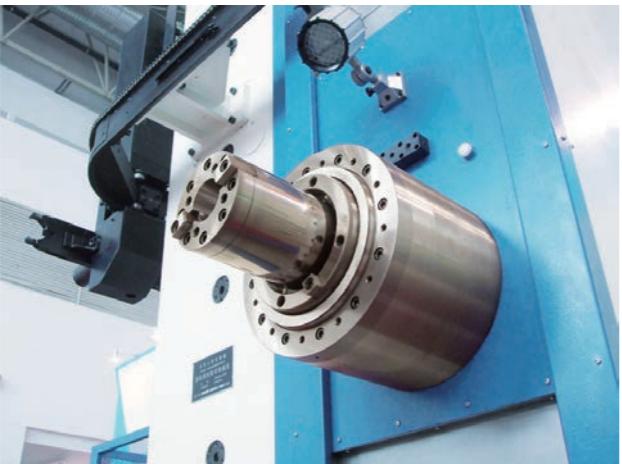
Mandrinadora Tipo Mesa

Gantry Milling Machine

Fresadora De Pórtico



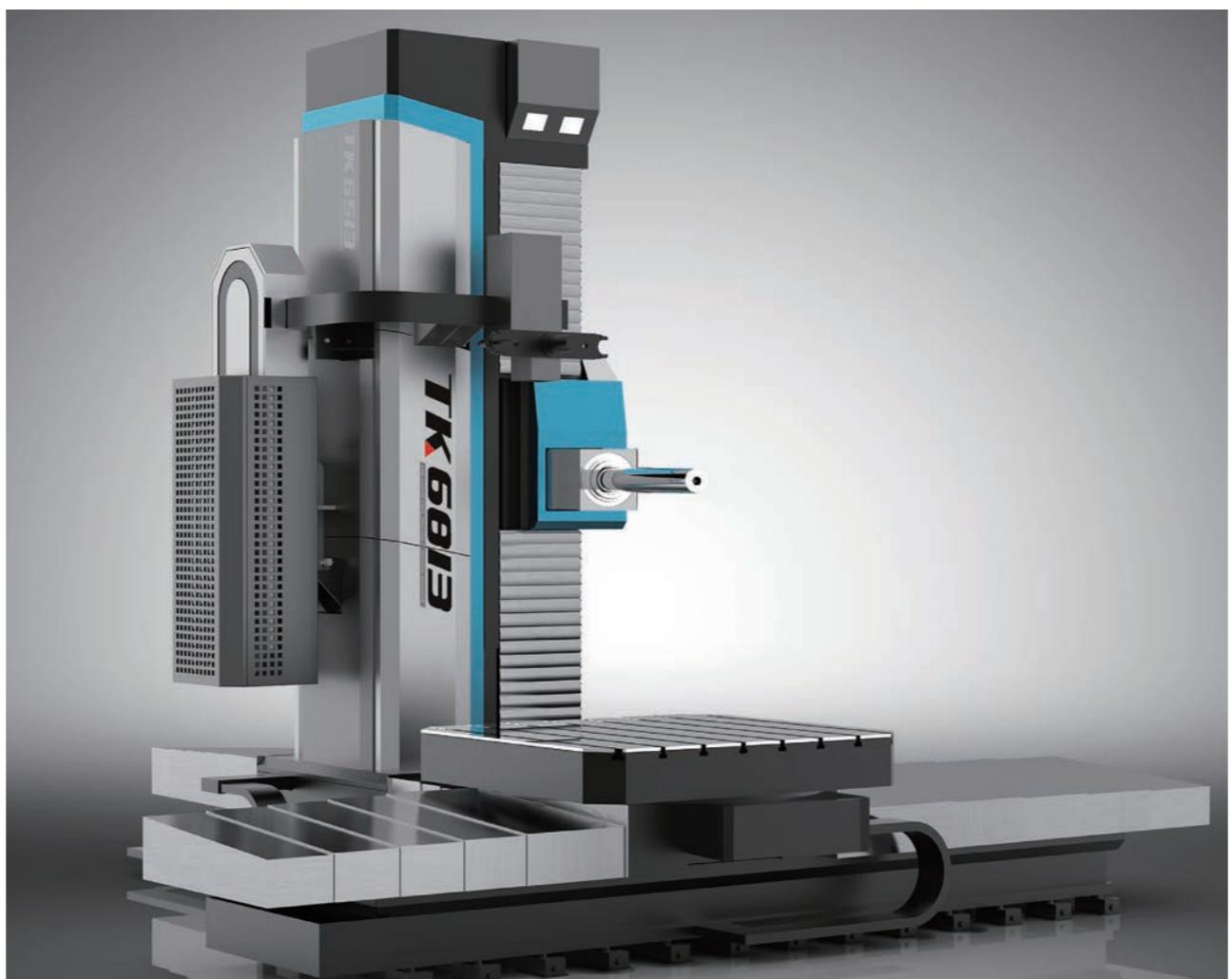
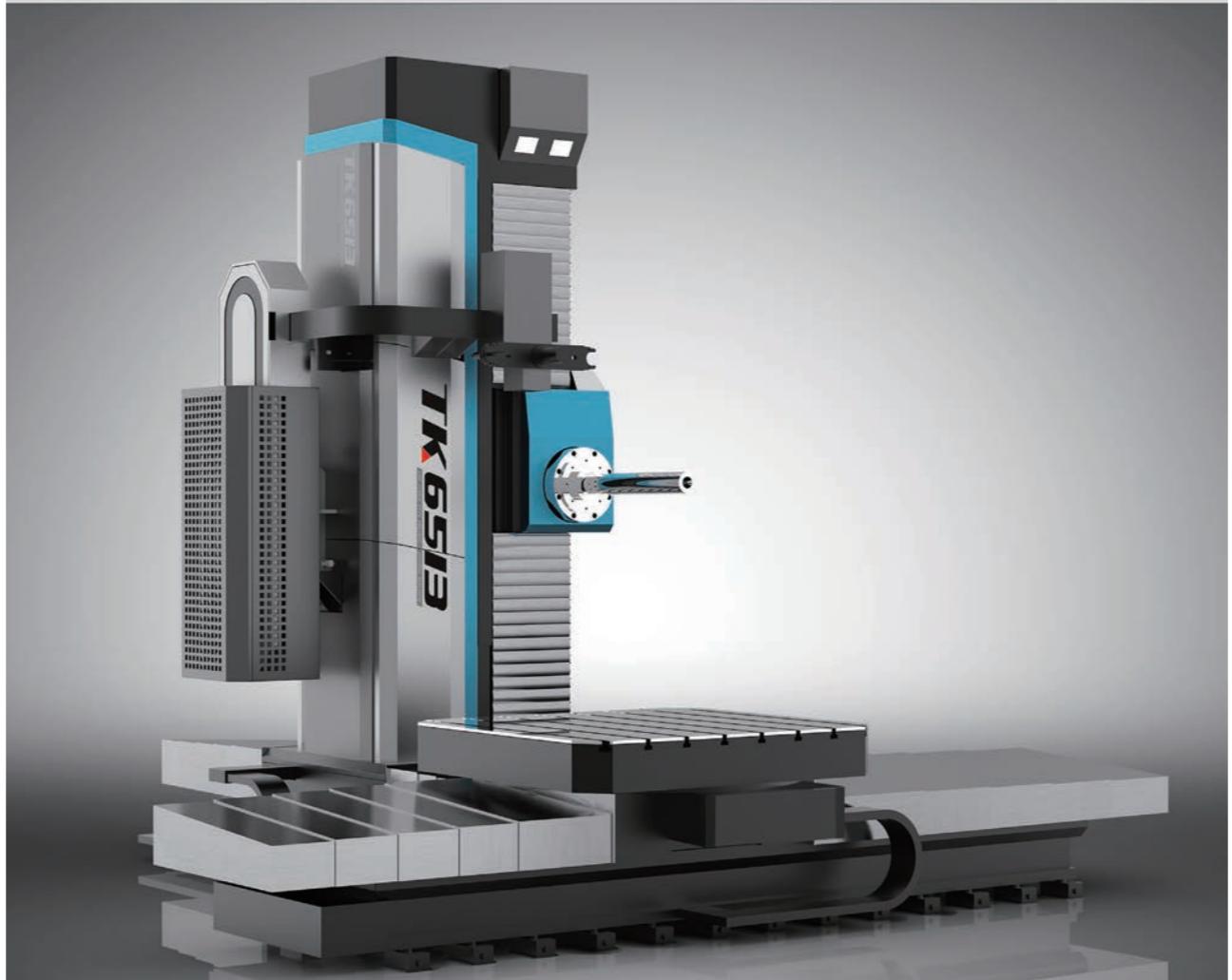
The CNC planer type boring mills are machines with large torque, high efficiency, high rigidity and advanced technologies. The machine can meet the demands of each user, including different controllers, different precision requirements, different sizes of tables by forming different models of boring machines. This series of boring mills are suitable for machining large medium sized box shaped, frame structure or moulding parts, also can perform milling, boring, drilling, winching, tapping etc after one clamping. The machine controls 7 axes with 4 axes simultaneous and allows circular interpolation and 3-D curved surface machining. Equipped with milling head, face plates and other devices, the series of machines have enlarged machining capabilities. The spindle has cooling case to limit the head in the spindle.



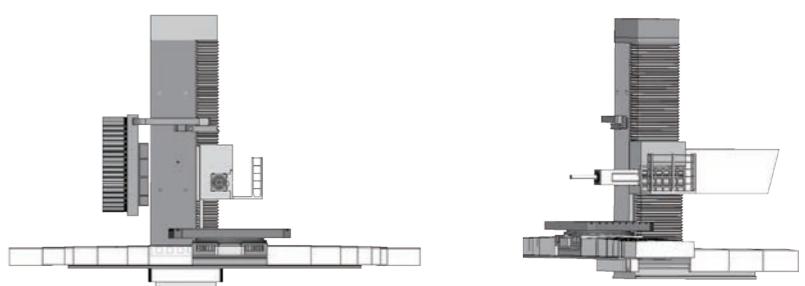
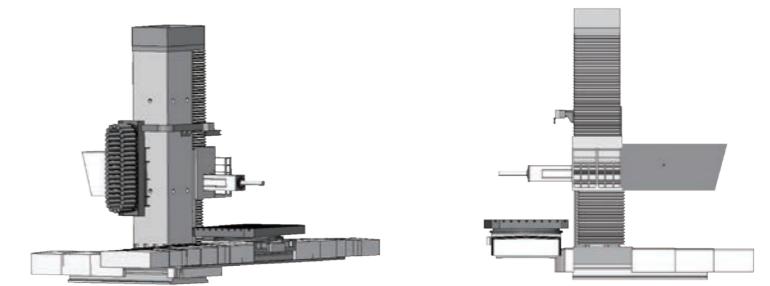
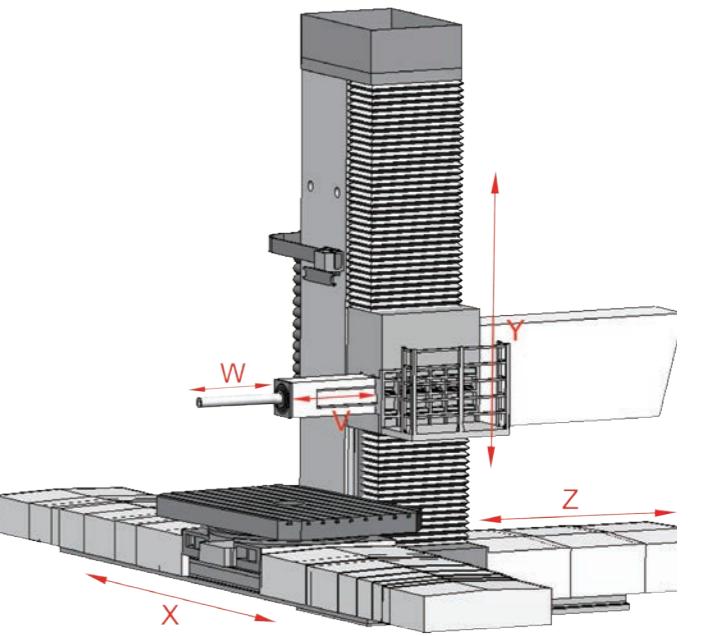
TK65 Series Boring Mills without Ram



TK68 Series Boring Mills with Ram



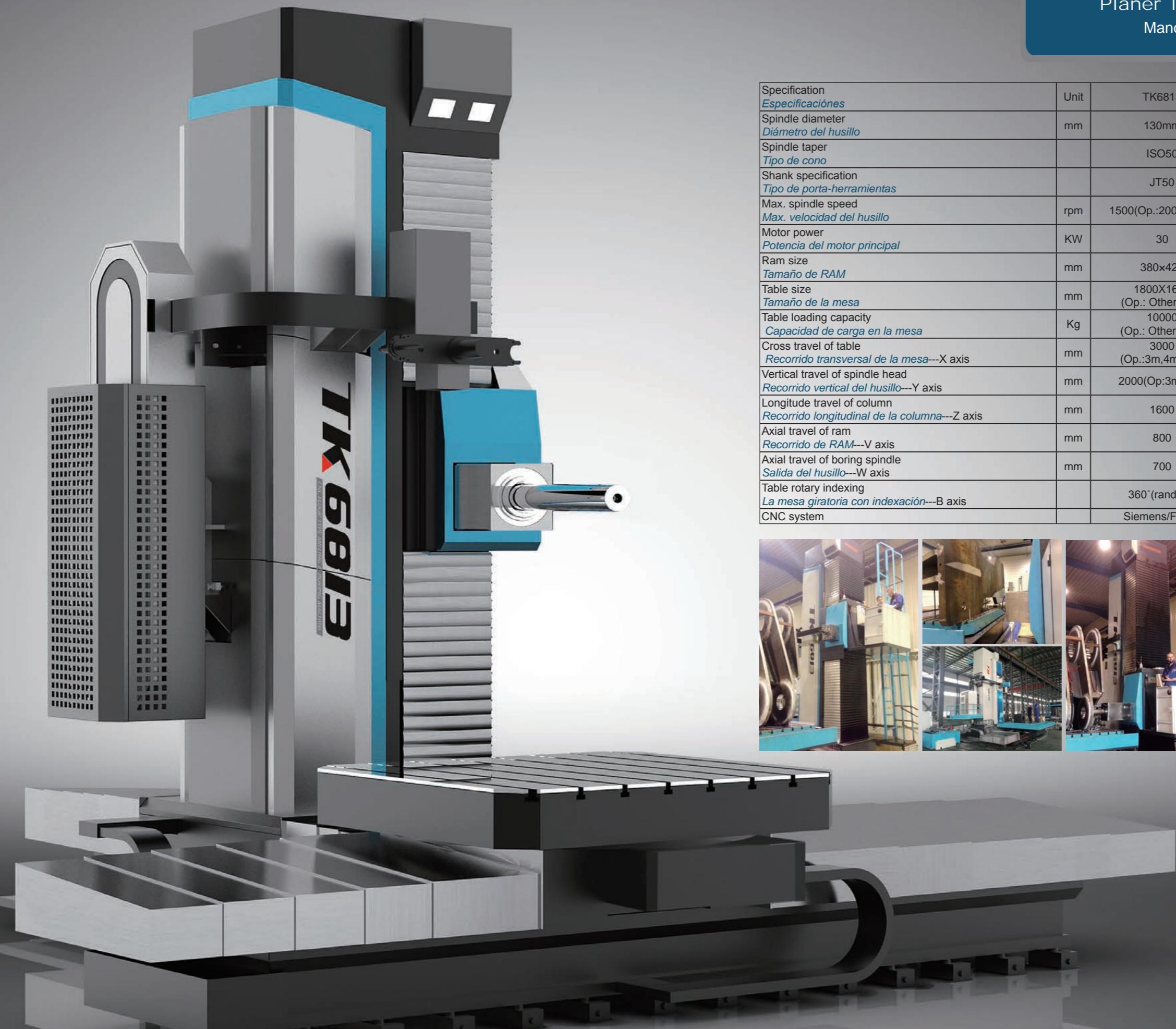
Planer Type Boring Mills Mandrinadora Tipo Planer

Planer Type Boring Mills
Mandrinadora Tipo Planer



Specification <i>Especificaciones</i>	Unit	TK6511	TK6513	TK6516
Spindle diameter <i>Diámetro del husillo</i>	mm	110	130	160
Spindle taper <i>Tipo de cono</i>		ISO50	ISO50	ISO50
Shank specification <i>Tipo de porta-herramientas</i>		JT50	JT50	JT50
Max. spindle speed <i>Max. velocidad del husillo</i>	rpm	1500(Op.:3000)	1500(Op.:3000)	1200(Op.:2000)
Motor power-Servo <i>Potencia del servo motor</i>	KW	22	30	40
Table size <i>Tamaño de la mesa</i>	mm	1400X1200 (Op.: Other size)	1800X1600 (Op.: Other size)	2200X1800 (Op.: Other size)
Table loading capacity <i>Capacidad de la carga en la mesa</i>	Kg	5000 (Op.: Other load)	10000 (Op.: Other load)	20000 (Op.: Other size load)
Cross travel of table <i>Recorrido transversal de la mesa--X axis</i>	mm	2000 (Op.:3m,4m)	3000 (Op.:3m,4m, 5m)	3000 (Op.:3m,4m, 5m)
Vertical travel of spindle head <i>Recorrido vertical del husillo--Y axis</i>	mm	1500(Op:2m,3m)	2000(Op:3m,4m)	2000(Op:3m, 4m)
Longitude travel of column <i>Recorrido longitudinal de la columna--Z axis</i>	mm	1300	1600	1600
Axial travel of boring spindle <i>Salida del husillo--W axis</i>	mm	600	800	1000
Table rotary indexing <i>La mesa giratoria con indexación--B axis</i>	degree	360°	360°	360°
CNC system		Fanuc/Siemens	Fanuc/Siemens	Fanuc/Siemens





Specification <i>Especificaciones</i>	Unit	TK6813	TK6816
Spindle diameter <i>Diámetro del husillo</i>	mm	130mm	160mm
Spindle taper <i>Tipo de cono</i>		ISO50	ISO50
Shank specification <i>Tipo de porta-herramientas</i>		JT50	JT50
Max. spindle speed <i>Max. velocidad del husillo</i>	rpm	1500(Op.:2000,3000)	1200(Op.:2000)
Motor power <i>Potencia del motor principal</i>	kW	30	40
Ram size <i>Tamaño de RAM</i>	mm	380x420	480x520
Table size <i>Tamaño de la mesa</i>	mm	1800X1600 (Op.: Other size)	2200X1800 (Op.: Other size)
Table loading capacity <i>Capacidad de carga en la mesa</i>	Kg	10000 (Op.: Other load)	20000 (Op.: Other size load)
Cross travel of table <i>Recorrido transversal de la mesa---X axis</i>	mm	3000 (Op.:3m,4m, 5m)	3000 (Op.:3m,4m, 5m)
Vertical travel of spindle head <i>Recorrido vertical del husillo---Y axis</i>	mm	2000(Op:3m, 4m)	2000(Op:3m, 4m)
Longitude travel of column <i>Recorrido longitudinal de la columna---Z axis</i>	mm	1600	1600
Axial travel of ram <i>Recorrido de RAM---V axis</i>	mm	800	1000
Axial travel of boring spindle <i>Salida del husillo---W axis</i>	mm	700	900
Table rotary indexing <i>La mesa giratoria con indexación---B axis</i>		360°(random)	360°(random)
CNC system		Siemens/Fanuc	Siemens/Fanuc



Machine Bed



The machine bed is built of resin, wood former with reasonable structure and rigidity. It guarantees a sound base and steady machine, also ensures a stable column when it's in motion. The machine is equipped with top quality dent surface racks which are imported from overseas, and two preload co-drive gears that ensures the accuracy of the X axis.



Slide Carriage



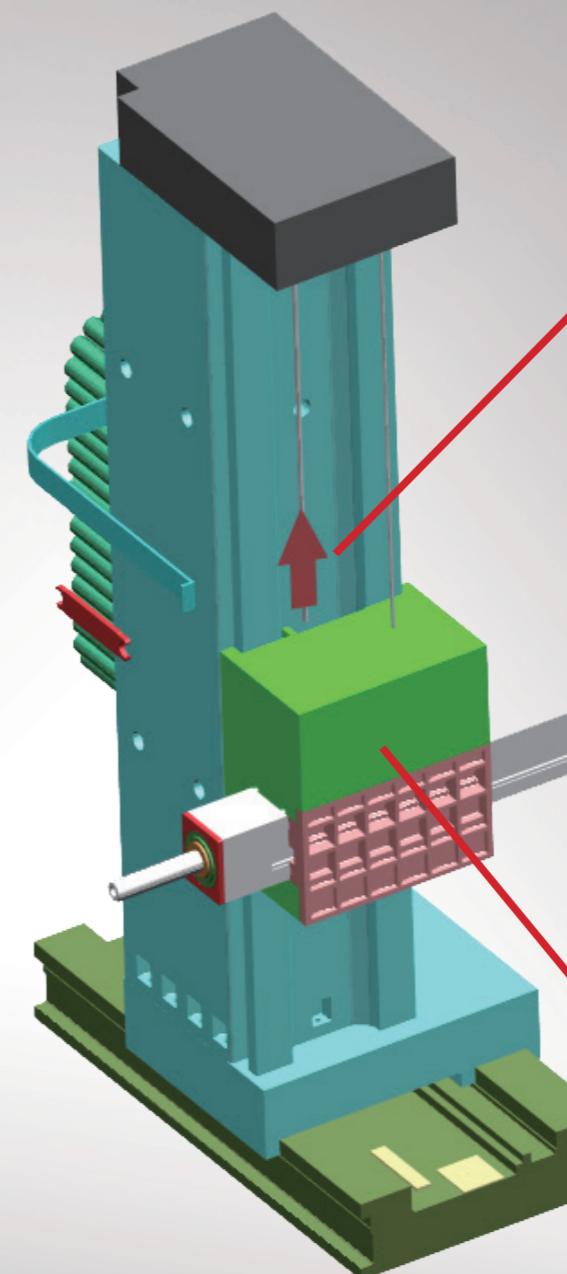
Built with top quality castings, resin and wood former, the sliding carriage possesses sufficient intensity. It connects to the machine bed with two wide guide ways. The single guide way serves as main positioning with the support from other double guide ways to maintain the stability and linearity of column in motion on machine bed.

Column

Most of high quality castings, resin and wool former are in a double-frame structure, the column is of sufficient rigidity that allows the smooth movement of spindle box vertically. Mosaic type counterweight balance rails are built inside of the column to ensure the stability of the counterweight's vertical movements, thus to ensure the high precision of the machine.



The two ground rails in front of the column check the position of the spindle box and ensure the steadiness of spindle's vertical movements. The column is equipped with preload precision double-nut ball screws, and servo motor drives the vertical travels of the spindle box.

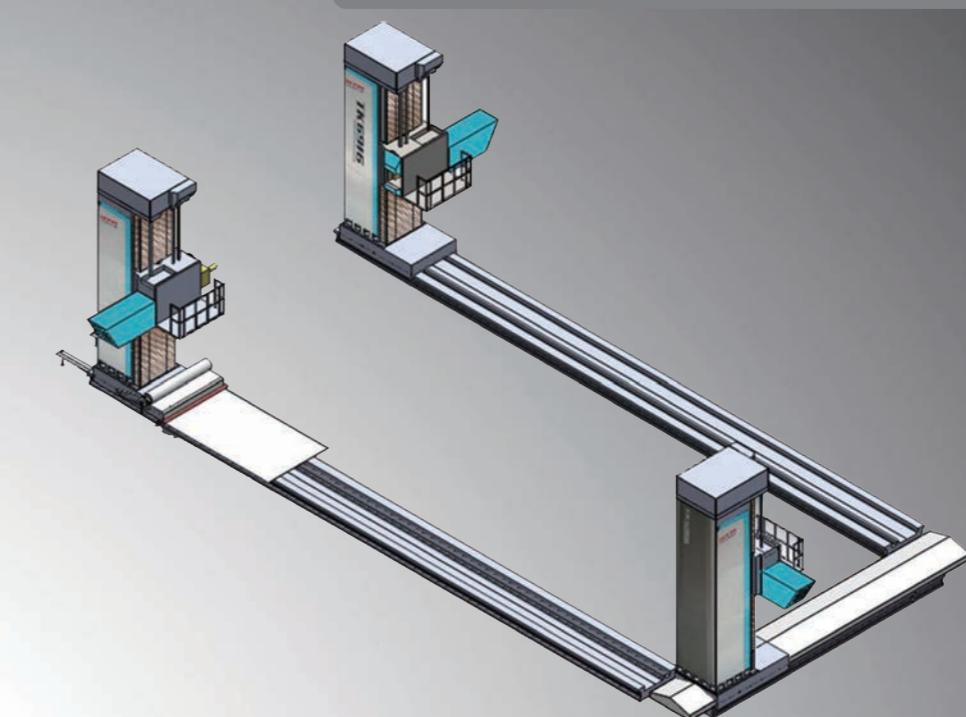


The electro-hydraulic balance compensation device on the spindle box aims to eliminate the spindle droop resulted from spindle box's shift of center of gravity.

Two pull rods with cylinder are built inside the ram, the hydraulic cylinder movements are controlled by hydraulic proportional valve. As ram moves forward, the rods are pulled tight under CNC control to eliminate the droop of ram and ensure the precision of ram in extension.

The machine adopts the structure of ram driving spindle box, which means the main transmission reducer is built at the back end of ram and feeds with ram. This structure has improved the spindle's stability and quality of machining under interrupted conditions, thus to achieve the spindle's high speed and steady spinning.

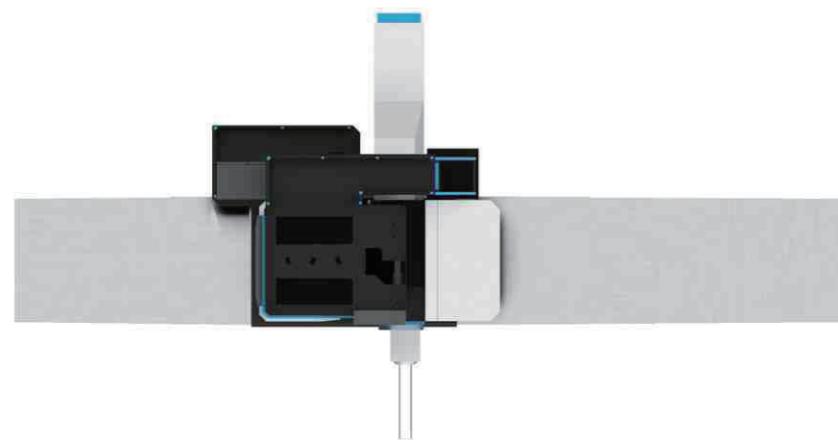




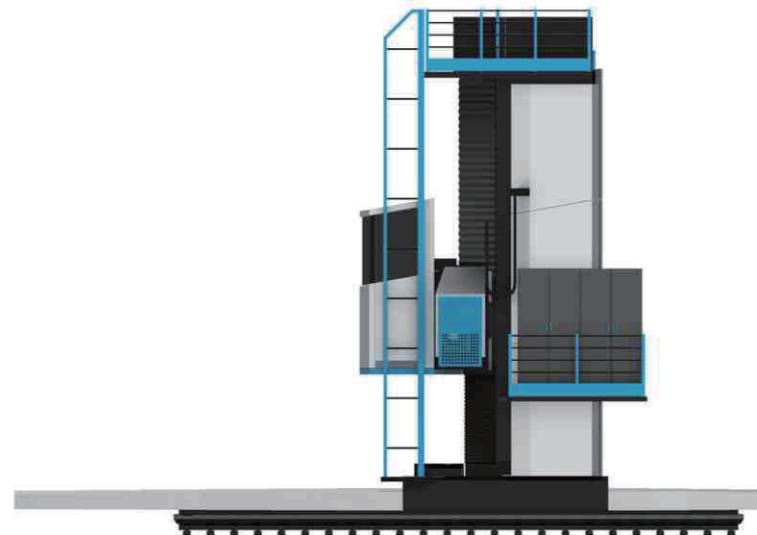
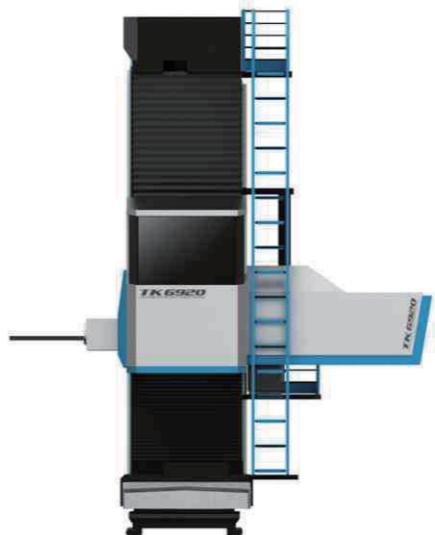
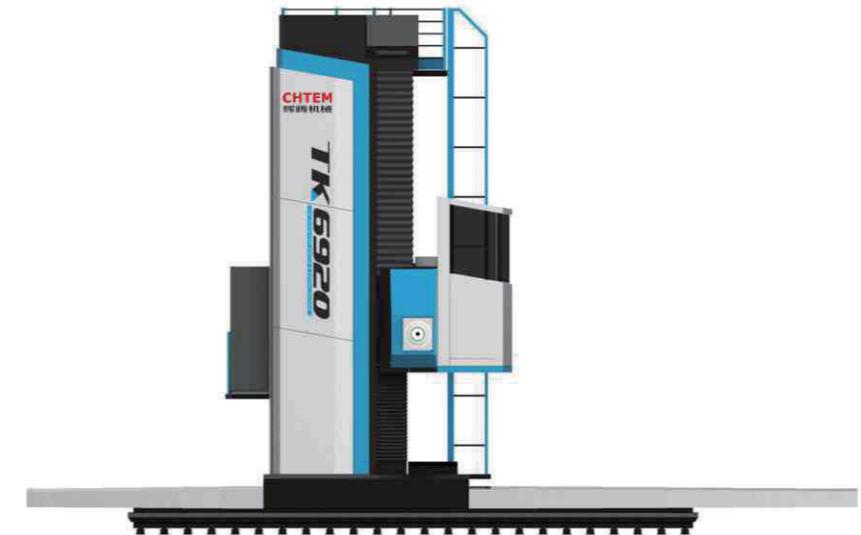
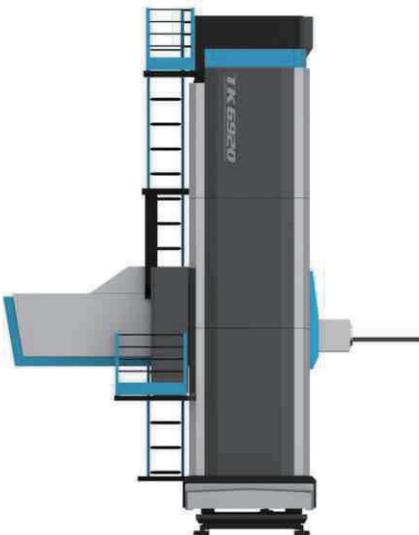
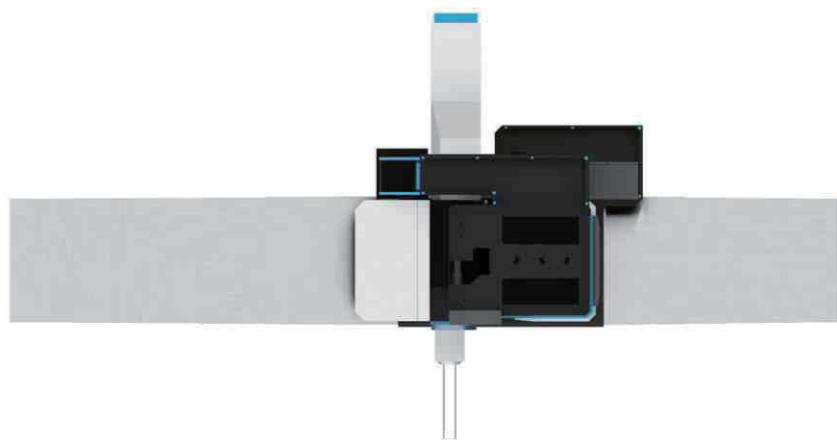
Specification <i>Especificaciones</i>	Unit	TK6913	TK6916	TK6920	TK6926
Boring spindle diameter <i>Diámetro del husillo</i>	mm	Φ130	Φ160	Φ200	Φ260
Spindle taper <i>Tipo de cono</i>		ISO 50	ISO 50	ISO 60	ISO 60
Spindle speed <i>Velocidad del husillo</i>	rpm	1500 (Op:3000)	1200 (Op:2000)	1000 (Op:2000)	1000 (Op:1500)
Size of ram section <i>Tamaño de RAM</i>	mm	380x420	480X520	480x520	640x720
Total travel of boring spindle and ram <i>Total recorrido de la cabezal y Ram</i>	mm	1500	2400	2400	3200
Travel of boring spindle (W axis) <i>Salida del husillo W</i>	mm	700	1200	1200	1600
Axial travel of ram--Z axis <i>Recorrido RAM --Z axis</i>	mm	800	1200	1200	1600
Vertical travel of boring head --Y axis <i>Recorrido vertical de la cabezal--Y axis</i>	mm	2000 (Op.:3m)	3000 (Op.:4m, 5m)	3000 (Op.:4m, 5m, 6m)	3000 (Op.:4m, 5m, 6m, 7m)
Longitudinal travel of column--X axis <i>Recorrido longitudinal de la columna--X axis</i>	mm	4000 (Op.:5-15m)	6000 (Op.:7-20m)	6000 (Op.:7-20m)	8000 (Op.:9-20m)
Main motor power <i>Potencia del motor principal</i>	kW	30	51	71	90
CNC system		Siemens/Fanuc	Siemens/Fanuc	Siemens/Fanuc	Siemens/Fanuc



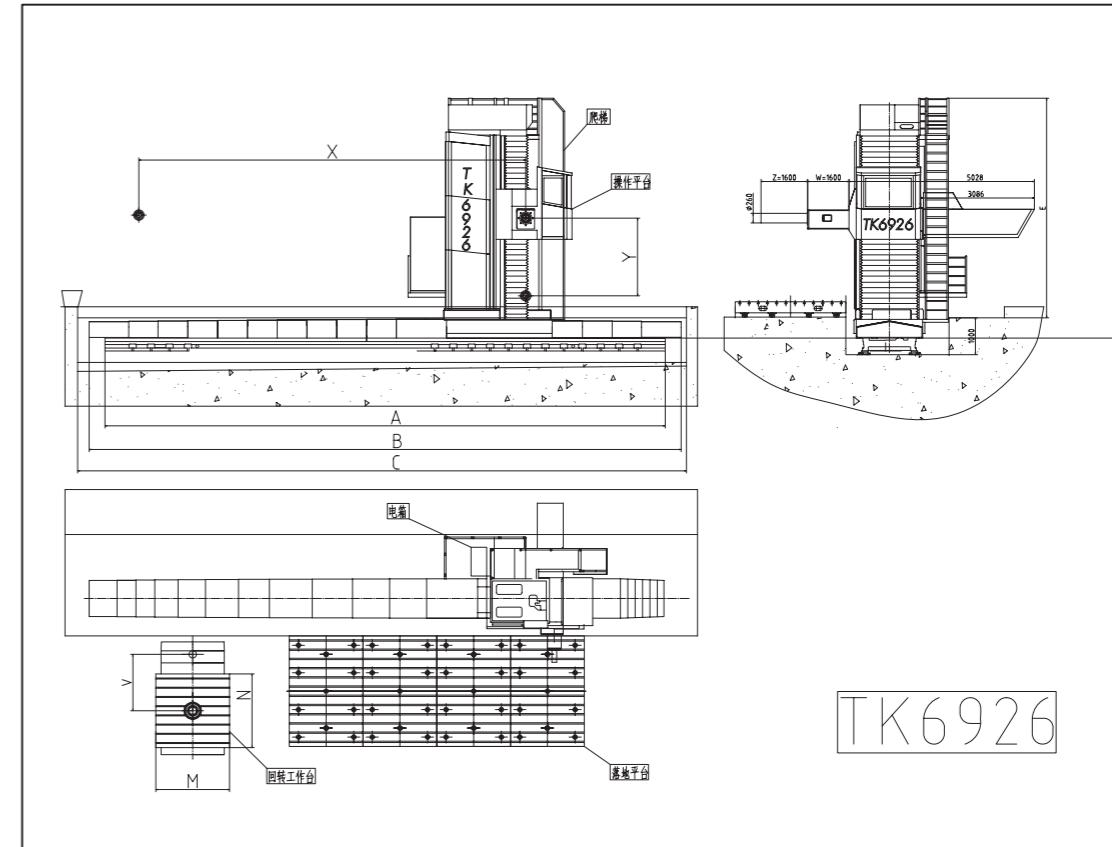
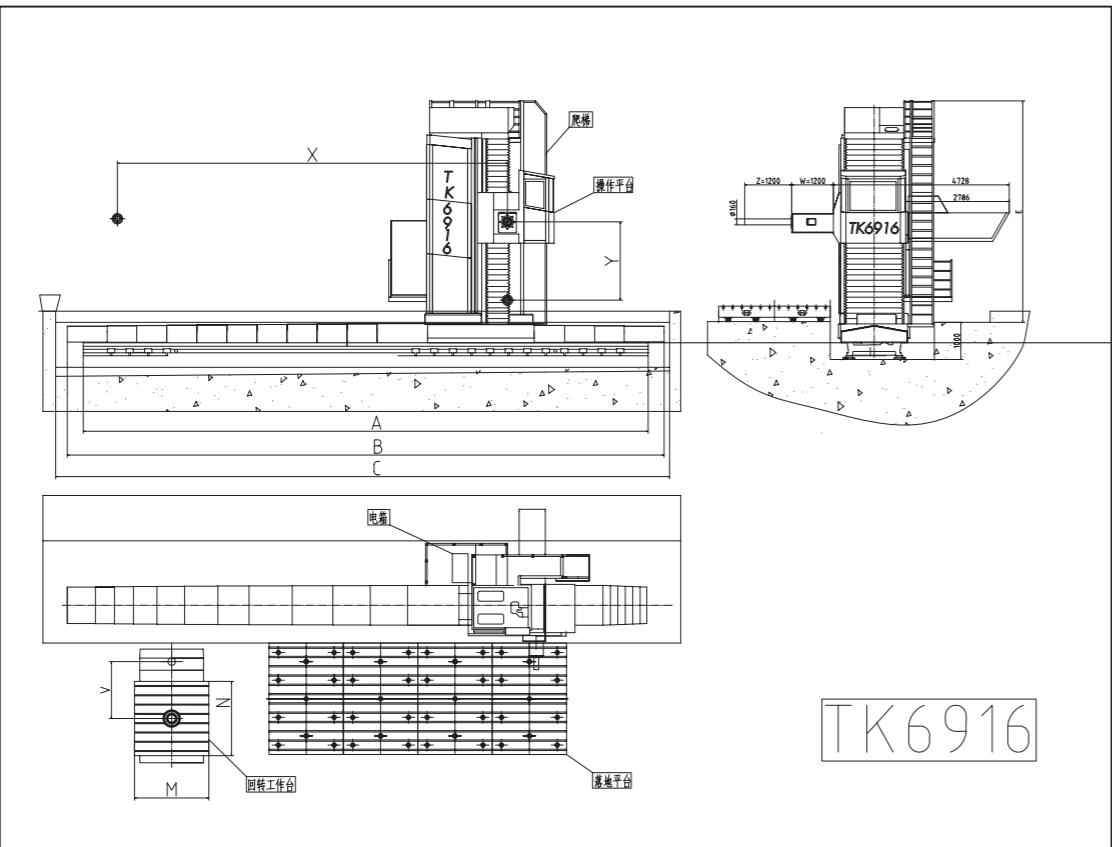
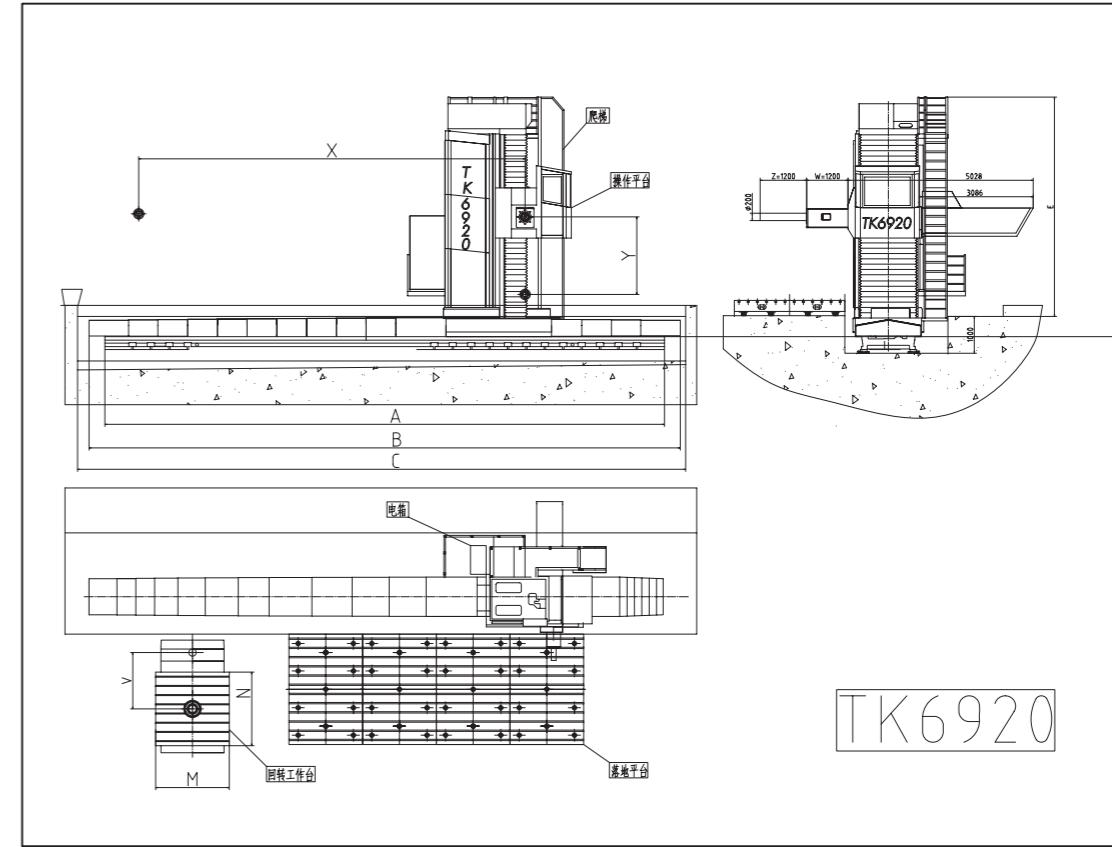
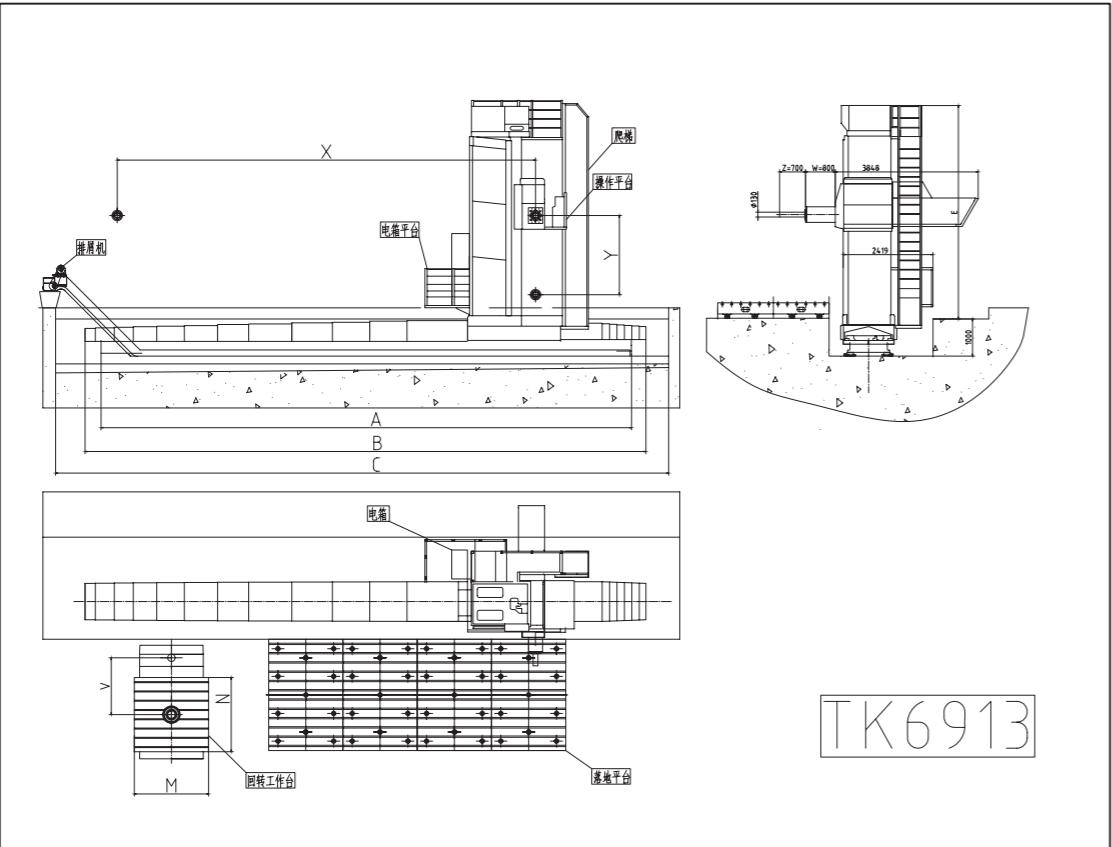
3D View

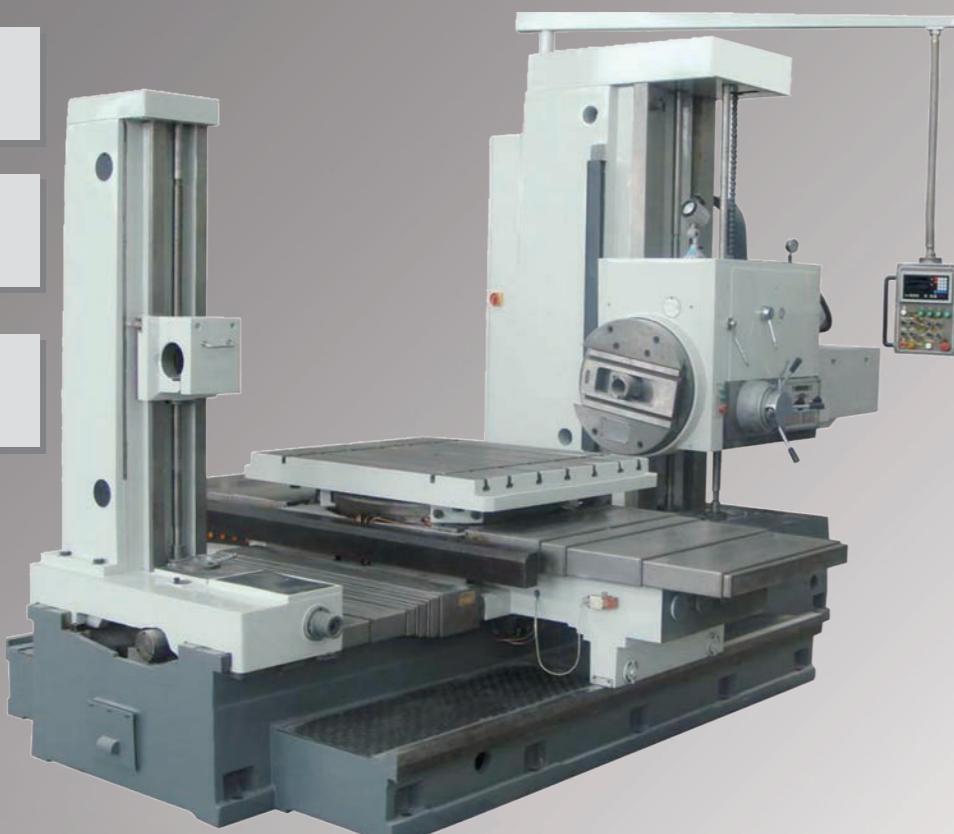


3D View

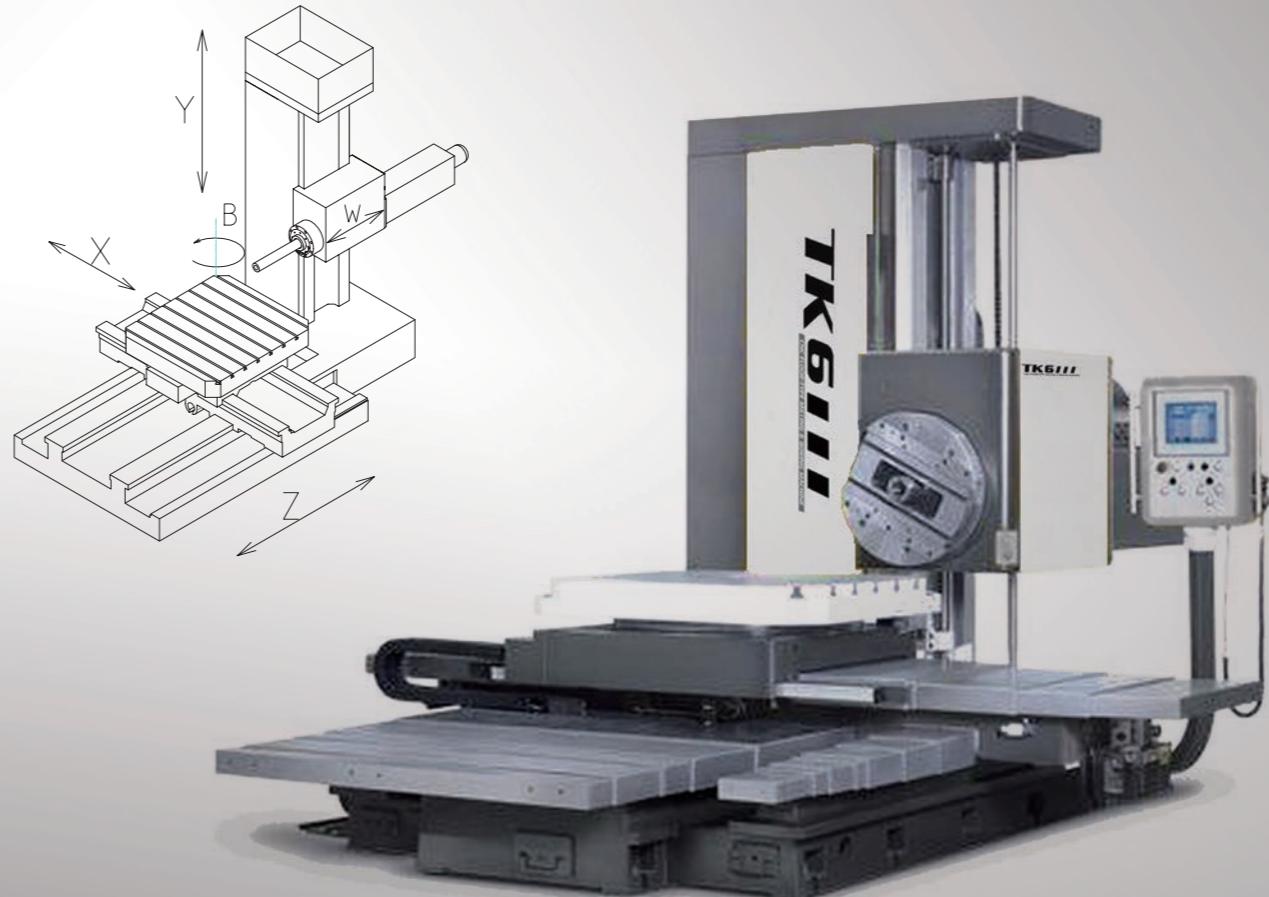


Main Structure





Specification <i>Especificaciones</i>	Unit	TK6111	TK6113	TK6516
Spindle diameter <i>Diámetro del husillo</i>	mm	110	130	160
Spindle taper <i>Tipo de cono</i>		ISO50	ISO50	ISO50
Shank specification <i>Tipo de porta-herramientas</i>		JT50	JT50	JT50
Max. spindle speed <i>Max. velocidad del husillo</i>	rpm	1500 (Op.:3000)	1500 (Op.:3000)	1200 (Op.:2000)
Motor power-Servo <i>Potencia del servo motor</i>	kW	15	22	40
Table size <i>Tamaño de la mesa</i>	mm	1400X1200 (Op.: Other size)	1600X1400 (Op.: Other size)	2200X1800 (Op.: Other size)
Table loading capacity <i>Capacidad de la carga en la mesa</i>	Kg	5000 (Op.: Other load)	8000 (Op.: Other load)	20000 (Op.: Other size load)
Cross travel of table <i>Recorrido transversal de la mesa--X axis</i>	mm	1600 (Op.:2m)	1800 (Op.:2m,3m)	3000 (Op.:3m,4m, 5m)
Vertical travel of spindle head <i>Recorrido vertical del husillo--Y axis</i>	mm	1400 (Op:2m)	1600 (Op:2m)	2000 (Op:3m, 4m)
Longitude travel of worktable <i>Recorrido longitudinal de la mesa--Z axis</i>	mm	1300	1600	1600
Axial travel of boring spindle <i>Salida del husillo--W axis</i>	mm	600	800	1000
Table rotary indexing <i>La mesa giratoria con indexación--B axis</i>	degree	360°	360°	360°
CNC system		Fanuc/Siemens	Fanuc/Siemens	Fanuc/Siemens



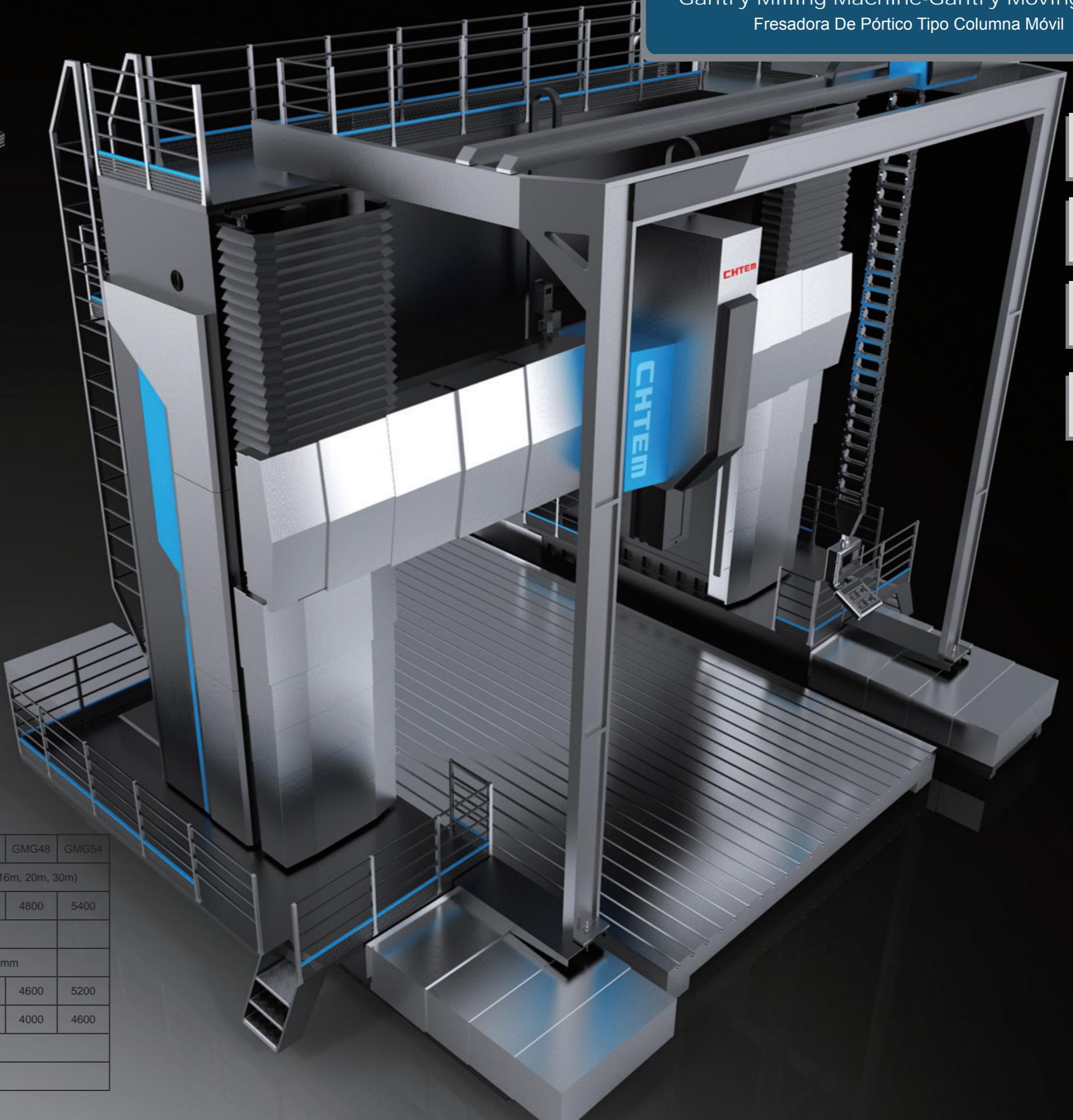
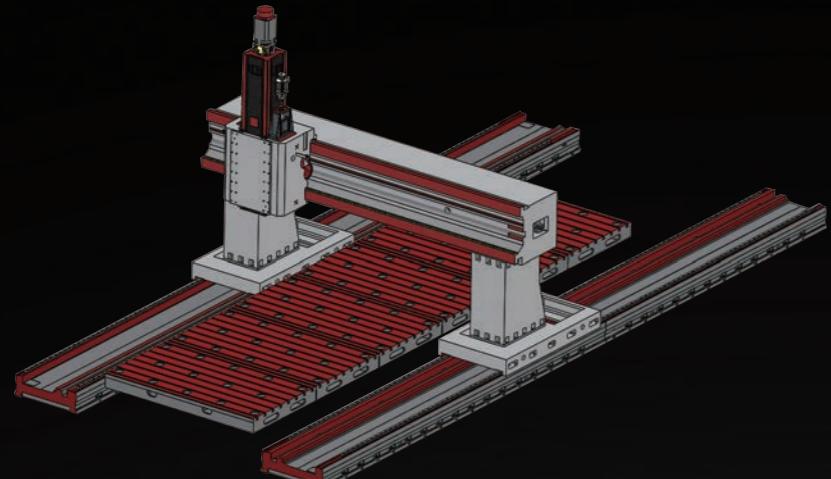
Specifications <i>Especificación</i>	Unit	TPX6113A	TPX6113B	TPX6113C
Spindle diameter <i>Diámetro del husillo</i>	mm	130	130	130
Spindle Taper <i>Tipo de cono</i>		Metric 80 (7:24 No50)	Metric 80 (7:24 No50)	Metric 80 (7:24 No50)
Speed range of spindle <i>Gama de revoluciones</i>	r/min	4-800	4-800	4-800
Power of main motor <i>Potencia del motor principal</i>	kW	15	15	15
Facing head diameter <i>Diámetro del cabezal</i>	mm	750	750	750
Table size(L x W) <i>Tamaño de la mesa (L x W)</i>	mm	1600x1400	1600x1400	1800x1600
Max. load of table <i>Max.carga en la mesa</i>	kg	8000	8000	8000
X-axis travel <i>Recorrido eje X</i>	mm	1600	2000	2000
Y-axis travel <i>Recorrido eje Y</i>	mm	1500	1800	2000
Z-axis travel <i>Recorrido eje Z</i>	mm	1500	1500	1500
W-axis travel <i>Recorrido eje W</i>	mm	900	900	900
U-axis travel(Slide of facing head travel) <i>Recorrido eje U(Recorrido de la cabezal)</i>	mm	250	250	250
B-axis angulations <i>Angulación de eje B</i>	degree	360	360	360
Rapid travel(X/Y/Z) <i>Recorrido rapido(X/Y/Z)</i>	mm/min	2500	2500	2500
B-axis measurement system reading precision <i>Sistema de medición de precisión visual eje B</i>	degree	0.001	0.001	0.001



Specification <i>Especificaciones</i>	Unit	GMT21	GMT24	GMT28	GMT32	GMT36	GMT42
X axis-Worktable travel <i>Recorrido de la mesa X</i>	mm	2000mm(Op:3m, 4m, 5m, 6m, 7m, 8m)					
Y axis-Spindle base travel <i>Recorrido del husillo Y</i>	mm	2100	2400	2800	3200	3600	4200
Z axis-Ram vertical travel <i>Recorrido vertical de RAM Z</i>	mm	1000(Op:1500, 2000)					
Distance between columns <i>Distancia entre columnas</i>	mm	2000	2200	2600	3000	3400	4000
Worktable width <i>Ancho de la mesa</i>	mm	1600	1800	2200	2600	3000	3600
Worktable length <i>Largo de la mesa</i>	mm	Depend on X axis					
CNC system <i>Sistema CNC</i>		Siemens/Fanuc					



Option: With Enclosed Guard



Specification <i>Especificaciones</i>	Unit	GMG24	GMG28	GMG32	GMG36	GMG42	GMG48	GMG54
X axis-Worktable travel <i>Recorrido de la mesa-X</i>	mm	5000mm(Op: 6m, 7m, 8m, 10m, 12m, 14m, 16m, 20m, 30m)						
Y axis-Spindle base travel <i>Recorrido del husillo-Y</i>	mm	2400	2800	3200	3600	4200	4800	5400
Z axis-Ram vertical travel <i>Recorrido vertical de RAM-Z</i>	mm	1000(Op:1500, 2000, 2500)						
W axis-Crossbeam vertical travel <i>Recorrido vertical de eje W-transversal</i>	mm	Option:1000mm, 2000mm, 3000mm, 4000mm						
Distance between columns <i>Distancia entre columnas</i>	mm	2200	2600	3000	3400	4000	4600	5200
Worktable width <i>Ancho de la mesa</i>	mm	1800	2200	2600	3000	3400	4000	4600
Worktable length <i>Largo de la mesa</i>	mm	Depend on X axis						
CNC system <i>Sistema CNC</i>		Siemens/Fanuc						

Machines In Different Customers La Pieza
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