

CATALOG OF HAISEN MACHINERY

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I . PRODUCTS

1. CNC Single Column Vertical Lathe

The main applications of CNC single column vertical lathe include the rough and fine machining on the inner and out cylindrical surfaces, inner and outer conical surfaces, threads, curved surfaces and complex surface of the parts, which are made from ferrous metal, or nonferrous metal, and some of which are from nonmetal materials, by using high speed steel, carbide alloy tools and cutting ceramics.



Parameters	Unit	CHK5112A	CHK5116A	CHK5120A	CHK5123A
Max. machining diameter	mm	1250	1600	2000	2300
Max. height of workpiece	mm	1000	1000	1250	1350
Max. weight of work piece	t	3.5	5	8	8

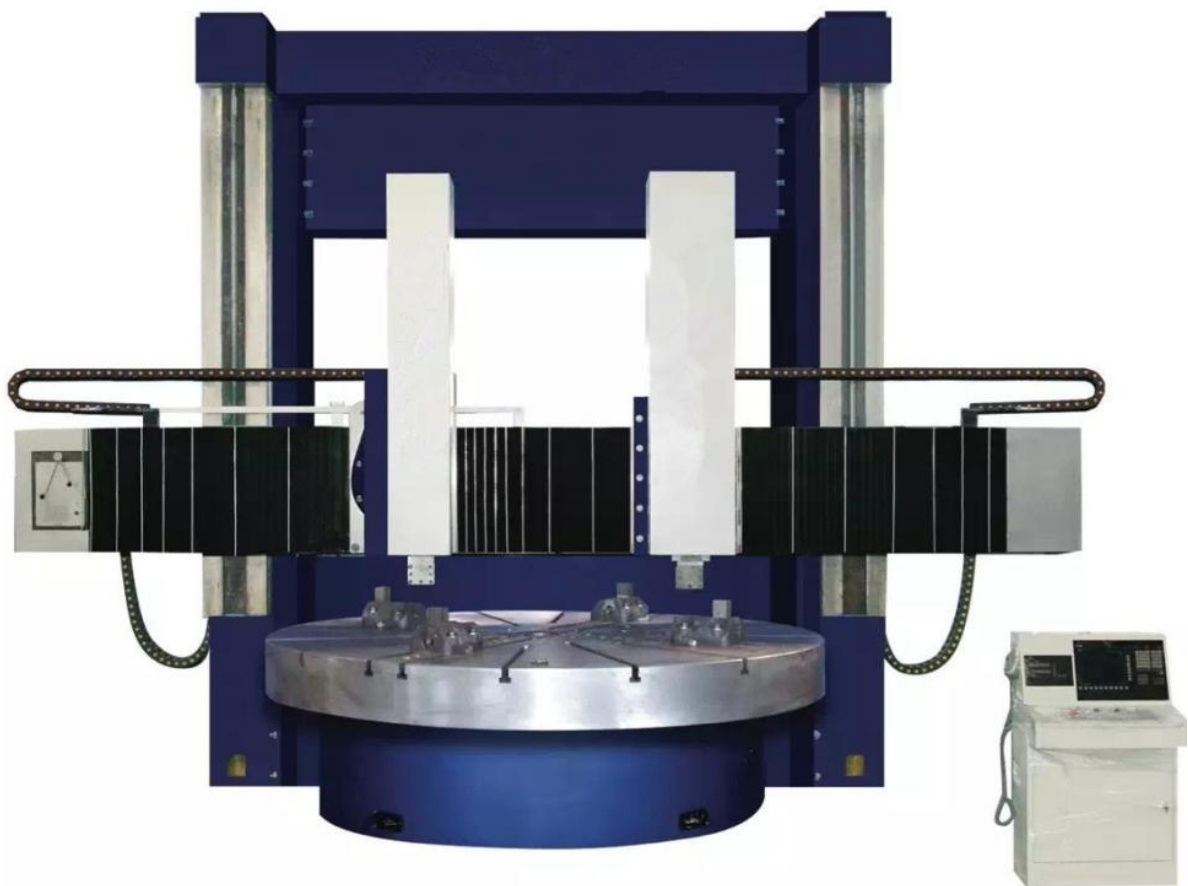
Table diameter	mm	1000	1400	1800	2000
Table speed step		16 (II gear stepless, stepless)	16 (II gear stepless, stepless)	16 (II gear stepless, stepless)	/
Table speed range	r/min	6.3-200	5-160	2.5-125	2.5-100
Max. table torque	KN.m	17.5	25(16)	32(25)	20
Max. cutting force of vertical tool head	KN	20	25(18)	25(18)	20
Horizontal travel of vertical tool head	mm	-720	-935	-1135	-20—1150
Vertical travel of vertical tool head	mm	650	800	800	800
Feed range of vertical tool head	mm/min	0.1-2000	0.1-2000	0.1-2000	/
Rapid moving speed of tool head	mm/min	10000	10000	10000	/
Travel of cross rail		650	650	890	890
Cross section area of tool bar	mm	32*40	32*40	32*40	/
Main motor power	Kw	AC:22(DC:37)	AC:30(DC:55)	AC:37 (DC:55)	/
Electric tool post	mm	320*320	320*320	320*320	/
CNC system		SIEMENS	SIEMENS	SIEMENS	SIEMENS

Typical workpiece



2. CNC Double Column Vertical Lathe

CNC double column vertical lathe is advanced equipment with excellent performance, wide application range and high efficiency and hydraulic technologies. Used in hard alloy and ceramic cutting tool. It is able to have rough and refined machining to the inner and outer cylinder, inner and outer conical surface, plane, arc and complex surface of parts made of ferrous metal, nonferrous metal and some non-metallic materials.



Parameters		Unit	CHK5225	CHK5235	CHK5240	CHK5245
Table diameter		mm	2250	2850	3600	3800
Max. turning diameter of work piece		mm	2500	3500	4000	4500
Max. height of work piece		mm	1600	2000/2500/3150	2000/2500/3150	2000/2500/3150
Max. weight of work piece(W)		t	10/16	10/16	25/32	25/32
Max. cutting force of tool head	Right	N	35000	40000	40000	40000
	Left	N	30000	35000	35000	35000
Max. table torque		N.m	32000	80000	80000	80000
Table speed range		r/min	2.5-80	0.63-63	0.63-63	0.5-50
Feed range of tool head		mm/m in	0.1-2000	0.1-500	0.1-500	0.1-500
Travel of cross rail		mm	1250/1650/1850	1250/1650/1850	1750/2250/2850/315	1750/2250/2850/315
Travel of tool head	Horizontal	mm	-1520	-1860	-2285	-2470
	Vertical	mm	1000	1250/1400	1000/1250/1400	1000/1250/1400
Moving speed of cross rail		mm/m in	350	350	300	300
Rapid moving speed of tool head		mm/m in	4000	4000	4000	4000
Max. rotation angle of tool head		degree	±30°	(-15°~+30°)	(-15°~+30°)	(-15°~+30°)
Cross section area of tool bar		mm	40*40	50*50	50*50	50*50
Cross section area of ram		mm	220	240	240	240
Main motor power		kw	55	55	55	55
CNC system			SIEMENS	SIEMENS	SIEMENS	SIEMENS

Parameters		Unit	CHK5250	CHK5263	CHK5280	CHK52100
Table diameter		mm	4200	5700	6300/7100	7100/7500
Max. turning diameter of work piece		mm	5000	6300	8000	10000
Max. height of work piece		mm	2500/3150/4000	3150/4000/4500	4000/4500/5000	4500/5000
Max. weight of work piece(W)		t	25/32	25/40	100/125	100/150/200
Max. cutting force of tool head	Right	N	50000	63000	80000	100000
	Left	N	35000	50000	63000	80000
Max. table torque		N.m	125000	200000	460000	640000
Table speed range		r/min	0.5-50	0.32-32	0.2-20	0.2-20
Feed range of tool head		mm/min	0.1-500	0.1-500	0.1-500	0.1-500
Travel of cross rail		mm	1750/2250/2850/3150	1750/2250/2850/3150	3000/3650/4250	3750/4250
Travel of tool head	Horizontal	mm	-2785	-3600	-4450	-5450
	Vertical	mm	1400/1600/2000	1600/2000/2500	2000/2500/2750	2500/2750
Moving speed of cross rail		mm/min	350	230	230	230
Rapid moving speed of tool head		mm/min	4000	4000	4000	4000
Max. rotation angle of tool head		degree	(-15°~+30°)	(-15°~+30°)	(-15°~+30°)	(-15°~+30°)
Cross section area of tool bar		mm	50*50	60*60	70*70	80*80
Cross section area of ram		mm	280	320	360	400
Main motor power		kw	75	90	110	132
CNC system			SIEMENS	SIEMENS	SIEMENS	SIEMENS

3. Conventional Single Column Vertical Lathe

The conventional single column vertical lathe satisfies heavy cutting, table overload, high dynamic and static accuracy, safe and reliable movements, long service life and high machining efficiency.

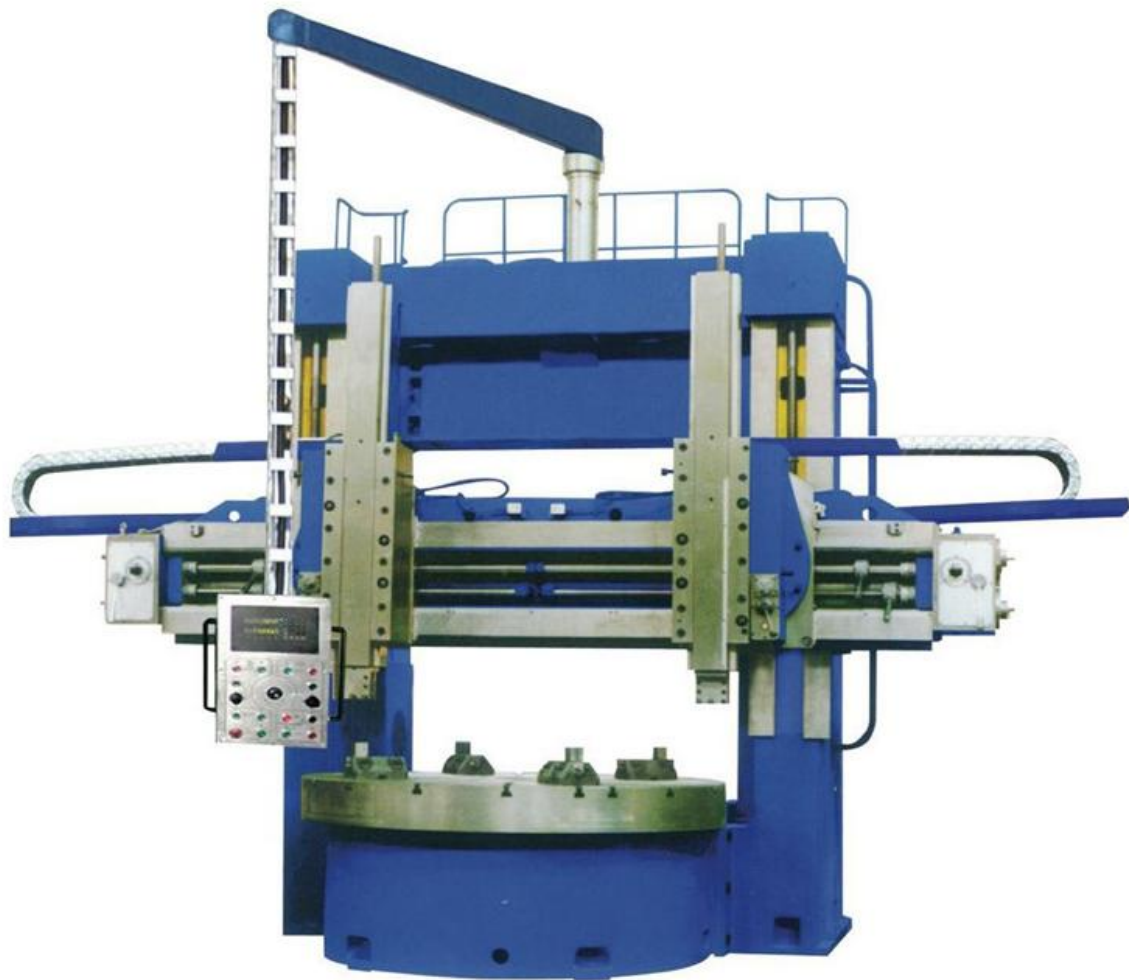
This machine is double column vertical lathe which is mainly composed of workbench, lathe bed, gearbox, cross beam, vertical tool rest, digital display, electric cabinet and other parts.



Parameters	Unit	CHP5112A	CHP5116A	CHP5120A	CHP5123A	CHP5126A
Max. turning diameter	mm	1250	1600	2000	2300	2600
Table diameter	mm	1010	1400	1800	2000	2300
Max. height of work piece	mm	1000/1250/1400	1000/1400/1600	1250/1600/1800	1250/1600/1800	1500
Max. weight of work piece	t	5	8	10	10	10
Max. cutting force of vertical tool head	Kn	20	25	25	25	/
Max. cutting force of lateral tool head	Kn	20	20	20	20	/
Max. table torque	Kn.m	17.5	25	32	32	/
Table speed range	r/min	6.3-200	5-160	2.5-125	2.5-125	1.2-40
Move degree limit of vertical tool head		±30°	±30°	±30°	±30°	/
Feed range of tool head(12 steps)	mm/min	0.8-86	0.8-86	0.8-86	0.8-86	/
Travel of cross rail	mm	650/830/1050	650/1050/1250	900/1250/1450	900/1250/1450	/
Moving speed of cross rail	mm/min	440	440	440	440	/
Horizontal travel vertical tool head	mm	700	915	1050	1200	/
Travel of ram, vertical tool head	mm	650	800/1000	800/1000	800/1000	630
Horizontal travel of vertical tool head	mm	500	630	630	630	/
Vertical travel of lateral tool head	mm	970	980	1180	1180	/
Rapid moving speed of tool head	mm/min	1800	1800	1800	1800	/
Section height of tool bar	mm	40	40	40	40	
Main motor power	Kw	22	30	37	37	/

4. Conventional Double Column Vertical Lathe

Conventional double column vertical lathe is the high-tech electromechanical integration products which absorb advanced design and manufacturing technology at home and abroad, conforming to the latest precision standard of the state, configured with domestic and foreign advanced units with the strong cutting in structure performance, high static and dynamic stiffness of machine tool, safe and reliable movement, long life and high machining efficiency.



Parameters		Unit	CHP5225	CHP5235	CHP5240	CHP5245
Table diameter		mm	2250	2850	3600	3800
Max. turning diameter of work piece		mm	2500	3500	4000	4500
Max. height of work piece		mm	1600	2000/2500/3150	2000/2500/3150	2000/2500/3150
Max. weight of work piece		t	10/16	10/16	25/32	25/32
Max. cutting force of tool head	Right	N	35000	40000	40000	40000
	Left	N	30000	35000	35000	35000

Max. table torque	N.m	63000	80000	80000	80000
Table speed changing steps	Step	16	16	16	16
Table speed range	r/min	2.5-63	0.63-63	0.63-63	0.5-50
Feed steps	Step	18	18	18	18
Feed range of tool head	mm/min	0.25-90	1-500	1-500	1-500
Travel of cross rail	mm	1250/1650/1850	1250/1650/1850	1750/2250/2850/3150	1750/2250/2850/3150
Travel of tool head	Horizontal	mm	1400	1900	2200
	Vertical	mm	1000	1250/1400	1000/1250/1400
Moving speed of cross rail	mm/min	350	350	300	300
Rapid moving speed of tool head	mm/min	1550	4000	4000	4000
Max. rotation angle of tool head	degree	±30°	(-15°~+30°)	(-15°~+30°)	(-15°~+30°)
Cross section area of tool bar(W*H)	mm	40*50	50*50	50*50	50*50
Main motor power	kw	55	55	55	55

Parameters	Unit	CHP5250	CHP5263	CHP5280	CHP52100
Table diameter	mm	4200	5700	6300/7100	7100/7500
Max. turning diameter of work piece	mm	5000	6300	8000	10000
Max. height of work piece	mm	2500/3150/4000	3150/4000/4500	4000/4500/5000	4500/5000
Max. weight of work piece	t	25/32	25/40	100/125	100/150/200
Max. cutting force of tool head	Right	N	50000	63000	80000
	Left	N	35000	50000	63000
Max. table torque	N.m	80000	200000	460000	640000
Table speed changing steps	Step	16	16	16	16
Table speed range	r/min	0.5-50	0.32-32	0.2-20	0.2-20
Feed steps	Step	18	18	18	18
Feed range of tool head	mm/	1-500	1-500	1-500	1-500

		min				
Travel of cross rail		mm	1750/2250/2850/3 150	1750/2250/2850/3 150	3000/3650/4 250	3750/4250
Travel of tool head	Horizontal	mm	2700	3200	4400	5400
	Vertical	mm	1400/1600/2000	1600/2000/2500	2000/2500/2 750	2500/2750
Moving speed of cross rail		mm/ min	350	230	230	230
Rapid moving speed of tool head		mm/ min	4000	4000	4000	4000
Max. rotation angle of tool head		degr ee	(-15°~+30°)	(-15°~+30°)	(-15°~+30°)	(-15°~+30°)
Cross section area of tool bar(W*H)		mm	50*50	50*50	50*50	50*50
Main motor power		kw	75	90	110	132

5. Turning and Milling Combined Machine

Main components and main transmission adopt thermal symmetric structure with high thermal stability; Ram adopts high precision ball screw transmission, machine equipped with ATC automotive turning and milling combined tool magazine, position from 12-20.



Items	Unit	CKM2500	CKM3000	CKM6300
Max turning dia./machining dia.	mm	2500	3000	6300
Max machining height	mm	2000	2000	3150
Max workpiece weight	kg	16000	20000	50000
Z axis travel	mm	1400	1400	2000
W axis travel	mm	1200	1200	2700
X axis travel	mm	-0.423728814	-0.461538462	-0.910087719
Y axis travel	mm	-1	-1	12000
Worktable diameter	mm	2000	2500	5700
Spindle power	kW	74	74	74
Max worktable torque	Nm	54100	81200	100000
Worktable stepless turning speed	rpm	80/250	63/200	120
W axis rapid moving speed	mm/min	3000	3000	4000
X axis rapid moving speed	mm/min	20000	20000	-
Z axis rapid moving speed	mm/min	20000	20000	-
Milling spindle motor power	kW	37	37	17
Milling spindle torque	Nm	1200	1200	-
Milling spindle speed	rpm	3500	3500	3150
Tool holder	-	SK50/HSK 100/Capto C8		

6. Turning and Grinding Combined Machine

The turning and grinding combined machine can complete turning and grinding work of cylindrical surface, conical surface and a plane, both inside and outside of the rough finishing.



Specifications	Unit	CKLG5116
Max. turning diameter	mm	1600
Max. workpiece height	mm	1000
Max. workpiece weight	t	5
worktable		
Worktable diameter	mm	1250
Worktable changing speed series		stepless
Rotation speed range of worktable	r/min	4-240
Max. torque of worktable	N.m	7200
Main motor power	kw	22
tool post		
Max. cutting force of vertical tool post	KN	40
Max. ram travel of vertical tool post	mm	800
Rapid speed of vertical tool post	mm/min	10000
Feed series of vertical tool post		stepless
Feed range of vertical tool post	mm/min	0.1-2000
Section size of tool bar	mm	40
beam		
Max. travel of beam	mm	1000
Beam movement speed	mm/min	410
Beam lifting motor power	kw	5.5
Weight of machine(approx)	t	19.5

grinding		
Max. grinding diameter	mm	1600
Min. grinding bore	mm	100
Max. grinding depth	mm	800
Max machining height	mm	1000
Rotary speed	r/min	1000-2900
Grinding wheel diameter range	mm	50-300
Motor power	kw	7
Wheel spindle taper hole		1:10
Radial jump of grinding wheel	mm	0.003
End jump of grinding wheel	mm	0.003
Travel speed of X axis	mm	0-6000
Min. unit		0.001
Grinding head angle		±30°
Grinding cylindricity	mm	0.005/300
Plane grinding accuracy	mm	0.015

7. Vertical Machine Center

Structure is compact, cover an small area, good rigidity and vibration resistance. The vertical machine center can do milling, boring, drilling and tapping etc under one time clamping.



Specifications	Unit	MVD0536	MVD500	MVD700	MLH2285	MLH2285B
CNC Taping Center					Vertical Machine Center	
Table size	mm	600x360	650x400	900x420	2200X820	2200X820
Max. table load	kg	250	250	300	960	1400
X/Y/Z axis travel	mm	510x360x300	500x400x300	700x400x330	2000X800X700	2000x800x700
Spindle nose to table surface	mm	130-430	150-450	150-480	200-900	200-920
Spindle taper		BT30	BT30	BT30	BT40	BT50/ ϕ 190
Spindle speed	rpm	200-20000, 15000, 12000	200-20000, 15000, 12000	200-20000, 15000, 12000	100-8000	100-6000
Spindle Drive		Direct connection	Direct connection	Direct connection	synchronous belt	synchronous belt
X/Y/Z axis rapid feed speed	m/min	30/30/24	48	48	22/22/22	22/22/22
X/Y/Z axis cutting feed rate	m/min	10	10	10	15/15/12	15/15/12
Magazine capacity		BT30-14T	BT30-16T	BT30-16T	BT40-16/24	BT50-16/24
Positioning accuracy	mm	± 0.01	± 0.01	± 0.01	± 0.01	± 0.01
Repositioning accuracy	mm	± 0.005	± 0.005	± 0.005	± 0.008	± 0.008

Specifications	Unit	MLH640	MLH750	MLH7132	MLH7134
Vertical Machine Center					
Table size	mm	700x410	820x460	800x320	940x340
X/Y/Z axis travel	mm	600x400x510	600x400x510	500x320x350	600x340x450
Spindle nose to table surface	mm	150-660	150-660	120-470	120-570
Spindle taper		BT40	BT40	BT30	BT40
Spindle speed	rpm	100-8000	100-8000	80-6000	100-8000
X/Y/Z axis rapid feed speed	m/min	24/24/20	15/15/12	18/18/18	18/18/18
X/Y/Z axis cutting feed rate	m/min	10	8	10	10
Positioning accuracy	mm	± 0.007	± 0.008	± 0.007	± 0.007
Repositioning accuracy	mm	± 0.003	± 0.005	± 0.003	± 0.003

Specifications	Unit	MLH850	MLH850A	MLH850B	MLH856
Table size	mm	1000x500	1000x500	1000x500	1000x560
Max. table load	kg	580	520	520	450
Guide way		3 hard rail	2 linear rail, 1 hard rail	3 linear rail	3 linear rail
X/Y/Z axis travel	mm	800x500x510	800x500x510	800x500x510	850x500x510
Spindle nose to table surface	mm	150-660	150-660	150-660	150-660
Spindle taper		BT40	BT40	BT40	BT40
Spindle speed	rpm	100-8000	100-8000	100-8000	100-8000
Spindle motor	kw	7.5	7.5	7.5	7.5/11
X/Y/Z axis rapid feed speed	m/min	15/15/12	24/24/12	24/24/20	30/30/30
X/Y/Z axis cutting feed rate	m/min	8	10	10	10
Magazine type		Carousel or disc type	Carousel, disc type	Carousel, disc type	Carousel, disc type
Magazine capacity		BT40-16/24	BT40-16/24	BT40-16/24	BT40-16/24
Positioning accuracy	mm	±0.008	±0.007(X,Y)±0.008(Z)	±0.007	±0.007
Repositioning accuracy	mm	±0.005	±0.003(X,Y)±0.005(Z)	±0.003	±0.003

Specifications	Unit	MLH1050	MLH1050A	MLH1050B	MLH1060	MLH1580
Table size	mm	1000x500	1000x500	1000x500	1300x620	1700x800
Max. table load	kg	580	520	520	600	900
Guide way		3 hard rail	2 linear rail, 1 hard rail	3 linear rail	2 linear rail, 1 hard rail	3 hard rail
X/Y/Z axis travel	mm	1000x500x510	1000x500x510	1000x500x510	1000x600x600	1500/800/700
Spindle nose to table surface	mm	150-660	150-660	150-660	150--750	200-900
Spindle taper		BT40	BT40	BT40	BT40/BT50	BT40/BT50
Spindle speed	rpm	100-8000	100-8000	100-8000	100-8000/100-6000	8000
X/Y/Z axis rapid feed speed	m/min	15/15/12	24/24/12	24/24/20	24/24/15	15/15/12
X/Y/Z axis cutting feed rate	m/min	8	10	10	10	8
Magazine type		Carousel or disc type	Carousel or disc type	Carousel or disc type	Carousel or disc type	Carousel or disc type
Magazine capacity		BT40-16/24	BT40-16/24	BT40-16/24	BT40-16/24	BT40-16/24

					(BT50-16/20/24)	
Positioning accuracy	mm	±0.008	±0.007(X,Y) ±0.008(Z)	±0.007	±0.007(X,Y) ±0.008(Z)	±0.01
Repositioning accuracy	mm	±0.005	±0.003(X,Y) ±0.005(Z)	±0.003	±0.003(X,Y) ±0.005(Z)	±0.008



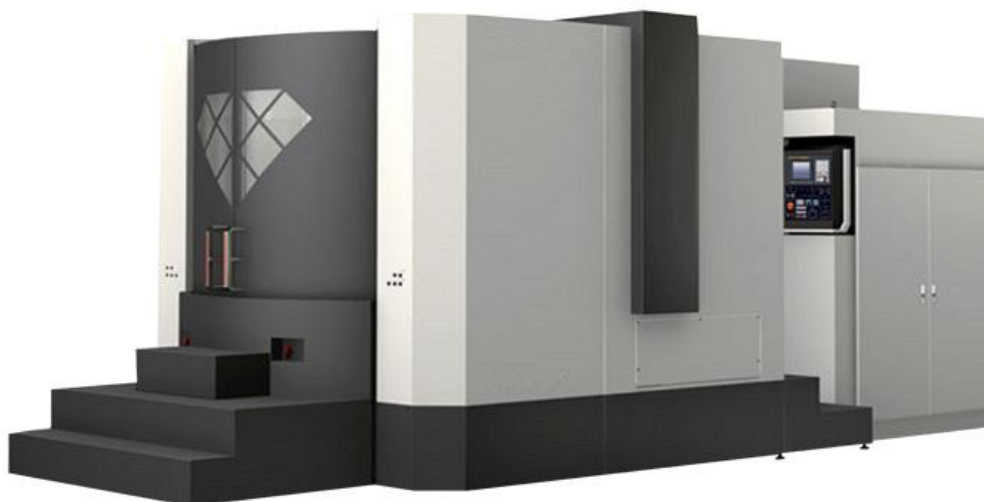
Specifications	Unit	VMH700L	VMH1000L		VMH900	VMH1100
X/Y/Z axis travel	mm	700x450x500	1000x600x600		900x430x510	1100x540x520
Spindle nose to table surface	mm	150-650	150-750		150~660	150~670
Table size	mm	800x450	1150x600		1100*430	1300*550
Max. load	kg	600	800		700	1200
Max. speed	rpm	8000	12000	8000	12000	
Spindle motor power	Kw	7.5/11	7.5/11		7.5/11	
Max. torque	Nm	71.5/105	47.7/70	71.5/105	71.5/105	
X/Y/Z Rapid speed	m/min	36/36/30	36/36/30		36	

8. Horizontal Machine Center

Horizontal machining center is suitable for volume production of complex shapes and high precision parts especially for the Box Type Parts and the complex structure parts. Horizontal machining center is used extensively for precision and efficiency production for the complex parts which needed for the automotive, aerospace, marine, and power generation industries. The working theory is the workpiece in the processing center through a fixture, the computer could select different tools and change the spindle speed automatically to complete the multi-process for multi- surface successively.







Specification	Unit	HM50E	HM63E	HM80E	HM100H/D
X travel	mm	800	1050	1350	2000
Y travel	mm	600	910	1050	1500
Z travel	mm	700	900	1050	1200
Spindle center to table surface	mm	60-660	70-980	50-1100	50-1550

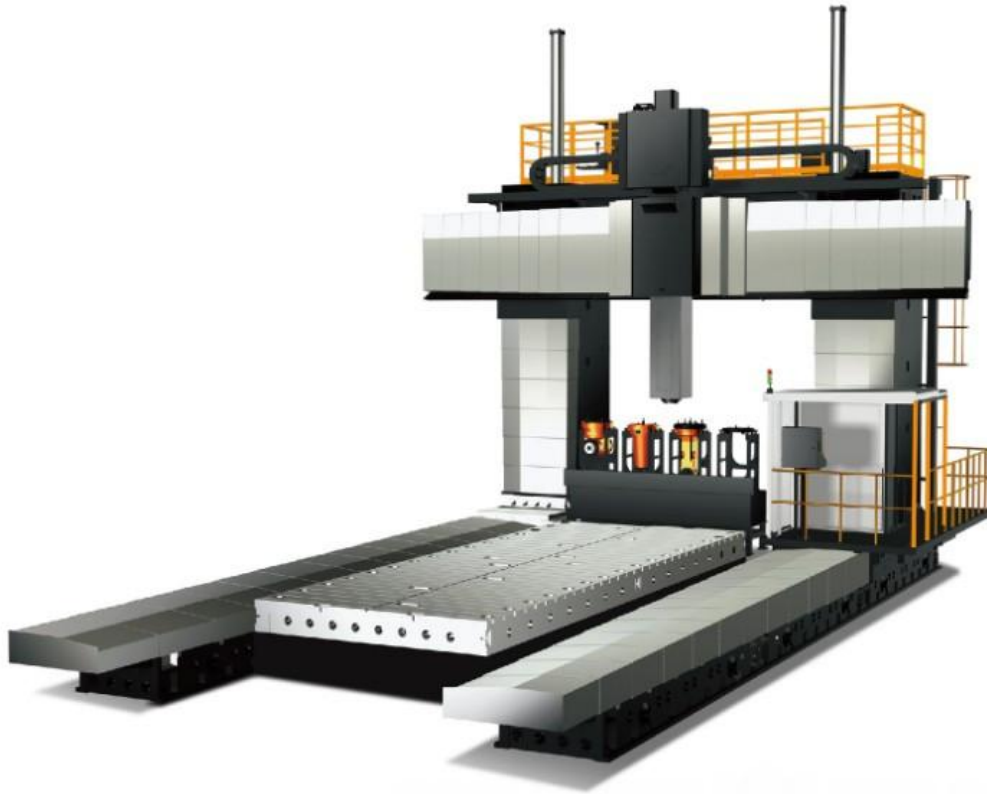
Spindle nose to table surface	mm	175-875	200-1100	200-1250	280-1480
Table size	mm	500 x 500	630 x 630	800 x 800	1000×1400
Table indexing		5°	1°	1°	1°×360
Table load	kg	800	1300	2000	5000
Pallet change type		Parallel	Rotary	Rotary	/
Pallet change time	sec	/	12	16	/
Pallet No.		2	2	2	1
Spindle motor	kw	/	26/45	26/45	/
Spindle speed	rpm	20-6000	10-6000	10-6000	20-4500
Spindle torque	N.m	430	305/623	305/623	837
Spindle taper		BT50	7/24 No. 50	7/24 No. 50	ISO7:24NO50
Pull stud		/	P50T-2-MAS403	P50T-2-MAS403	P50T-2-MAS403
Rapid traverse	m/min	30/24/30	40	30	14
Pallet indexing 90°	sec	5	3	4	7.5
Tool magazine	T	24	40	40	40
Tool select		Choose shortest way	Random shortest distance	Random shortest distance	Choose shortest way
Tool shank		BT50	BT50	BT50	BT50
Tool length	mm	300	500	500	500
Max. tool dia.(adjacent vacant)	mm	φ110(φ200)	φ115 (φ230)	φ115 (φ230)	120(240)
Max. tool weight	kg	15	25	25	30
Machine weight	ton	/	19	25	/
Machine size	cm	/	550 x390 x300	615 x428 x315	/

9. Gantry Milling Machine Center

Machine bed of the fixed beam gantry milling machine center is made of high strength castings, machine has good rigidity, shock resistance and maintain accuracy, fixed beam structure, precision machining for aerospace, automotive, mold, mining equipment and other large workpieces, can be done automatically milling, drilling, boring, tapping, and other processing.







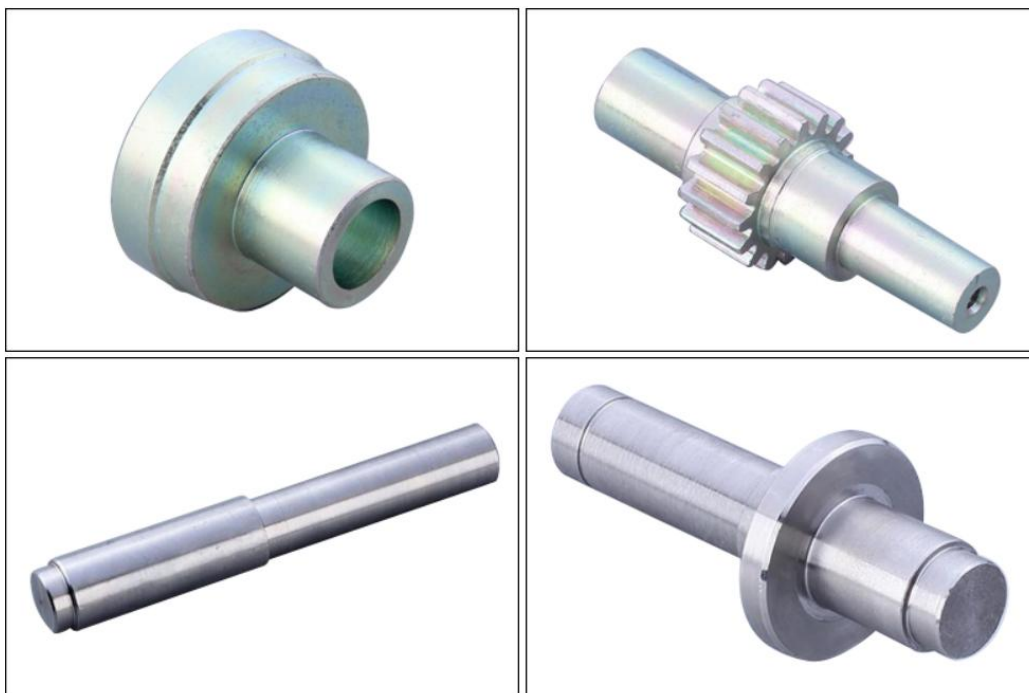
Specification	Unit	GLH13 x16	GLH13 x21	GLH13 x30	GLH16 x20	GLH16 x25
X travel	mm	1500	2000	3000	2000	2500
Y travel	mm	1300			1800	
Z travel	mm	700			700	
Width between column	mm	1380			1280	
Spindle nose to table surface	mm	150-850			150-850	
Table size	mm	1300 x1620	1300 x2100	1300 x3060	1500 x2000	1500 x2500
Table load	t	4	5	7	6	8
T slot		22 x160 x10	22 x160 x13	22 x160 x19	22 x160 x9	22 x160 x9
Rapid traverse X/Y/Z	m/min	20/20/20	18/20/20	18/20/20	20/20/15	20/20/15
Cutting feed rate X/Y/Z	m/min	12/12/12				
Driven type		Gear				
Max. spindle speed	rpm	6000				
Spindle motor	KW	15/18.5				
Spindle torque	N.m	327/532				
Spindle taper		7/24 No. 50				
Ram cross section	mm	350 x350				
Machine weight	t	12.5	13.5	15.5	20	23
Machine size	cm	500 x300 x400	600 x300 x400	800 x300 x400	661 x390 x435	762 x390 x435

10. Flat Bed CNC Lathe Machine

CK series CNC Lathe Machine is an economical, practical type machine tools with good quality. The machine has a very wide use which is suitable for internal and external turning, tapering, circular arc, thread, boring, reaming of axle and disk workpiece. It can also achieve non-circular curve machining.







Specifications	CK6140		CK6150	CK6161	CK6166	CK6180
Max .Swing over bed	400mm		500mm	610mm	660mm	800mm
Max. Work piece Length	750/1000/1500/2000/3000mm					
Spindle taper	Mohs No.6 MT6 [Φ90 1:20(B type)] [Φ113 1:20(C type)]					
Chuck size	C6 [D8(B type, C type)]					
Spindle bore dia.	Φ52mm. [Φ80mm (B type)] [Φ105mm (C type)]					
Spindle speeds	Independent spindle 100~1600r/min 3 steps automatic speed change 21-1620rpm(I 162-1620 II 66-660 III 21-210)					
Tailstock center sleeve travel	150mm					
Tailstock center sleeve taper	MT5					
Positioning accuracy	±0.015mm					
Repositioning accuracy	±0.006mm					
X/Z rapid traverse	4/6m/min					
Spindle motor	7.5kw				11kw	
Packing size for 750	2550×1550×1700mm			2550×1550×1900mm		
Packing size for 1000	2750×1550×1700mm			2750×1550×1900mm		
Packing size for 1500	3250×1550×1700mm			3250×1550×1900mm		
Packing size for 2000	3700×1550×1700mm			3700×1550×1900mm		
Packing size for 3000	4710×1550×1700mm			4710×1550×1900mm		
G.W./N.W. for 750	2800/2100	2900/2120		2850/2250	2900/2300	3000/2400
G.W./N.W. for 1000	2900/2200	3000/2240		3000/2400	3050/2450	3150/2550
G.W./N.W. or 1500	3150/2300	3200/2350		3200/2600	3250/2650	3350/2750
G.W./N.W. for 2000	3350/2700	3400/2740		3400/2830	3450/2880	3550/2980
G.W./N.W. for 3000	4100/3500	4200/3600		4250/3650	4300/3700	4400/3800

Specifications	CHK6163B	CHK6180
Max. Swing over bed	630mm	800mm
Max. Swing over carriage	350mm	480mm
Max. Turning dia over bed	500mm	600mm
Width of bed	550mm	600mm
Section of turning tool	32x32mm	32x32mm
Max. Workpiece length	1500mm/2000mm/3000mm	1500mm/2000mm/3000mm
Speed change	Automatic four-speed CVT	Automatic four-speed CVT
Spindle speed	I 17-128 II 38-278 III 75-750 IV 170-1000r/min	I 17-128 II 38-278 III 75-750 IV 170-1000r/min
Spindle bore	104mm	104mm
Spindle taper	Mohs No.5 MT6 120mm	Mohs No.5 MT6 120mm
Spindle end	D11	D11
X/Z Rapid feed	4000/8000mm/min	4000/8000mm/min
X/Z Feed speed	3000/5000mm/min	3000/5000mm/min
Max. Tail stock spindle travel	250mm	250mm
Tail stock spindle diameter	100mm	100mm
Main motor	11/15kw	15kw
Packing size for 1500mm	4550×1800×1950mm	4650×1800×1950mm
Packing size for 2000mm	5050×1800×1950mm	5150×1800×1950mm
Packing size for 3000mm	5950×1800×1950mm	6050×1800×1950mm
Weight for 1500mm	4000kg	6700kg
Weight for 2000mm	5000kg	7200kg
Weight for 3000mm	6000kg	8200kg

11. Slant Bed CNC Lathe Machine

SL series enable heavy-duty cutting on a durable, stable machine. A wide bed and hardened guide way add to their durability, but they remain pinpoint accurate machines capable of handling even large projects.



Specification	unit	SL20
Swing over bed	mm	Φ420
Swing over carriage	mm	Φ200
Max. turning dia	mm	Φ320
Tailstock maximum clamping dia.	mm	400
Max. turning length	mm	360
		977
Spindle speed	rpm	5000
Spindle nose		JISA2-5
Spindle bore dia./draw tube dia	mm	Φ42
Spindle bearing dia	mm	Φ80
Chuck size	inch	6
X/Z Traverse	mm	165/410
X/Z Rapid traverse	m/min	20/30
C axis rapid speed	rpm	-
ASL type		HydraulicV8
Tool size	mm	20×20
Boring shaft dia.	mm	Φ32
Rotate time	s/pos	0.4
Milling spindle motor	kW	-
Mill spindle speed	rpm	-
Mill capacity	mm	-
Tailstock spindle dia.		Φ70
Taper		MT NO.4
Tailstock spindle stroke.		80
Tailstock stroke		220
Main motor	kW	AC7.5/11
X/Z servo motor	kW	AC1.2/1.2
Space occupied (L*W*H)	mm	3380×1600×1690
	kg	3000
CNC system		Fanuc Oi Mate-TD

Specification	unit	SL25				
		SL25×500	SL25MC×500	SL25×1000	SL25MC×1000	SL25×1000
Swing over bed	mm	Φ560	Φ580	Φ560	Φ580	Φ650
Swing over carriage	mm			Φ320		Φ320
Max. turning dia	mm	Φ400	Φ360	Φ360	Φ360	Φ360
Tailstock maximum clamping dia.	mm	580	550	1040	1030	1540

Max. turning length	mm	560	500	1000	1000	1500
Spindle speed	rpm	4500				4500
Spindle nose		JISA2-6				JISA2-6
Spindle bore dia./draw tube dia	mm	Φ62				Φ62
Spindle bearing dia	mm	Φ100				Φ100
Chuck size	inch	8				8
X/Z Traverse	mm	210/610	280/550	200/1050	280/1050	200/1550
X/Z Rapid traverse	m/min	24/30				20/20
C axis rapid speed	rpm	-	15	-	15	-
ASL type		Hydraulic V12	Motor-power VDI12	Hydraulic V12	Motor-power VDI12	Hydraulic V12
Tool size	mm	25×25				25×25
Boring shaft dia.	mm	Φ40				Φ40
Rotate time	s/pos	0.45	0.65	0.45	0.65	0.45
Milling spindle motor	kW	-	AC3.7/5.5	-	AC3.7/5.5	-
Mill spindle speed	rpm	-	3500	-	3500	-
Mill capacity	mm	-	Φ20/M16×2 /M24×1.5	-	Φ20/M16×2 /M24×1.5	-
Tailstock spindle dia.		Φ100	Φ70	Φ100	Φ70	Φ100
Taper		MT NO.4				MT NO.4
Tailstock spindle stroke.		120	80	120	80	120
Tailstock stroke		400		720		1100
Main motor	kW	AC11/15	AC9/11	AC11/15	AC9/11	AC15/18.5
X/Z servo motor	kW	AC1.8/1.8	AC1.6/3.0	AC1.8/1.8	AC1.6/3.0	AC2.5/2.5
Space occupied (L*W*H)	mm	3720×1850 ×1830	3720×1850 ×1830	4710×1860 ×1900	4710×1860 ×1900	5140×1860 ×2010
	kg	4400	4500	4900	5000	5400
CNC system		Fanuc Oi Mate-TD	Fanuc Oi-TD	Fanuc Oi Mate-TD	Fanuc Oi Mate-TD	Fanuc Oi Mate-TD

Specification	unit	SL30		
		SL30A×500	SL30A×1000	SL30A×1500
Swing over bed	mm	Φ650		
Swing over carriage	mm	Φ420		
Max. turning dia	mm	Φ500		
Tailstock maximum clamping dia.	mm	550	1040	1540
Max. turning length	mm	530	1000	1500
Spindle speed	rpm	3500		

Spindle nose		JISA2-8		
Spindle bore dia./draw tube dia	mm	Φ76		
Spindle bearing dia	mm	Φ120		
Chuck size	inch	10		
X/Z Traverse	mm	260/580	260/1050	260/1550
X/Z Rapid traverse	m/min	16/20		
C axis rapid speed	rpm	-	-	-
ASL type		HydraulicV12	HydraulicV12	HydraulicV12
Tool size	mm	25×25		
Boring shaft dia.	mm	Φ40		
Rotate time	s/pos	0.45	0.45	0.45
Milling spindle motor	kW	-	-	-
Mill spindle speed	rpm	-	-	-
Mill capacity	mm	-	-	-
Tailstock spindle dia.		Φ100	Φ100	Φ100
Taper		MT NO.5		
Tailstock spindle stroke.		120		
Tailstock stroke		350	720	1100
Main motor	kW	AC15/18.5	AC15/18.5	AC15/18.5
X/Z servo motor	kW	AC2.5/2.5	AC2.5/2.5	AC2.5/2.5
Space occupied (L*W*H)	mm	3720×1850×1900	4710×1860×1900	5500×1860×1900
	kg	4600	5300	6000
CNC system		Fanuc Oi Mate-TD	Fanuc Oi Mate-TD	Fanuc Oi Mate-TD

Specification	unit	SL35A					
		SL35A ×1000	SL35AMC ×1000	SL35A ×1500	SL35AMC ×1500	SL35A ×2000	SL35AMC ×2000
Swing over bed	mm	φ700					
Swing over carriage	mm	φ600					
Max. turning dia	mm	φ630					
Tailstock maximum clamping dia.	mm	1000		1500		2000	
Max. turning length	mm	1000		1500		2000	
Spindle speed	rpm	2500					
Spindle nose		JISA2-8					
Spindle bore dia./draw tube dia	mm	Φ92					
Spindle bearing dia	mm	Φ150					
Chuck size	inch	15					

X/Z Traverse	mm	365/1060		365/1560		365/2060	
X/Z Rapid traverse	m/min	16/20					
C axis rapid speed	rpm	-	15	-	15	-	15
ASL type		Hydraulic V12	Servo BMT12	Hydraulic V12	Servo BMT12	Hydraulic V12	Servo BMT12
Tool size	mm	32×32					
Boring shaft dia.	mm	Φ50					
Rotate time	s/pos	0.5	0.2	0.5	0.2	0.5	0.2
Milling spindle motor	kW	-	AC5.5/7.5	-	AC5.5/7.5	-	AC5.5/7.5
Mill spindle speed	rpm	-	3500	-	3500	-	3500
Mill capacity	mm	-	Φ22/M18×2 /M27×1.5	-	Φ22/M18×2 /M27×1.5	-	Φ22/M18×2 /M27×1.5
Tailstock spindle dia.		φ130					
Taper		MT NO.5					
Tailstock spindle stoke.		120					
Tailstock stroke		700		1200		1700	
Main motor	kW	AC18.5/22					
X/Z servomotor	kW	AC3.0/4.0					
Space occupied (L*W*H)	mm	5380×2200×2200		5800×2200×2200		6500×2200×2200	
	kg	9000	9200	10500	10700	12000	12200
CNC system		Fanuc 0i-TD					

Specification	unit	SL40			
		SL40×1250	SL40MC×1250	SL40×2750	SL40MC×2750
Swing over bed	mm	φ700		φ670	
Swing over carriage	mm	φ500		φ500	
Max. turning dia	mm	φ700	φ660	φ660	
Tailstock maximum clamping dia.	mm	1325		2825	
Max. turning length	mm	1250		2570	
Spindle speed	rpm	3-2000			
Spindle nose		JISA1-11			
Spindle bore dia./draw tube dia	mm	φ105			
Spindle bearing dia	mm	φ170			
Chuck size	inch	15			
X/Z Traverse	mm	380/1320	445/1320	380/2820	445/2820
X/Z Rapid traverse	m/min	12/15		12/12	
C axis rapid speed	rpm	-	15	-	15
ASL type		Hydraulic V12	Motor-power VDI12	Hydraulic V12	Motor-power VDI12

Tool size	mm	32×32	32×25	32×32	32×25
Boring shaft dia.	mm	Φ60	Φ50	Φ60	Φ50
Rotate time	s/pos	1.7	0.78	1.7	0.78
Milling spindle motor	kW	-	AC5.5/7.5	-	AC5.5/7.5
Mill spindle speed	rpm	-	3000	-	3000
Mill capacity	mm	-	Φ22/M18×2/M27×1.5	-	Φ22/M18×2/M27×1.5
Tailstock spindle dia.		φ160			
Taper		MT NO.5			
Tailstock spindle stoke.		150			
Tailstock stroke		900		2400	
Main motor	kW	AC30/37			
X/Z servo motor	kW	AC3.0/7.0			
Space occupied (L*W*H)	mm	4715×2360×2290		6625×2640×2460	
	kg	10000	10300	14500	14800
CNC system		Fanuc Oi-TD			

Typical workpiece



12. Flat Bed Gang Type CNC Lathe

Main Taiwan and Japanese configuration, precise linear guideway, μ class precision turning, spindle speed above 5000rpm, fast feeding speed above 20m/min.

About C series, using synchronization of motorized spindle. The spindle and feed shaft have synchronous servo configuration, making machining precision into the higher class.



Main parameters		UNIT	S5	S7	S5C	S7C
Capability	Max. swing diameter	mm	245	285	245	285
	Max. turning diameter	mm	240	270		
	Max. turning length	mm	200	300	200	300
	Max. bar through-hole	mm	21(25)	26(35)	20(25)	26(35/39)
Axis stroke	X-axis travel	mm	250	320		
	Z-axis travel	mm	200	300	200	300
Rapid traverse	X/Z-axis	m/m in	20	20	20	20
Spindle	Spindle nose size	N/A	A2-4	A2-5	A2-4	A2-5

	Spindle servo motor power	kW	asynchronous 2.2/3.7	asynchronous 3.7/5.5	synchronous electric spindle	synchronous electric spindle
	Spindle speed range	rpm	0~5500	0~5000	0~6000	0~6000
	Work piece clamping method	N/A	25 collet (4' hydraulic chuck)	36 collet (5'hydraulic chuck)		
No. of tools	Number of tools	PCS	5	5	5	5
Toolhold er	Toolholder type	N/A	Dovetail gang tool	Dovetail gang tool	Dovetail gang tool	Dovetail gang tool
	Toolholder center height in radial	mm	50	50	50	50
	Tool size	mm	16*16	16*16	16*16	16*16
	Boring rod diameter	mm	25	25	25	25
Accuracy	X\Z axis repeating positioning accuracy	mm	0.002	0.002	0.002	0.002
Others	Cooling motor capacity	L	120	120	120	120
	Hydraulic box capacity	L	60	60	60	60
	Required electric power	kVA	7	8	7	8
	Height from floor to spindle center	mm	≈1050	≈1070	≈1050	≈1070
	Overall size(L*W*H)	mm	1500*1250*1 650	1650*1300*1 650	1500*1250*1 650	1650*1300*1 650
	Net weight	kg	≈1200	≈1700	≈1200	≈1700
Standard configuration: tool box, instruction book, operational manual, cooling system , lighting system, lubrication system, chips cleaner, hydraulic collet(chuck), foot switch.						
Optional configuration: program control blowing function, precision C axis dividing, power spindle head , automatic door, loading and unloading system, industrial robotic, automatic bar feeder, receiving device for bar materials, automatic detection system, automatic cutter radius compensation system, high-pressure cooling system.						

13. Slant Bed Gang Type CNC Lathe

Precise linear guideway slant bed gang type lathe has whole casting structure, making precise turning more stability, optional synchronous motorized spindle can achieve spindle higher, faster, more stable capacity.



Main parameters		Unit	X25	X36	X350	X36D	X350D
Capabili ty	Max. swing diameter	mm	270	300	350	300	350
	Max. turning diameter	mm	250	270	350	270	350
	Max. turning length	mm	320	330	420	330	420
	Max. bar through-hole	mm	21(25)	26 (35)	40	26 (35)	40
Axis stroke	X-axis travel	mm	320	420	420	330	330
	Z-axis travel	mm	320	330	330	420	420

Rapid traverse	X/Z-axis	m/min	20	20	20	20	20
Spindle	Spindle nose size	N/A	A2-4	A2-5	A2-5	A2-5	A2-5
	Spindle servo motor power	kW	3.7/5.5	3.7/5.5	5.5/7.5	3.7/5.5	5.5/7.5
	Spindle speed range	rpm	0~5500	0~5000	0~4500	0~5000	0~4500
	Work piece clamping method	N/A	25 collet (4'hydraulic chuck)	36 collet (5'hydraulic chuck)	6' hydraulic chuck (42 collet)	36 collet (5'hydraulic chuck)	6' hydraulic chuck (42 collet)
No. of tools	Number of tools	PCS	5	5	5	3+8	3+8
Toolholder	Toolholder type	N/A	Dovetail gang tool	T-slot gang tool	T-slot gang tool	T-slot gang tool + turret	T-slot gang tool + turret
	Toolholder center height in radial	mm	50	62	62	62	62
	Tool size	mm	16*16	20*20	20*20 (25*25)	20*20	20*20 (25*25)
	Boring rod diameter	mm	25	25	25	25	25
Accuracy	X\Z axis repeating positioning accuracy	mm	0.002	0.002	0.002	0.002	0.002
Others	Cooling motor capacity	L	120	120	120	120	120
	Hydraulic box capacity	L	60	60	60	60	60
	Required electric power	kVA	10	12	14	15	15
	Height from floor to spindle center	mm	≈1070	≈1070	≈1070	≈1000	≈1000
	Overall size(L*W*H)	mm	1850*1750*1750	1850*1750*1750	1850*1750*1750	1850*1750*1750	1850*1750*1750
	Net weight	kg	≈2200	≈2400	≈2400	≈2600	≈2600

Standard configuration: tool box, instruction book, operational manual, cooling system , lighting system, lubrication system, chips cleaner, hydraulic collet (chuck), foot switch.

Optional configuration: program control blowing function, precision C axis dividing, power spindle head , automatic door, loading and unloading system, industrial robotic, automatic bar feeder, receiving device for bar materials, automatic detection system, automatic cutter radius compensation system, high-pressure cooling system.

14. Slant Bed Turret Type CNC Lathe

Precise linear guideway slant bed turret lathe, main Taiwan and Japanese configuration, μ class precision turning, whole casting structure, making precise turning more stability, optional synchronous motorized spindle making high processing efficiency and high machining precision.



Main Parameters		Unit	TU400	TU500
Capability	Max. swing diameter	mm	400	500
	Max. turning diameter	mm	300	400
	Max. turning length	mm	340	470
	Max. bar through-hole	mm	40	50
Axis stroke	X-axis travel	mm	155	200
	Z-axis travel	mm	370	500
	W1-axis travel	mm	258	440

Rapid traverse	X/Z-axis	m/min	20	20
Spindle	Spindle nose size	N/A	A2-5	A2-6
	Spindle servo motor power	kW	7.5/11	9.5/13
	Spindle speed range	rpm	0~4500	0~4000
	Work piece clamping method	N/A	6'(8') hydraulic chuck	8'(10') hydraulic chuck
Tailstock	Tailstock sleeve stroke	mm	100	100
	Tailstock sleeve diameter	mm	φ80	φ80
	Tailstock sleeve boring-hole	N/A	MT4	MT4
No. of tools	Number of tools	PCS	8 (12)	8 (12)
Toolholder	Toolholder type	N/A	hydraulic (servo) turret	hydraulic (servo) turret
	Toolholder center height in radial	mm	85	105
	Tool size	mm	20*20	25*25
	Boring rod diameter	mm	25(32)	32(40)
Accuracy	X\Z axis repeating positioning accuracy	mm	0.002	0.002
Others	Cooling motor capacity	L	120	120
	Hydraulic box capacity	L	60	60
	Required electric power	kVA	15	20
	Height from floor to spindle center	mm	≈950	≈1020
	Overall size(L*W*H)	mm	2500*1850*1800	2700*1900*1830
	Net weight	kg	≈2700	≈3300

Standard configuration: tool box, instruction book, operational manual, cooling system , lighting system, lubrication system, chips cleaner, hydraulic collet (chuck), foot switch.

Optional configuration: program control blowing function, precision C axis dividing, power spindle head , automatic door, loading and unloading system, industrial robotic, automatic bar feeder, receiving device for bar materials, automatic detection system, automatic cutter radius compensation system, high-pressure cooling system.

15. Five Axis Turning Center

Precision linear guideway 5 axis turning center, main Taiwan and Japanese configuration, μ class precision turning, precision multi-axis linkage and effective tool combination application can achieve multistep composite processing of turning, milling, drilling, tapping.



Main Parameters		Unit	W25	W36	W350
Capability	Max. swing diameter	mm	φ480	φ480	φ480
	Max. turning diameter	mm	φ300	φ300	φ300
	Max. turning length	mm	330	330	330
	Max. bar through-hole	mm	21(25)	26 (35)	40
Axis stroke	X-axis travel	mm	230	230	230
	Z-axis travel	mm	330	330	330
	Y-axis travel	mm	420	420	420
	W1-axis travel	mm	250	250	250
	W2-axis travel	mm	310	310	310

Rapid traverse	X//Z/Y/W1/W2-axis	m/m in	20	20	20
Spindle	Spindle nose size	N/A	A2-4	A2-5	A2-5
	Spindle motors power	kW	3.7/5.5	3.7/5.5	5.5/7.5
	Spindle speed range	rpm	0~5500	0~5000	0~4500
	Work piece clamping method	N/A	25 collet (4' hydraulic chuck)	36 collet (5' hydraulic chuck)	42 collet (6' hydraulic chuck)
Vice-spindle	Vice-spindle nose spec.	N/A	A2-4	A2-4	A2-4
	Vice-spindle servo motor power	kW	3.7KW	3.7KW	3.7KW
	Vice-spindle speed range	rpm	0~5000	0~5000	0~5000
	Vice-spindle work pieces clamping method	N/A	CR30A4	CR30A4	CR30A4
Tailstock	Tailstock sleeve stroke	mm	100	100	100
	Tailstock sleeve diameter	mm	φ80	φ80	φ80
	Tailstock sleeve boring-hole	N/A	MT4	MT4	MT4
No. of tools	Number of tools in radial	pcs	5 (10)	5 (10)	5 (10)
	Number of tools in axial	pcs	4 (8)	4 (8)	4 (8)
	Number of power tools in radial	pcs	3	3	3
	Number of power tools in radial	pcs	3	3	3
Toolholder	Toolholder type	N/A	compound tool holder	compound tool holder	compound tool holder
	Toolholder center height in radial	mm	70	70	70
	Tool size	mm	16*16	16*16	16*16
	Boring rod diameter	mm	25	25	25
Accuracy	X\Z axis repeating positioning accuracy	mm	0.002	0.002	0.002
Others	Cooling motor capacity	L	120	120	120
	Hydraulic box capacity	L	60	60	60
	Required electric power	kVA	20	20	20
	Height from floor to spindle center	mm	≈1010	≈1010	≈1010
	Overall size(L*W*H)	mm	1950*1850*1950	1950*1850*1950	1950*1850*1950
	Net weight	kg	≈2600	≈2700	≈2800

Standard configuration: tool box, instruction book, operational manual, cooling system , lighting system, lubrication system, chips cleaner, hydraulic collet (chuck), foot switch.

Optional configuration: program control blowing function, precision C axis dividing, power spindle head , automatic door, loading and unloading system, industrial robotic, automatic bar feeder, receiving device for bar materials, automatic detection system, automatic cutter radius compensation system, high-pressure cooling system.

16. Swiss Type CNC Lathe

Acquire full of technology from Korean company.

Maximum clamping bar diameter 38 mm, which can realize unattended 24 hours production.

Widen the guide span structure, the main/auxiliary shaft's brake locking device after dividing, improve the stability of workpiece machining.



3 Axis/4 Axis Swiss Type CNC Lathe:

	Items	Unit	M203 (FANUC)	M203 (SYNTEC)	SR164 (FANUC)	SR164 (SYNTEC)
Mechanics	Main spindle RPM	rpm	10000	6000	8000	6000
	Main spindle stroke	mm	260	260	150	150
	Sub spindle RPM	rpm	/	/	8000	6000
	Sub spindle stroke	mm	/	/	150	150
	Max machining diameter	mm	20	20	16	16
	Minimum index	degree	0.001°	0.001°	0.001°	0.001°
Motors	Spindle motor	kw	2.2/3.7	3.7	3.7/5.5	3.7
	Sub Spindle motor	kw	/	/	0.55/1.1	0.4
	Cross driven tools motor	kw	1	0.75	0.5	0.75
	Servo axis motor	kw	0.75	0.75	0.75	0.75
	Coolant motor	w	0.4	0.4	0.25	0.25
System	CNC control unit		FANUC Oi-TD	SYNTEC-21TB	FANUC Oi-TD	SYNTEC-21TB
	Minimum feed unit	mm	0.001	0.001	0.001	0.001
	LCD/MDI		LCD 8.4"	LCD 8.4"	LCD 8.4"	LCD 8.4"
	Control axis/simultaneous axis		4 axis/ 4 axis	4 axis/ 4 axis	6 axis/4 axis	6 axis/4 axis
Tool	O.D tools	ea	6	6	6 (5)	6 (5)
	Front work tools	ea	5	5	5 (3)	5 (3)
	Back work tools	ea	/	/	/	/
	Cross driven tools	ea	4	4	4 (3)	4 (3)
Others	Total power	kva	10	10	10	10
	Coolant tank capacity	L	180	180	180	180
	Lubrication tank capacity	L	1.8	1.8	1.8	1.8
	Mass of machine	kg	2800	2800	3000	3000

5 Axis Swiss Type CNC Lathe:

Items		Unit	M205 (FANUC)	M205 (SYNTEC)	SH325 (FANUC)	SH325 (SYNTEC)	SF385 (FANUC)	SF385 (SYNTEC)
Mechanics	Main spindle RPM	rpm	10000	6000	10000	6000	8000	6000
	Main spindle stroke	mm	260;	260;	280	280	220	220
			(without guide bush 50)	(without guide bush 50)				
			(with/without guide bush: 218/50)	(with/without guide bush: 218/50)	(with/without guide bush: 220/80)	(with/without guide bush: 220/80)	(with/without guide bush: 185/95)	(with/without guide bush: 185/95)
	Sub Spindle RPM	rpm	8000	6000	8000	6000	8000	6000
	Sub spindle stroke	mm	260	260	280	280	220	220
	Max machining diameter	mm	20	20	32	32	38	38
	Minimum index	Degree	0.001°	0.001°	0.001°	0.001°	0.001°	0.001°
Motors	Spindle motor	kw	2.2/3.7	3.7	3.7/5.5	5.5	3.7/5.5	5.5
	Sub spindle motor	kw	1.5/2.2	2.9	1.5/2.2	3.7	1.5/2.2	3.7
	Cross driven tools motor	kw	0.55/1.1	0.75	0.55/1.1	0.75	0.55/1.1	0.75
	Servo axis motor	kw	0.75	0.75	1	0.75	1	0.75
	Coolant motor	w	0.4	0.4	0.9	0.9	0.9	0.9
System	CNC control unit		FANUC Oi-TD	SYNTEC-20 OTB	FANUC Oi-TD	SYNTEC-20 OTB	FANUC Oi-TD	SYNTEC-20 OTB
	Control axis/simultaneous axis		7 axis/4 axis	7 axis/4 axis	7 axis/4 axis	7 axis/4 axis	7 axis/4 axis	7 axis/4 axis
	Minimum feed unit	mm	0.001	0.001	0.001	0.001	0.001	0.001
	LCD/MDI		LCD 10.4"	LCD 10.4"	LCD 10.4"	LCD 10.4"	LCD 10.4"	LCD 10.4"
Tool	O.D tools	ea	6	6	6	6	5	5
	Front work tools	ea	5	5	5	5	5	5
	Back work tools	ea	4	4	4	4	4	4
	Cross driven tools	ea	4	4	4	4	4	4
Others	Total power	kva	12	12	14	14	14	14

Coolant tank capacity	L	180	180	200	200	200	200
Lubrication tank capacity	L	1.8	1.8	1.8	1.8	1.8	1.8
Mass of machine	kg	3600	3600	3800	3800	4500	4500

17. Conventional Lathe

CA and CH series universal lathe is suitable for internal and external turning, tapering, and other rotating faces, metric, module and inch threads, as well as drilling and pull oil slot, widely used in axial plates processing.

The lathe bed is wider than normal machine, the width of the bed is 312mm, owns high rigidity, guideway after high frequency quenching, with high durability.





Specification		CA6132D	CA6136D	CA6140D
Max. swing over bed		320mm	360mm	400mm
Max. swing over carriage		180mm	200mm	240mm
Max. length of work piece		750/1000mm		
Width of bed		312mm		
Section of turning tool		20×20		
Spindle	Spindle speed	30-1600r/min(12 range)		
	Spindle hole	Ø52mm		
		C6		
	Spindle taper	Mohs 6No.(MT6)		
Feed	No. of feed	lengthways(0.039-1.05mm) horizontal(0.019-0.52mm)		
	Range of metric threads	0.5-20mm(25 types)		
	Range of inch threads	80-1.75 /inch(35 types)		
	Range of module threads	0.25-10mm		
	Range of diametral pitc threads	160-3.5dp(30 types)		
Tailstock	Max. tailstock spindle travel	100mm		
	Tailstock spindle diameter	Ø60mm		
	Taper of tailstock spindle center hole	MT4		
Main motor		3/4KW		
Packing dimensions	Overall dimensions for 750mm	2000×1130×1540		

	Overall dimensions for 1000mm	2250×1130×1540		
Weight(kg)	Overall dimensions for 750mm	1400kg	1500kg	1700kg
	Overall dimensions for 1000mm	1500kg	1600kg	1800kg

Specifications		CH6140 CH640	CH6150 CH6250	CH6161 CH6261	CH6166 CH6266	CH6180 CH6280
		CH6140B CH5240B	CH6150B CH6250B	CH6161B CH6261B	CH6166B CH6266B	CH6180B CH6280B
			CH6150C CH6250C	CH6161C CH6261C	CH6166C CH6266C	CH6180C CH6280C
Max. Swing over bed		400mm	500mm	610mm	660mm	800mm
Max. Swing over carriage		210mm	300mm	370mm	400mm	540mm
Max. Swing in gap		- 630mm	- 720mm	- 830mm	- 880mm	- 1020mm
Effective gap length		- 210mm	- 210mm	- 210mm	- 210mm	- 210mm
Max. length of work piece		750/1000/1500/2000/2200/3000/4000mm				
Width of bed		400mm				
Section of turning tool		25*25mm				
Spindle	Spindle speed	16- 1400rpm(24 steps)				
	Hole through spindle	52mm, (80mm), (105mm)				
	Spindle taper	No.6(MT6)(∅				
		90 1:20)(∅				
Feed	No. of feed	64(kinds)(for each)				
	Range of metric threads	(1-192mm)44 kinds				
	Range of inch threads	(2-24tpi)21 kinds				
	Range of module threads	0.25-48(module 39kinds)				
	Range of diameter pitc threads	1-96DP(37 kinds)				
Tailstock	Max. tailstock spindle travel	150mm				
	Tailstock spindle diameter	75mm				
	Taper of tail stock spindle center hole	NO.5(MT5)				
Main motor		7.5KW(10HP)				

18. Floor Type Boring and Milling Machine

The CNC floor type boring and milling machine is based on modularized CNC machine, ad hoc suitable for producing a group of holes in a very long, large or heavy part. The machining range can be broadened by adopting right-angle milling heads, universal milling heads and CNC rotary tables, to accomplish accurate machining of complex and heavy parts.



Parameters	Unit	HK6211	HK6213	HK6216	HK6913	HK6916
Spindle diameter	mm	110	130	160	130	160
Spindle tapered bore		ISO 7:24 No50	ISO 7:24 No50	ISO 7:24 No50	ISO 7:24 No50	ISO 7:24 No50
Milling shaft diameter			221.44	260	221.4	260
Spindle speed	r/min	10-2000	10-2000	10-1500	10-1500	10-1000
Max. spindle torque	N.m	1300	2800	3500	2500	3000
Cross section area of ram	mm				480*480	480*480
Travel of column(side base)X	mm	4000 (per 1000 increasing)	4000 (per 1000 increasing)	4000 (per 1000 increasing)	4000 (per 100 increasing)	4000 (per 1000 increasing)
Vertical travel of spindle box(carriage)Y	mm	1500	1600	2000(2500)	2000(2500,3000)	2000(2500,3000)
Travel of ram Z	mm				700	700

Travel of spindle W	mm	550	800	1000	700	700
Main motor power	Kw	17/22.5	37/51	37/51	37/51	37/51
Cutting feed speed X,Y,Z	mm/min	X,Y:1-6000	X,Y:1-6000	X,Y:1-6000	X,Y:1-6000	X,Y:1-6000
A,B	r/min	W:1-2000	W:1-3000	W:1-3000	W:1-3000	W:1-3000
Rapid moving speed	m/min	X,Y:9 W:2.4	X,Y:8 W:3	X,Y:9 W:3	X,Y:6 Z,W:3	X,Y:6 ZW:3
Tool magazine capacity		40	40	40	40	
Tool shank specification		ISO 7: 24 JT50	ISO 7:24 JT50	ISO 7:24 JT50	ISO 7:24 JT50	ISO 7:24 JT50
Blind rivets standard		LD50D	LD50D	LD50D	LD50D	LD50D
Positioning accuracy X,Y,Z,W	mm	X:0.22 Y,W:0.02	X:0.035/100 Y:0.020 W:0.02	X:0.032/1000 Y:0.026 W:0.02	X,Y:0.026/1000 Z,W:0.03/overall length	Y,Z,W:0.026
A,B	sec					
Repeated positioning accuracy X,Y,Z,W	mm	X:0.025 Y,W:0.016	X:0.025/1000 Y:0.020 W:0.018	X:0.025/1000 Y:0.020 W:0.018	0.013/1000	X,Y,Z:0.015
A,B						
Machine tool overall dimension(L*W*H)	mm	8000*2993*4500	8600*4490*4830	9300*5500*5600	8400*3200*5600	9000*3200*5600
Weight of machine	kg	28000	34000	42000	31500/34500	37000
Total electric capacity	KVA	50	70	85	85	85
CNC system		SIEMENS 840D sl	SIEMENS 840D sl	SIEMENS 840D sl	SIEMENS 840D sl	SIEMENS 840D sl

19. Table Type Boring and Milling Machine

The table type boring and milling machine can do drilling, boring, reaming, milling and turning, threading etc. under a clamping.

The sliding block on rotating plate can radial feed during plate turning, to boring big hole, turning excircle, turning surface and grooving etc.



Parameters	Unit	QT6111B	QT6111B/2	QT6111B/3
Table size	mm	1100×960	1100×960	1250×1100
X/Z axis travel of worktable	mm	900×1000	1250×1000	1600×1400
Number/Width of T-slot	mm	7-22	7-22	7-22
Vertical travel of headstock	mm	900	900	1200
Max. load of worktable	kg	2500	2500	3000
Spindle diameter	mm	110	110	110
Spindle travel	mm	600	600	600
Facing head tool holder's radial travel	mm	180	180	180
Spindle taper		MT6	MT6	MT6
Spindle speed range	rpm	8-1000	8-1000	8-1000
Facing head speed range	rpm	4-200	4-200	4-200
Spindle motor power	kw	7.5	7.5	7.5
Rapid travel(X/Y/Z/W)	mm/min	2500	2500	2500
Overall dimension	mm	4910×2454×2750	4910×2870×2750	5117×3359×3079
Machine weight	kg	13000	14500	18000

Typical workpiece



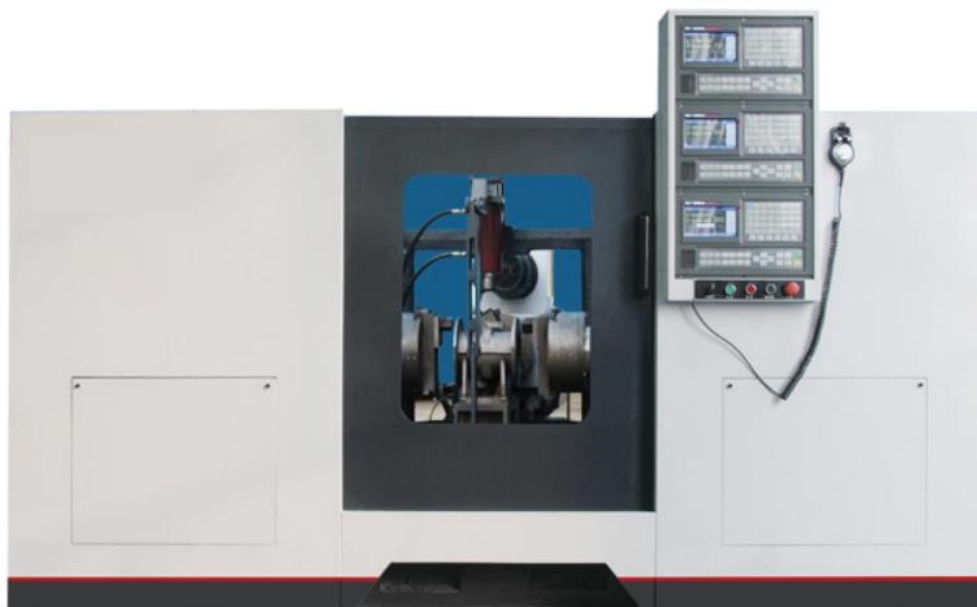
20. Specialized Machine for Valve Industry

(1) CNC Milling Machine for Valve Processing

CNC multi station specialized valve processing machine are advanced machine tools for boring and milling work for flange and valve.

With 2 axis simultaneous or 3 axis simultaneous application, this series machines greatly simplify the previous process which finished by the conventional lathe and milling machine.

The CNC multi station specialized valve processing machine is made by integration casting work with simple structure, which assures its long service life and easy maintaining in the method during the service life.



One axis specialized CNC machine for valve processing

Specification	HS-X140B
Voltage	380AC
Main motor power	5.5kw(Y132M-6)
Feed motor	130BYG350B(28N.m)
Spindle speed(r/min)	42 90 140 (stepless speed change can be chosen)
Distance from spindle to table(mm)	354
Spindle nose taper	1:20
Max. machining diameter (mm)	600
Suit for valves type	DN200-DN400 middle port of valves, auto parts
Z axis travel(mm)	350

Rapid traverse speed (mm/min)	Z:3000
Repeated positioning accuracy	Z:0.015
Clamping type	Hydraulic clamping
Controller	HDMT818
Rail width(mm)	75
Bed width(mm)	600
Lubrication type	Electronic integrate lubrication
Dimension(mm)	1700×600×1600

2 Axis specialized CNC machine for butterfly valve processing

Specification	HS-TX600
Voltage	380AC
Power	8kw
Spindle speed(r/min)	Turning: 110 140 190 (Boring stepless variable speed)
Distance from spindle to table(mm)	159
Spindle nose taper	1:20
Max. machining length(mm)	800
Max. machining diameter (mm)	480
Suit for valves type	DN350-DN600
Z axis travel(mm)	350
X axis travel(mm)	90
Rapid traverse speed (mm/min)	X: 3000 Z:3000
Repeated positioning accuracy	X: 0.01 Z:0.015
Ball screw diameter screw pitch(mm)	X: 2004 Z: 4006

3 Axis specialized CNC machine for valve processing

Specification	HS-X320A/B
Voltage	380AC
Power(13kw)	4kw×3
Feed motor	130BYG350
Spindle speed(r/min)	110 140 190 (stepless speed change can be chosen)
Distance from spindle to table(mm)	368
Spindle nose taper	1:20
Max. machining length(mm)	600
Max. machining diameter (mm)	480
Suit for valves type	Sluice valve DN50-DN200

Z axis travel(mm)	350
X axis travel(mm)	120
Rapid traverse speed (mm/min)	X: 3000 Z:3000
Repeated positioning accuracy	X: 0.01 Z:0.015
Clamping type	Hydraulic clamping
Controller	HMT818
Rail width(mm)	82
Bed width(mm)	600
Cover type X320A	Full cover
Cover type X320B	Semi-cover
Lubrication type	Electronic integrate lubrication
Dimension(mm) X320A	2700×1700×1800
Dimension(mm) X320B	2450×1600×1200

Typical workpiece



(2) Horizontal Porous Drilling Machine

Horizontal porous drilling machine includes horizontal porous combination drilling machine, hydraulic automatic horizontal porous drilling machine, mechanical semi-automatic horizontal porous drilling machine, hydraulic drilling machine.

Hydraulic automatic horizontal porous drilling machine is driven by hydraulic pressure as power, can realize stepless speed regulation of borehole, to improve drilling efficiency.



1. Horizontal porous combination drilling machine

Specification	Unit	HSZ150B	HSZ200B	HSZ300B
Power supply		380V/50HZ	380V/50HZ	380V/50HZ
(Voltage/frequency)				
Machine Power	KW	9	11	22
Water pump motor	KW	0.2	0.2	0.2
Fast speed power	KW	0.75	0.75	1.1
Max travel	Mm	380	380	420
Turning speed of drill pipe	r/min	300 450	270 360	270 360
Installation of drill pipe (National Standard)		Mohs 2	Mohs 2	Mohs 3
Drilling head	mm	8-23	8-26	18-28
Drilling hole distance error	mm	0.1	0.1	0.1
Distribution round diameter of processing hole	mm	60-240	60-295	295-410
Min center distance of processing hole	mm	36	36	36
Overall dimensions	mm	3000*850*1300	3100*900*1500	3100*1000*1500
Application		Both ends of the valve, flange, auto parts etc		

		The machine can be designed according to customer's workpiece
Lubricating forms		Lubrication pump lubrication
Clamping type		Manual clamping
		Optional is hydraulic clamping

2. Automatic hydraulic horizontal porous drilling machine

Specification	Unit	HSZ150BY	HSZ150B
Power supply		380V/50HZ	380V/50HZ
(Voltage/frequency)			
Machine Power	KW	11	5
Water pump motor	KW		0.2
Max travel	Mm	380	380
Turning speed of drill pipe	r/min	300 450	300 450
Installation of drill pipe (National Standard)		Mohs 2	Mohs 2
Drilling head	mm	8-23	8-23
Drilling hole distance error	mm	0.1	0.1
Distribution round diameter of processing hole	mm	60-240	60-240
Min center distance of processing hole	mm	36	36
Drilling motor power	Kw	2*4	2*4
Feeding speed		Stepless speed regulation	
Overall dimensions	mm	3000*850*1300	1500*850*1300
Application		Both ends of the valve, flange, motor shell body , auto parts etc The machine can be designed according to customer's workpiece	Middle port of valve, valve cover, motor shell body , auto parts etc
Lubricating forms		Lubrication pump lubrication	Lubrication pump lubrication
Clamping type		Lubrication clamping	Lubrication clamping
Feeding type		Lubrication feeding	
Cooling way			Water cooling

Combination of porous power heads can be designed according to customer's workpiece.

21. Specialized Machine for Pipeline Industry

(1) CNC Pipe Thread Lathe

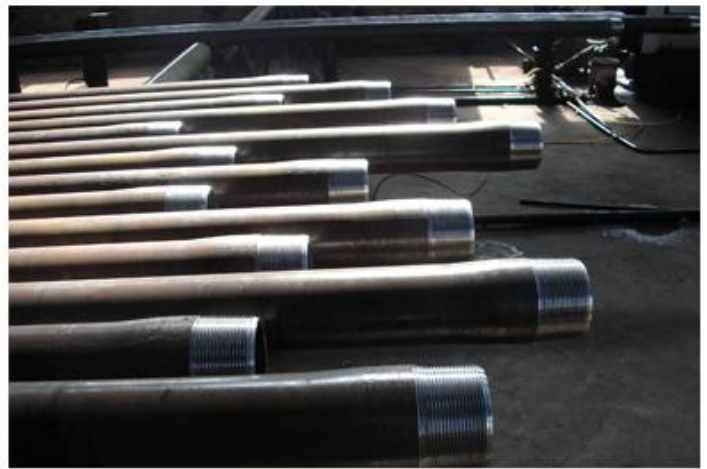
CNC pipe threading lathe has double clamping chucks, besides conventional pipe threading lathe function, processing various internal and external threads accurately and high-efficiency.



Specification	QK1313	QK1319	QK1322	QK1327	QK1330	QK1335	QK1343
Swing over bed	630mm		670mm	800mm	800mm	1000mm	1000mm
Swing over carriage	350mm		390mm	480mm	480mm	610mm	610mm
Spindle bore	135mm	200mm	225mm	280mm	305mm	360mm	445mm
Range of spindle speed	0-130r/min	0-80r/min		20-100r/min		50-340r/min	23-120r/min
	130-800r/min	80-500r/min		50-340r/min		100-220r/min	65-258r/min
Distance between two chucks	1450mm	1550mm		1510mm		1890mm	1940mm
Mode of spindle speed	Manual two steps inverter speed						
The max distance between centers	1450mm						
Span of guideway	490mm		550mm	600mm		755mm	
Main motor	11KW			15kw		22kw	

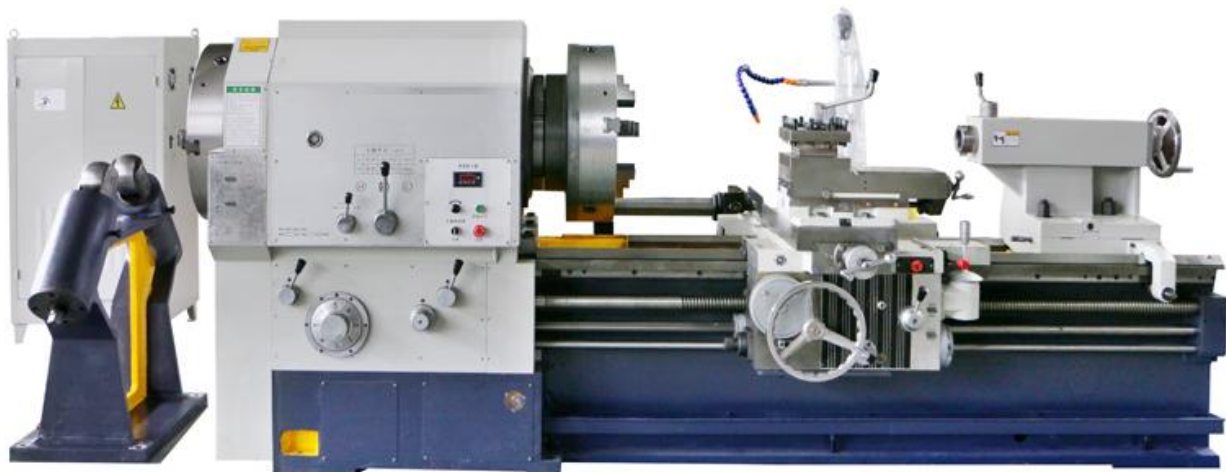
power			
Diameter of tailstock quill	100mm	100mm	140mm
Travel of tailstock quill	250mm		300mm
Taper hole of tailstock quill	M5	M6	
Automatic lubrication internal time	12min/time		
Rapid travel speed	X:4m/min Z:6m/min		
Lathe electricity	Three-phase 380V（-15%—+10%）50HZ		
X/Z repeat precision	0.012/0.016mm		

Typical workpiece



(2) Conventional Pipe Thread Lathe

Conventional pipe threading lathe is for meeting pipeline, drill pipe, and casing thread processing requirements in petroleum, chemical and metallurgical industry.



Conventional Pipe Threading Lathe								
Item	Unit	Q1313	Q1319	Q1322	Q1325	Q1327	Q1335	Q1343
Processing of pipe thread diameter	mm	50-135	50-193	50-225	250	70-280 70-300	350	440
Swing over bed	mm	630	630	670	800	800	1000	1000
Swing over carriage	mm	350	350	390	490	480	610	610
The maximum distance between centers	mm	1500,3000,4000,5000,6000,8000						
Maximum turning length	mm	1300,2800,3800,4800,5800,7800						
Span of guideway	mm	550	550	550	550	600	750	755
The distance of two chucks	mm	1500	1500	1500	1670	1700	1890	1930
Spindle bore	mm	135	200	225	250	280	350	440
Mode of spindle speed		Manual two steps inverter speed						
Range of spindle speed	r/min	17-350	20-100	24-100	25-70	20-100	17-100	23-120
		275-750	100-300	100-300	70-300	100-260	80-300	65-258
Screw pitch of leadscrew	mm	1/2	1/2	1/2	1/2	12	12	12
Saddle slide travel	mm	1310	1310	1310	1810	1810	1960	1960
Maximum travel of cross slide	mm	390	390	390	460	460	520	520

Maximum travel of top slide	mm	200	200	200	200	200	300	300
Diameter of tailstock quill	mm	100	100	100	100	100	140	140
Taper hole of tailstock quill		M5			M6			
Main motor power	KW	11	11	7.5	11	15	22	22
Fast motor		ACH-90 0.3KW						
		1450R/MIN						
Cooling pump		JCB-22 0.125KW						
		2800r/min						

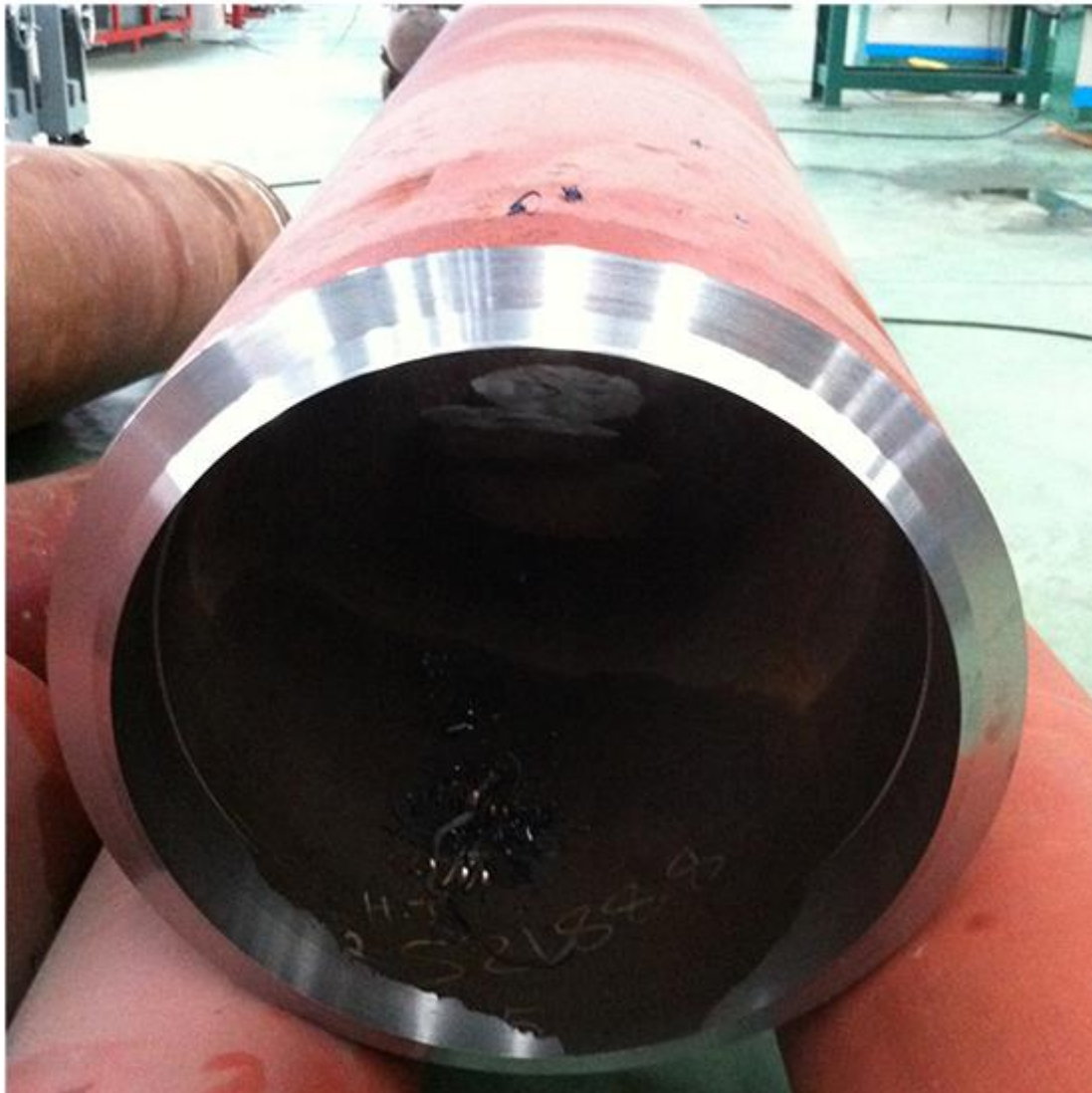
(3) Beveling Machine

Beveling diameter: DN600/DN800/DN1000/DN1200/DN1500

Features of the beveling machine: A lower screw lift up and down the upper portion of the cylinder tube clamping asynchronous, differential feed radial or axial electric retract servo motor feed / retraction, PLC touch screen preset parameters, ordinary CNC blade without cooling liquid, double V-shaped and U-shaped groove for radial or axial beveling and thick-walled pipe wall thickness of ordinary pipe radial beveling.



Typical workpiece



(4) Band Saw Machine

Cutting Pipe diameter: DN400/DN600/DN800/DN1000/DN1200/DN1500

Features of the band saw machine: Front 2 of the jaw mechanism, the grating + hydraulic cylinder or servo motor and ball screw, fixed-length system, bilateral synchronous hydraulic cylinder for clamping, V-type conveyor roller pair, frequency conversion stepless cutting speed regulation, piped real-time color video surveillance, human-machine interface for continuous automatic cutting multi-tube after the preset data.



Typical workpiece



(5) Coupling Tight Machine

Coupling tight machine is characterized by a large clamping range, the overall high strength, clamping reliable, non-skid, do not hurt pipe, qualified to API standards.



HNJG Series Coupling Tight Machine

Specifications	HNJG180/20	HNJG230/30	HNJG-290/30	HNJG-400/68	HNJG570/68
Diameter	Φ 180	Φ 230	Φ 290	Φ 400	Φ 570
Range of application	Φ 60.33- Φ 140mm oil tube , steel grade J55,N80,P110 (2 3/8 " —27/8 " —3 1/2 " —41/2 " —51/2 ")	Φ 48- Φ 177.8 (2"—7")	Φ 60- Φ 244.5 (2"—79")	Φ 139.7- Φ 339.7 (5"—14")	Φ 244.5- Φ 508 (9"—20")
Min speed of main tong head	1-7r/min	1-6r/min	1-6r/min	1-8r/min	1-6r/min
Max speed of main tong head	10-21r/min	10-21r/min	10-21r/min	101-25r/min	1-21r/min

Max torque	In 16 Mpa pressure, max torque is 20 KN.m. can meet screw-on requirements of not thicken tube by API standard	30KN.m	30KN.m	68KN.m	68KN.m
Motor power	30Kw	30Kw	30Kw	30Kw	37Kw
Control method	PLC+IPC control	PLC+IPC control	PLC+IPC control	PLC+IPC control	PLC+IPC control

HNJQ Series Coupling Tight Machine

Specifications	HNJQ250/75	HNJQ400/75	HNJQ470/100	HNJQ590/200
Clamping range	2"-8"	2"-14"	2"-16"	2"-23"
Max Shackle torque	75KN.m.(50000ft.lb) under pressure 16 Mpa		100KN.m.under pressure 20 Mpa	200KN.m.under pressure 20 Mpa
Through diameter	¢ 250mm	¢ 400mm	¢ 470mm	¢ 590mm

(6) Hydro Tester

Hydro tester (Water pressure testing machine) is for pressure and blasting performance testing of all kinds of automobile hose, rubber hose, air conditioning pipe, auto assembly products etc.



Specification			
Items	7 "oil casing water pressure testing machine	13 " water pressure testing machine	20 "casing water pressure testing machine
Range of application	60mm-177.8mm, length 8.5 ~ 13m, pressure test a piece / time;	114mm-340mm, length of 8.5 ~ 13m, pressure test a piece / time	245mm-508mm, length of 8.5 ~ 13m, pressure test a piece / time
Pressure test mode	Steel skeleton big hug forced radially outer gap seal	Steel skeleton big hug forced radially outer gap seal	Steel skeleton big hug forced radially outer gap seal
Test pressure	0 ~ 80Mpa, qualified to API standards	0 ~ 70Mpa, qualified to API standards	0 ~ 70Mpa, qualified to API standards
The Max pressure drop during pressure holding	less than test pressure 1%		
Pressure holding	5 ~ 60S, adjustable		
Test medium	Water or emulsion		
Production tact	1 piece/70 seconds (139.7 mm casing, Pressure holding time of 5 seconds, the test pressure 70MPa)	1 piece/90 seconds (244.5 mm casing, Pressure holding time of 5 seconds, the test pressure 60MPa)	1 piece/120 seconds (508 mm casing, Pressure holding time of 5 seconds, the test pressure 15MPa)
Installed capacity	90KW	180KW	160KW
Total weight	45T	90T	100T

II . COMPANY PROFILE

(1) Corporate Overview

Dalian Haisen Machinery Co.,Ltd. is the accredited machine tool producing company in China. providing unparalleled quality with sheer excellence.

Haisen specialized in machine tools field and continually improving to develop high quality, high speed, high precision technology machine tools. Our fully equipped facility can provide the high level different machine tools for pipeline, valves, military, automotive, aerospace, locomotive, energy, shipping and other industries.

Haisen produces a line of machine tools that includes:

- CNC Lathe / Turning Center Series
- Vertical Machining Center Series
- Horizontal Machining Center Series
- Pipe Thread Lathe Machine Series
- Vertical Lathe Series
- Gantry Milling Machine Center Series
- Boring and Milling Machine Series
- Specialized Machine for **Valve Industry**
- Specialized Machine for **Pipeline Industry**
- Automation Solution

Our Quality Management System and products are certified to standards including CE, ISO9001: 2000, ISO14001, OHSAS18001, China Patent, Measurement Guarantee Confirmation Certificate etc.

Our machine has been exported to Germany, The United States, Russia, Poland, South Africa, Turkey, Ethiopia, Brazil, Argentina, Malaysia etc.

Our machine precision can be guaranteed by high-end of "machine tools", completeness of machine detecting, and high-level of engineer teams.

In HAISEN, machine tool quality is not only the corporate slogan to sincere business, but also is an inseparable part of our being.

(2) Haisen Service

Haisen offers a broad range of services and support to every customer of ours, including Basic Service and Extended Services

1. Basic Service

- ✓ Product Model Selection
- ✓ Product Installation and Commissioning
- ✓ CNC Technical Training
- ✓ Machine Customized
- ✓ Make OEM Machine
- ✓ Packing List, Commercial Invoice etc
- ✓ Consulting Service, such as Maintenance and Some Instruction Documents etc

2. Extended Service

- ✓ Complete Progress Report of Machine Production
- ✓ Accurate Testing Report of Machine
- ✓ Trade Assurance
- ✓ The Most Suitable Container and Transportation Solution
- ✓ Zero Obstacle Russian Communication for Customers Who Only Speak Russian
- ✓ Much Time Warranty According to Customer's Need
- ✓ Wearing Parts Can Be Provided with Machine
- ✓ Other Relevant Service