









Page 7



Page 9



Page 11



Page 13





### Company introduction

- KMTC is domiciled in the Chinese town Kunming, on the plateau of "eternal spring"
- KMTC has a tradition of more than 70 years of successful production of machine tools for the world market
- During this period more than 100 large machine tools were new developed and some thousands were sold worldwide
- Over the last decade, the products were honored with numerous
  - · Innovation,
  - · Standardization and
  - · Quality Awards
- · KMTC holds 16 patents in machine tool building
- · KMTC main products:
  - Boring and milling machines (table-type and floor-type design)
  - · Horizontal machining centers
  - · Jig boring machines
  - · Portal milling machines

- · KMTC covers branches as:
  - aerospace
  - · plant engineering
  - · ship building
  - · general engineering
  - · power plant construction, etc.
- KMTC is listed at stock exchanges, both in Shanghai and Hongkong
- Currently, Chinas largest base for manufacturing of precision machine tools is under construction in Kunming



#### »I FEEL CONFIDENT:

WITH KMTC THE REFERENCE OF QUALITY FROM CHINA COMBINED THE WARRANTY OF SCHIESS FROM GERMANY!»

# CNC Horizontal Boring and Milling Machines



#### A) with fixed facing head:

Choose A-1, A-2, A-3, A-4 customs:

- · High-pressure braces, Pump valves, Petrol machinery, Chemical machinery.
- While processing, high facing head using frequency, spindle and facing head change frequently, without vertical milling head and other accessories, main big diameter hole was completed by facing head.

#### B) without facing head:

Choose B-1, B-2, B-3, B-4 customs:

- Construction machinery, automotive parts, aerospace, moulds, engines etc.
- While processing, milling and boring, high rigidity of spindle required and overhang processing, use vertical and universal milling head, removable facing head, high versatility processing requirement.

Item	Unit	A-1	B-1	A-2	B-2	A-3	B-3	A-4	B-4
Spindle diameter	mm	90	90	110	110	110	110	110	110
Spindle speed	rpm	5-1500	5-1500	10-1500	10-3000	10-1500	10-3000	10-1500	10-3000
Spindle power	kW	11	11	15	22	15	22	15	22
Spindle max. torque	Nm	1518	1518	1400	1000	1400	1000	1400	1000
Facing head diameter	mm	600	-	650	-	650	-	650	-
Facing head speed	rpm	5-200	-	7-165	-	7-165	-	7-165	-
Facing head max. torque	Nm	2277	-	2175	-	2175	-	2175	-
Table size	mm	900×1000	900×1000	1250×1250	1250×1250	1250×1400	1250×1400	1250×1400	1250×1400
Load of table	t	2.5	2.5	5	5	5	5	5	5
Transverse travel of table X	mm	1000	1000	1400	1400	1600	1600	1800	1800
Vertical travel of spindle head Y	mm	900	900	1200	1200	1200	1200	1400	1400
Longitudinal travel of table Z	mm	1100	1100	1200	1200	1200	1200	1400	1400
Travel of spindle W	mm	550	550	600	600	600	600	600	600
Travel of facing head slide	mm	160	-	200	-	200	-	200	-
Positioning accuracy X/Y/Z	mm	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Machine total weight	t	12	12	17.5	17	18.5	18	19	18.5
CNC system	Siemens	Sinumerik 828	>	>	>	>	>	>	>



# CNC Horizontal Boring and Milling Machines

### Serie 61

- The column is fixed on the bed and the spindle head is mounted on guideways at the column side. At the bed in front of the column a rotary table is mounted on a cross saddle. According to the different type of spindle heads this series is separated into standard types (with fixed facing head) and B types (without inbuilt facing head).
- · ATC available as option.
- B type can be equipped with milling heads or boring spindle supports sleeve etc. to increase the machining efficiency.

Item	Unit	TK6111 TH6111	TK6113 TH6113	TKS6111 THS6111	TH61140
		TK6111B TH6111B	TK6113B TH6113B		
Table size	mm	1400×1400	1400×1600	1250×1400	1400×1400
Table load max.	t	5	8	5	5
Spindle diameter	mm	110	130	110	200
Spindle speed	rpm	10-1500	6-1000	10-3000	10-3000
Transverse travel of table	mm	1700	1800	2000	1700
Vertical travel of spindle head (Y)	mm	1400	1600	1600	1400
Longitudinal travel of table (Z)	mm	1400	2000	1200	1400
Travel of spindle (W)	mm	600	900	550	500
Travel of facing head slide	mm	200	200	-	-



# CNC Planer-Type Boring and Milling Machines (Ram Type)

### Serie 65

- This series is equipped with square ram, with good performances and wide working range. Drilling, boring, grooving and plane milling can be finished by single set-up, only.
- Special accessories (e.g. ATC, chip conveyors, external and internal cooling system etc.) enlarge the machining range and improve the work efficiency.

Item	Unit	TK6513	TK6516	TK6516	XH7725		
item	Unit	TH6513	TH6516	TH6516	АП	, 25	
Diameter of Boring Spindle	mm	130	160	160	CYTEC	Head	
Spindle Speed	rpm	2-1500	2-1500	2-1500	18000	12000	
Power of Spindle Motor	kW	37	51	51	21	34	
Diameter of Facing Head	mm	630	-	-	-	-	
Speed of Facing Head	rpm	2-120	-	-	-	-	
Table Size (W×L)	mm	2000×2000	2000×2000	2000×2000	Ø 2500	Ø 2500	
Max. Load of Table	t	20	20	20	15	15	
Transverse Travel of Table (X)	mm	2000 (3000, 4000)	2000 (3000, 4000)	2000 (3000, 4000)	2000	2000	
Vertical Travel of Spindle Head (Y)	mm	2000 (2500, 3000)	2000 (2500, 3000)	2000 (2500, 3000)	2500	2500	
Longitudinal Travel of Column (W)	mm	1500 (2000)	1500 (2000)	1500 (2000)	1500	1500	
Axial Travel of Spindle (Z)	mm	800	800	800	-	-	
Ram Travel (V)	mm	800	800	1000	800	800	



# CNC Planer-Type Boring and Milling Machines

### Serie 65

- The entire machine layout is designed as T-shape incl. bed as closed box shape with high rigidity.
- · ATC available as option.
- B type can be equipped with milling heads or boring spindle support sleeve etc. to increase the machining efficiency.
- Suitable for perform milling, drilling, boring, tapping and 3D curve face and other multiple step process machining of big sized and medium sized work pieces. This series is used mainly for engineering machinery, automotive, mining equipments, engines, power industry, ship building, steel construction industry.

Thom	llm:a	TK6511 TH6511	TK6513A TH6513A	TK6516A TH6516A		
Item	Unit	TK6511A TH6511A	TK6513B TH6513B	TK6516B TH6516B		
Spindle diameter	mm	110	130	160		
Spindle speed	rpm	10-1500 (10-2000) (10-2500)	10-1500 (10-2000)	10-1500		
Table size	mm	1250×1250 (1250×1400)	1400×1600 (1600×1800, 1800×2000)	1800×2000 (2000×2000, 2000×2500)		
Max. Load of table	t	50	10	20		
Transverse travel of table (X)	mm	2000 (3000)	2000 (2500, 3000, 3500, 4000)	2000 (3000, 4000)		
Vertical travel of spindle head (Y)	mm	1600 (2000)	1600 (2000, 2500)	2000 (2500, 3000)		
Longitudinal travel of column (Z)	mm	1500	1250 (1600, 2000, 2500)	2000		
Travel of spindle (W)	mm	600	900	900		
Travel of facing head slide (U)	mm	200 (A Type)	300 (A Type)	300 (A Type)		



# CNC Floor-Type Boring and Milling Machines

### Serie 69

- With good performance and wide working range this series machines can finish drilling, boring, grooving and plane milling in a single set-up. Also high precision holes can be machined.
- Equipment with special accessories such as ATC, chip conveyor, external cooling system and internal cooling system etc. can enlarge the machining range and improve the work efficiency
- Five axes simultaneously machining can be realized with a CNC rotary table and a two axes AC universal milling head.

#### series of compound guideways

Specifications		TK6913	TK6916Q	TK6916A	TKS6916	TK6920A	TK6922A
	Unit	TH6913	TH6916Q	TH6916A	linar guideway type	TH6920A	TH6922A
Diameter of Boring Spindle	mm	130	160	160	160	200	225
Power of Spindle Motor	kW	37	51	51	51	60	71
Cross Travel of Column (X)	mm	6000	6000	8000	6000	10000	12000
Vertical Travel of Spindle Head (Y)	mm	2000	2000	3000	3000	4000	4000
Axial Travel of Ram (Z)	mm	800	800	1100	1000	1200	1250
Travel of Spindle (W)	mm	800	800	900	800	1200	1250

X, Y axes are extendable

#### series of hydrostatic guideways

		TK6916J	TK6920J	TK6922J	TVCODE
Specifications	Unit	TH6916J	TH6920J	TH6922J	TK6926
Diameter of Boring Spindle	mm	160	200	225	260
Power of Spindle Motor	kW	60	71	71	129
Cross Tracel of Column (X)	mm	8000	10000	10000	12000
Vertical Travel of Spindle Head (Y)	mm	3000	4000	5000	5000
Axial Travel of Ram (Z)	mm	1200	1400	1400	1800
Travel of Spindle (W)	mm	1000	1200	1200	1600

X, Y axes are extendable



#### **CNC Rotary and Traversing Tables**

	1800×2000	2000×2000	2500×2500	3000×3000	3500×3500	4000×4000	4500×4500	5000×5000
Table Size (W×L) mm	2000×2000	2000×2500	2500×3000	3000×3500	3500×4000	4000×4500	5000×5000	5000×6000
	2000×2500		3000×3000	3000×4000	4000×4000	4000×5000	5000×6000	
Table load max. t	20	30	40	60	80	100	160	200
Linear travel in mm	2000	2000	2000	2000	2000	2000	3000	4000

# CNC Gantry-Type Milling and Boring Machines

Serie 21-28

- · Four versions of structure are provided:
  - Series XK21 with moving cross rail and fixed column:
  - 2) Series XK24 with fixed column and cross rail;
  - 3) Series XK27 with fixed cross rail and moving column;
  - 4) Series XK28 with moving cross rail and column.
- This series machine is suitable for perform machining as milling, drilling, boring, tapping and curved surfaces etc. of big and medium working parts. After the integration with milling heads some five side surfaces of working parts and five axes simultaneously machining of various complicated surfaces can be realized.
- This machine is applicable for industries like heavy engineering machinery, automobile, mine facility, large engines, steam turbines, ship building, steel and military industries.



Item	Unit	XK2120	XK2125	XK2130	XK2135	XK2420	XK2425	XK2430	XK2435	XK2730
Table size (W×L)	mm	2000×4000	2500×6000	3000×8000	3500×10000	2000×4000	2500×6000	3000×6000	3500×6000	3000×10000
Max. table loading	t	12	12	12	12	15	25	30	35	-
Max. table loading	t/m²	-	-	_	_	-	-	_	-	25
X axis travel	mm	3600	4100	4600	5100	3000	3500	4000	4500	4800
Y axis travel	mm	3600	4100	4600	5100	3000	3500	4000	4500	4800
Z axis travel	mm	1000/1250	1250/1500	1250/1500	1500/2000	1000	1250	1250	1250	1500
W axis travel	mm	1500/2000/2500	1500/2000/2500	2500/3000	2500/3000	-	-	-	-	-



XK2735	XK2740	XK2745	XK2750	XK2830	XK2835	XK2840	XK2845	XK2850	XK2855	XK2860
3500×10000	4000×12000	4500×12000	5000×12000	3000×10000	3500×10000	4000×12000	4500×12000	5000×18000	5500×18000	6000×18000
-	-	-	-	-	-	-	-	_	-	-
25	25	25	25	25	25	25	25	25	25	25
5300	5800	6300	6800	4800	5300	5800	6300	6800	7300	7800
5300	5800	6300	6800	4800	5300	5800	6300	6800	7300	7800
1500	1500	1500	1500	1500/2000	1500/2000	1500/2000	1500/2000	1500/2000	1500/2000	1500/2000
-	-	-	-	1500/2000	2000/2500	2000/2500	2500/3000	2500/3000	3000/3500	3000/3500



SCHIESS GmbH

Ernst-Schiess-Strasse 1 06449 Aschersleben Germany Contact - Sales

(1) +49 (0) 3473 968-333

(2) +49 (0) 3473 968-121

(3) vertrieb@schiess.de

(1) +49 (0) 3473 968-222(2) ±49 (0) 3473 968-146(3) ±5 service@schiess.de

Contact - Service