Extra Heavy-duty CNC Horizontal Lathe

Features

1. This is a type of universal NC and heavy horizontal lathe with bearing 32ton, which is applicable for turning external and internal cylindrical surfaces, oil grooves, cutting off, boring hole, turning inside and outside conical, cylindrical, discoid parts and different kinds of screw thread to axes parts of different materials with high-speed steel and hard alloy steel cutters.
2. This machine bed's structure is integral box-shaped and three strip rectangular guideway, and its found once by high quality cast iron(HT300), through two-aged processing, stability is good.
3. Width guide way surface(1600mm), good rigidity, strong anti-vibration ability.
4. It is adopt inlay steel guide way and accurate ground by import guide way grinder, guarantee the machine tool's longevity, high precision and best receptivity.
5. The machine master drive institution is dragged by 75kw DC electromotor, and it adopt the mode of speed regulation of adjust magnetism commix with adjust pressure, total ratio of speed regulation is 1: 22.2, the institution's speed regulation progression is third class, the syntheses speed regulation ratio of mechanism and electric is 1:200, thereby make the master axes obtain infinite class speed variation scope 0.8~160r/min.
6. The Z axis feeding system adopt import precision gear rack structure, the X axis feeding system adopt high precision ball screw, guarantee the stability of process precision.

AK-2000H/1

Specification	Unit	AK-1600H/1	AK-2000H/1	AK-2500H/1
Max.swing dia over bed	mm	1600	2000	2500
Max.torque of face chuck	kg.m	8000	8000	8000
Max.workpiece length	mm	3000-18000(according to customer's need)		
Max. swing over cross slide	mm	1250	1600	2200
Form of bed guideway		3 slideways	3 slideways	3 slideways
Width of bed	mm	1600	1600	1600
Spindle speed	rpm	0.8-160(stepless)	0.8-160(stepless)	0.8-160(stepless)
Face chuck diameter	mm	1600	1600	1600
Range of longitudinal feed	mm/min	1-4000	1-4000	1-4000
Infeed stroke	mm	800	800	800
Range of cross feed	mm/min	1-2000	1-2000	1-2000
Tool post		Vertical 4-possition	Vertical 4-possition	Vertical 4-possition
Diameter of tailstock quill	mm	300	300	300
Travel of tailstock quill	mm	300	300	300
Taper hole of tailstock quill		1:7	1:7	1:7
Rapid traverse of tailstock	mm/min	3000	3000	3000
Rapid traverse of sleeve	mm/min	664	664	664
Max. weight of workpiece	kg	32000		

▶There are also 63ton and 80ton loading capacity models available according to customer's need.

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

ZHENGZHOU
TIMEWAY MACHINE TOOL CO., LTD.
TIMAC

CNC Horizontal Lathe

Features:

1.These series are economical and practical CNC lathe. With optimized structures, unfailing performance, high quality, simple programming, and easy handling, they are suitable for turning of complicated shaft, sleeve, and disk type workpieces such as turning of internal and external cylindrical, conical, arc surfaces and various threads, and even drilling, boring and reaming holes. And they are especially fit for turning of diversified workpieces on small and medium batches.
2.They are of high versatility, high efficiency, low inferiority and good conformability. So to be widely used in various trades, such as automobile industry, petroleum industry, military industry, and so on.
3. AK...B Series accomplish step-less spindle speed-changing by means of main motor frequency conversion and 4-shift hydraulic gear change.
4.AK...BJ Series obtain 18 speeds all manually.

AK-800B

AK-800BJ

Specification	Unit	AK-800B AK-800BJ	AK-1000B AK-1000BJ
Swing over bed	mm	800	1000
Swing over cross slide	mm	480	680
Max. length of workpiece	mm	1000/1500/2000/3000/4000/5000/6000	1000/1500/2000/3000/4000/5000/6000
Max. turning length	mm	850/1350/1850/2850/3850/4850/5850	850/1350/1850/2850/3850/4850/5850
Width of bed	mm	600	600
Spindle nose		C11(optional: C15)	C11(optional: C15)
Chuck size	mm	400	400
Spindle bore	mm	100(optional: 140)	100(optional: 140)
Taper hole of spindle	mm	1:20/120(1:20/150)	1:20/120(1:20/150)
Spindle speed	rpm	AK-800B: auto 4 gear steps, stepless in step. 8-800	AK-1000B : auto 4 gear steps, stepless in step. 8-800
		AK-800BJ:18 gear speed, 6-750	AK-1000BJ:18 gear speed, 6-750
Tool-post working position		Vertical 4-position	Vertical 4-position
Rapid speeds of X-/Z-axis	m/min	3-4/6-8	3-4/6-8
Section of tool shank	mm	□32	□32
Diameter of tailstock quill	mm	100	100
Travel of tailstock quill	mm	250	250
Taper hole of tailstock quill		Morse 6	Morse 6
Main motor power	kw	15	15
Max.weight of workpiece	kg	3000	

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

Heavy-duty CNC Horizontal Lathe

Features:

1.These series are economical large type CNC lathes.
2.Spindle speeds of AK series are changed by frequency converter in 4 hydraulic gear-shifts, and it is all manually for AK...J series.
3.AC servo motor is adopted in feeding system, and the tailstock is moved electrically.
4.They are ideal equipment for large and middle sized complicated workpieces precision machining in batches.

AK-1000

AK-1600J

Specification	Unit	AK-1000 AK-1000J	AK-1250 AK-1250J	AK-1600 AK-1600J
Swing over bed	mm	1000	1250	1640
Swing over cross slide	mm	630	880	1250
Max. length of workpiece	mm	1500/3000/5000/6000/8000/10000/12000/14000/16000/18000		
Max. turning length	mm	1230/2730/4730/5730/7730/9730/11730/13730/15730/17730		
Width of bed	mm	755	755	755
Spindle nose		A2-15	A2-15	A2-15
Chuck size	mm	1000	1000	1000
Spindle bore	mm	130	130	130
Taper hole of spindle	mm	1:20/140	1:20/140	1:20/140
Spindle speed	rpm	AK series: auto 4 gear steps,stepless in step. 3.15-315 AK···J series:foreward:3.15-315(manual 21 gear speed)reversal:3.5-291(manual 12 gear speed)		
Center height from bed	mm	500	625	820
Min.feed increment of X-/Z-axis	mm	0.001/0.001	0.001/0.001	0.001/0.001
Rapid speeds of X-/Z-axis	mm/min	3000/6000	3000/6000	3000/6000
Max.travel of x-axis	mm	520	580	630
Tool-post working position		Vertical 4-position		
Indexing time	s	2.6(V4)	2.6(V4)	2.6(V4)
Indexing repeatility	mm	0.01	0.01	0.01
Section of tool shank	mm	□40	□40	□40
Diameter of tailstock quill	mm	160	160	160
Travel of tailstock quill	mm	300	300	300
Taper hole of tailstock quill		Morse 6	Morse 6	Morse 6
Workpiece accuracy		IT6-IT7	IT6-IT7	IT6-IT7
Surface roughness	μm	Ra1.6	Ra1.6	Ra1.6
Main motor power	kw	22	22	22
Max.weight of workpiece	kg	6000(optional: 8000)		

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

ZHENGZHOU
TIMEWAY MACHINE TOOL CO., LTD.
TIMAC

Heavy-duty CNC Horizontal Lathe

Features:

1. This series heavy-duty CNC lathe is developed and made according to market demand which has semiclosed loop control function.
2. This series machine can process a variety of shaft, disk type parts, it can also turn many kinds of thread, the circular arc, and the rotary cone inner and outer surfaces, it meets the high-speed cutting of ferrous metals and non-ferrous metal speed requirements.
3. These lathes are suitable for ship, locomotive, aerospace, military industry, metallurgy and other industries when do rotating parts for efficient, multitudinous, high-precision processing use.
4. The rigidity of the bed, spindle, tailstock and other key components are matched reasonable, it improves the rigidity of the machine greatly and ensure the stability of heavy-cutting.
5. AK...H series: the spindle speed change use hydraulic 4-step, in step is stepless.
6. AK...HJ series spindle speed change is by hand.
7. Feed system uses AC servo motor.
8. The machine makes program easily, and operate simply, they are ideal largescale mechanical processing equipment.

AK-2000H

Specification	Unit	AK-1250H AK-1250HJ	AK-1600H AK-1600HJ	AK-2000H AK-2000HJ
Max. swing dia. over bed	mm	1250	1600	2000
Max. swing dia. over cross slide	mm	900	1250	1650
Max. workpiece length	mm	3000/4000/5000/6000/8000/10000/12000/14000/16000/18000		
Max. cutting length	mm	2800/3800/4800/5800/7800/9800/11800/13800/15800/17800		
Form of bed guide way		double rectangles	double rectangles	double rectangles
Spindle nose		A2-15 (1:4; 285.775mm)		
Chuck size	mm	1250	1250	1250
Spindle bore	mm	100	100	100
Taper hole of spindle		metic system 140	metic system 140	metic system 140
Spindle speed	rpm	AK...H series: auto 4 gear steps,stepless in the step. 3 ~320 AK...HJ series: foreward: 3.15 ~315 (manual 21 gear speed) reversal: 3.5 ~291 (manual 12 gear speed)		
Rapid speeds of X/Z-axis	mm/min	4000/6000	4000/6000	4000/6000
Drive mechanism of Z-axis		screw or pinion and rack		
Tool-post working position		Vertical 4-position	Vertical 4-position	Vertical 4-position
Size of tool post	mm	380 x 380	380 x 380	380 x 380
Max. travel of tailstock	mm	800	800	800
Size of tool shank	mm	□50	□50	□50
Diameter of tailstock quill	mm	260	260	260
Travel of tailstock quill	mm	300	300	300
Taper hole of tailstock quill		metic 80	metic 80	metic 80
Travel speed of tailstock	m/min	3.2	3.2	3.2
Workpiece accuracy		IT7	IT7	IT7
Surface roughness	μm	Ra2.5~Ra3.2	Ra2.5~Ra3.2	Ra2.5~Ra3.2
Main power	kw	30	30	30
Max.weight of workpiece	kg	16000(optional: 20000)		

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

Extra Heavy-duty Horizontal Lathe

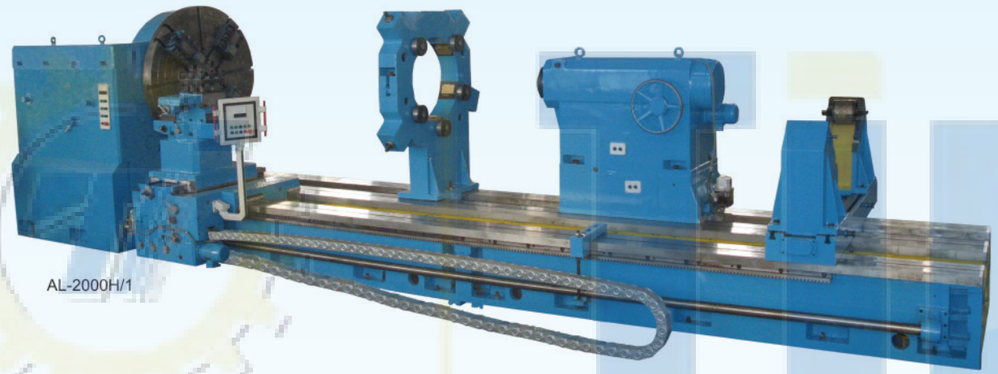
Features:

1.This is one type of universal lathe bearing 32ton, it is applicable for turning external and internal cylindrical surface, oil grooves, cutting off, boring hole, turning inside and outside conical, cylindrical and discoid parts to axes parts of different materials with high-speed steel and hard alloy steel cutters, and it can turn different kinds of screw thread with length short of 600mm with upper tool-post(via change gears).

2.This machine bed structure is integral box-shaped and three strip rectangle guide way, and it is found once by high quality cast iron (HT300), through two-aged processing, stability is good; Width guideway surface (1600mm), good rigidity ,strong anti-vibration ability; it is accurate ground by import guide way grinder, which guarantee the high precision and best receptivity

3.The machine's tool master drive institution is dragged by 75KW DC electromotor, and it adopts the mode of speed regulation of adjust magnetism commix with adjust pressure, total ratio of speed regulation is 1:22.2, the institution's speed regulation progression is third class, the syntheses speed regulation ratio of mechanism and electric is 1:200, there by made the master axes obtain infinite class speed variation scope 0.8-160r/min.

4.Input system is connected with naked bar and master drive, made the input directness relation to speed of master axes, feeding amount selection is facility.



AL-2000H/1

Specification	Unit	AL-1600H/1	AL-2000H/1	AL-2500H/1
Swing over bed	mm	1600	2000	2500
Max.torque of face chuck	kg.m	8000	8000	8000
Max.workpiece length	mm	3000-18000(according to customer's need)		
Swing over cross slide	mm	1250	1600	2200
Form of bed guide way		3 slideway	3 slideway	3 slideway
Width of bed	mm	1600	1600	1600
Spindle speed	rpm	0.8~160(stepless)	0.8~160(stepless)	0.8~160(stepless)
Taper hole of spindle	mm	120(tapered1 : 7)	120(tapered1 : 7)	120(tapered1 : 7)
Face chuck diameter	mm	1600	1600	1600
Longitudinal feed range	mm/r	18kinds, 0.125~48	18kinds, 0.125~48	18kinds, 0.125~48
Cross feed range	mm/r	18kinds, 0.063~24	18kinds, 0.063~24	18kinds, 0.063~24
Upper tool-post feed range	mm/r	0.063~24	0.063~24	0.063~24
Number and range of metric thread	mm	2~40	2~40	2~40
Number and range of inch thread	TPI	1~14	1~14	1~14
Number and range of module thread	mm	1.5~20	1.5~20	1.5~20
Max.travel of cross slide	mm	725	725	800
Max.travel of top slide	mm	600	600	600
Diameter of tailstock quill	mm	300	300	300
Travel of tailstock quill	mm	300	300	300
Taper hole of tailstock quill	mm	100(tapered1 : 7)	100(tapered1 : 7)	100(tapered1 : 7)
Main motor power	kw	75	75	75
Max. weight of workpiece	kg	32000		

▶There are also 63ton and 80ton loading capacity models available according to customer's need.

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

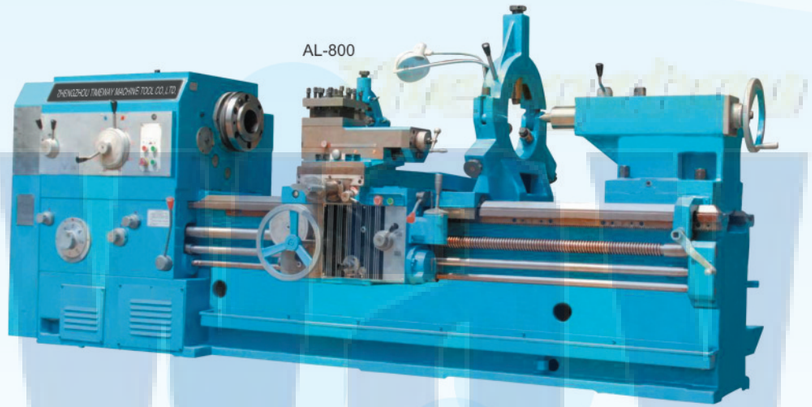
ZHENGZHOU
TIMEWAY MACHINE TOOL CO., LTD.
TIMAC

Horizontal Lathe

Features:

These horizontal lathes are suitable for turning internal and external cylindrical, conical and swing surfaces as well as various metric, inch, module and diametric pitch threads. They can also be used for broaching oil grooves and key ways.

1. Casted in whole piece, box type internal structure, of high rigidity, with hardened guideway. The rigidity is high. The precision is stable. And these lathes can carry out strong force cutting.
2. On apron, there is a device, operated by a single lever, used for rapid traverse of the carriage. Spindle's braking and rotating direction change is controlled by hydraulic system, or by hand operation, all to user's choice.
3. The saddle guideway is glued by "TSF" soft belt wear resisting materials.
4. The top slide can be used independently for turning of short cone, in combination with longitudinal feeding, it can also turn long taper surface.



AL-800

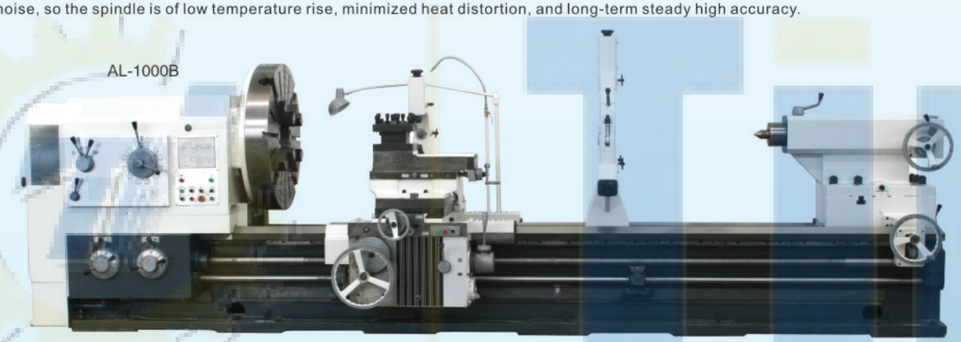
Specification	Unit	AL-800	AL-1000
Swing over bed	mm	800	1000
Swing over cross slide	mm	480	680
Max. length of workpiece	mm	1000/1500/2000/3000/4000/5000/6000/7000/8000	
Max. turning length	mm	850/1350/1850/2850/3850/4850/5850/6850/7850	
Width of bed	mm	600	600
Spindle nose		C11 (optional: C15)	C11 (optional: C15)
Diameter of spindle thru hole	mm	100 (optional: 140)	100 (optional: 140)
Taper hole of spindle		1:20	1:20
Spindle speed (forward)	rpm	18kinds, 5.5~750	18kinds, 5.5~750
Spindle speed (reverse)	rpm	6kinds, 10~775	6kinds, 10~775
Longitudinal feed range	mm/r	64kinds, 0.1~24.32	64kinds, 0.1~24.32
Cross feed range	mm/r	64kinds, 0.05~12.16	64kinds, 0.05~12.16
Screw pitch of lead screw	mm	12	12
Number and range of metric thread	mm	50kinds, 1~240	50kinds, 1~240
Number and range of inch thread	TPI	26kinds, 14~1	26kinds, 14~1
Number and range of module thread	mm	53kinds, 0.5~120	53kinds, 0.5~120
Number and range of diametrical pitch thread	DP	24kinds, 28~1	24kinds, 28~1
Rapid traverse speed of carriage	mm/min	4000	4000
Distance between spindle center-line and tool resting plane	mm	33	33
Size of tool shank	mm	□32	□32
Tool post swing range		±90°	±90°
Max. travel of top slide	mm	200	200
Max. travel of cross slide	mm	500	500
Diameter of Tailstock quill	mm	100	100
Travel of tailstock quill	mm	250	250
Taper hole of tailstock quill		morse6	morse6
Main motor power	kw	11	11
Max.weight of workpiece	kg	3000	

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

Heavy-duty Horizontal Lathe

Features:

These lathes are suitable for turning cast iron and steel workpieces, turning of nonferrous metal parts of big or medium sizes. It can do external cylindrical surface turning, inner hole and end face turning. It can also turn various internal and external metric, inch, module and diametrical pitch threads, the top slide can be used independently for turning of short taper.
These lathes are of high power, high rigidity and wide rotating speed range, so it can be used for high speed and strong force turning.
1. Bed with high rigidity
Casted in whole piece, box type internal structure, of high rigidity, with hardened guideway, TSF coated carriage to minimize the possibility of low speed stick-slip.
2. Main spindle with high rigidity and high accuracy
Spindle comes with bearing of famous brand, spindle-box of heat-symmetrical structure to avoid spindle axis drifting, oil lubricating to minimize heat distortion.
Spindle comes with three support structure to secure accuracy and increase rigidity, all gears quenched and tooth-ground to secure precise transmission and low noise, so the spindle is of low temperature rise, minimized heat distortion, and long-term steady high accuracy.



Specifcation	Unit	AL-1000B	AL-1250B	AL-1600B
Swing over bed	mm	1000	1250	1640
Swing over cross slide	mm	615	865	1250
Max. length of workpiece	mm	1500/3000/5000/6000/8000/10000/12000/14000/16000/18000		
Max. turning length	mm	1300/2800/4800/5800/7800/9800/11800/13800/15800/17800		
Width of bed	mm	755	755	755
Spindle nose		A2-15	A2-15	A2-15
Spindle bore	mm	130	130	130
Taper hole of spindle	mm	1:20/140	1:20/140	1:20/140
spindle speeds(forward)	rpm	21kinds, 3.15~315	21kinds, 3.15~315	21kinds, 3.15~315
spindle speeds(reverse)	rpm	12kinds,3.5~291	12kinds,3.5~291	12kinds,3.5~291
Longitudinal feed range	mm/r	56kinds, 0.1~12(0.004"~0.473")		
Cross feed range	mm/r	56kinds, 0.05~6(0.002"~0.236")		
Upper tool-post feed range	mm/r	0.025~3(0.001"~0.118")		
Number and range of metric thread	mm	44kinds, 1~120	44kinds, 1~120	44kinds, 1~120
Number and range of inch thread	TPI	31kinds, 28~1/4	31kinds, 28~1/4	31kinds, 28~1/4
Number and range of module thread	mm	45kinds, 0.5~60	45kinds, 0.5~60	45kinds, 0.5~60
Number and range of diametrical pitch thread	DP	38kinds,1/2~56	38kinds,1/2~56	38kinds,1/2~56
Rapid travel speed(longitudinal)	mm/min	3740	3740	3740
Rapid travel speed(cross)	mm/min	1870	1870	1870
Rapid travel speed(top slide)	mm/min	935	935	935
Distance between spindle center-line and tool resting plane	mm	48	48	48
Section of tool shank	mm	□45	□45	□45
Tool post swing range		±90°	±90°	±90°
Max. travel of carriage	mm	1450/2950/4950/5950/7950/9950/11950/13950/15950/17950		
Max. travel of top slide	mm	300	300	300
Max. travel of cross slide	mm	520(20")	580(22")	630(24")
Tool post travel per turn of the dials of top or cross slide	mm	0.05(0.002")	0.05(0.002")	0.05(0.002")
Diameter of tailstock quill	mm	160(6")	160(6")	160(6")
Travel of tailstock quill	mm	300(12")	300(12")	300(12")
Taper hole of tailstock quill		Morse 6	Morse 6	Morse 6
Main motor power	kw	22	22	22
Max.weight of workpiece	kg	6000(optionl: 8000)		

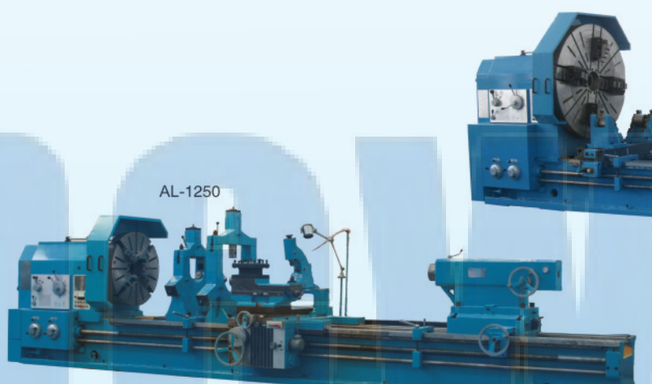
Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

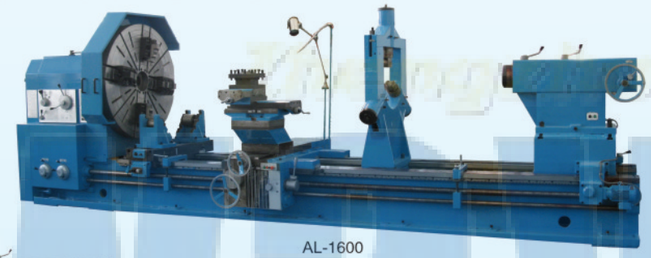
ZHENGZHOU
TIMEWAY MACHINE TOOL CO., LTD.
TIMAC

Heavy-duty Horizontal Lathe

Features:

1. This series heavy duty lathe adopts 1100mm wide rectangular induction hardened and ground bed guide ways, so of excellent stability, high rigidity, and with maximum bearing of 16 tons between centers.
2. The main spindle is of precision roller bearings 3-point supporting structure. Saddle guide ways with Teflon belt coated .Rotating tailstock quill structure to minimize friction and heat generation.3. These machines are suitable for various turning works, such as turning of external and internal cylindrical surfaces, end faces, and turning of metric or inch threads, modular threads and diametrical pitch threads, etc.
4. Motorized short taper turning could be done by the top slide independently, and long taper's motorized turning could be done by top slide combined with longitudinal feed. Further more, these machines can also carry out drilling, trepanning and boring processes, etc.





Specification	Unit	AL-1250	AL-1600	AL-2000
Swing over bed	mm	1250	1600	2000
Swing over cross slide	mm	900	1250	1650
Max. length of workpiece	mm	3000/4000/5000/6000/8000/10000/12000/14000/16000/18000		
Max. turning length	mm	2800/3800/4800/5800/7800/9800/11800/13800/15800/17800		
Width of bed	mm	1100	1100	1100
Spindle nose		A2-15	A2-15	A2-15
Spindle bore	mm	100	100	100
Taper hole of spindle		metric 140	metric 140	metric 140
Spindle speeds(forward)	rpm	21kinds, 3.15~315	21kinds, 3.15~315	21kinds, 3.15~315
Spindle speeds(reverse)	rpm	12kinds, 3.5~291	12kinds, 3.5~291	12kinds, 3.5~291
Longitudinal feed range	mm/r	56kinds, 0.1~12(0.004"~0.473")		
Cross feed range	mm/r	56kinds, 0.05~6(0.002"~0.236")		
Upper tool-post feed range	mm/r	0.025~3(0.001"~0.118")		
Number and range of metric thread	mm	44kinds, 1~120	44kinds, 1~120	44kinds, 1~120
Number and range of inch thread	TPI	31kinds, 28~1/4	31kinds, 28~1/4	31kinds, 28~1/4
Number and range of module thread	mm	45kinds, 0.5~60	45kinds, 0.5~60	45kinds, 0.5~60
Number and range of diametrical pitch thread	DP	38kinds,1/2~56	38kinds,1/2~56	38kinds,1/2~56
Rapid travel speed(longitudinal)	mm/min	3740	3740	3740
Rapid travel speed(Transverse)	mm/min	1870	1870	1870
Rapid travel speed(Top slide)	mm/min	935	935	935
Distance between spindle center-line and tool resting plane	mm	53	53	53
Section of tool shank	mm	□50	□50	□50
Tool post swing range		±90°	±90°	±90°
Maximum travel of top slide	mm	53	53	53
Maximum travel of cross slide	mm	740(29")	850(33")	900(35")
Tool post travel per turn of the dials of top or cross slide	mm	0.05(0.002")	0.05(0.002")	0.05(0.002")
Diameter of tailstock quill	mm	260	260	260
Travel of tailstock quill	mm	300(12")	300(12")	300(12")
Taper hole of tailstock quill		metric 80	metric 80	metric 80
Main motor power	kw	30	30	30
Maximum weight of workpiece	kg	16000(optional: 20000)		

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

CNC Horizontal Lathe

Features:

1. These series are economical and practical CNC lathes. With optimized structures, unfailing performance, high quality, simple programming, and easy handling, they are suitable for turning of complicated shaft, sleeve, and disk type workpieces such as turning of internal and external cylindrical, conical, arc surfaces and various threads, and even drilling, boring and reaming holes. And they are especially fit for turning of diversified workpieces on small and medium batches.
2. They are of high versatility, high efficiency, low inferiority and good conformability. So to be widely used in various trades, such as automobile industry, petroleum industry, military industry, and so on.
3. AK series accomplish step-less spindle speed-changing by means of main motor frequency conversion and 4-shift hydraulic gear-change.
4. AK...J series obtain 18 speeds all manually.
5. AK...A series spindle speed changing introduces 6-shift hydraulic gear-change and 3-shift manual gear-change to obtain 12 speeds.

AK-800

AK-800J

Specification	Unit	AK-630 AK-630J AK-630A	AK-800 AK-800J AK-800A	AK-940 AK-940J AK-940A
Swing over bed	mm	630	800	940
Swing over cross slide	mm	340	510	650
Max. length of workpiece	mm	750/1000/1500/2000/3000/4000/5000/6000		
Max. turning length	mm	600/850/1350/1850/2850/3850/4850/5850		
Width of bed	mm	550	550	550
Spindle nose		C11	C11	C11
Chuck size	mm	325	325	325
Spindle bore	mm	100	100	100
Taper hole of spindle	mm	1:20/120	1:20/120	1:20/120
Spindle speed and range	rpm	AK-630: auto 4 gear steps, stepless in step.12.5-1000 AK-630J: 18 gear speed,7.5-1000 CK-630A: auto 6 gear steps, manual 3 gear speed. 9-1000	AK-800 : auto 4 gear steps, stepless in step.10-800 AK-800J:18 gear speed, 6-800 AK-800A : auto 6 gear steps, manual 3 gear speed. 7-800	AK-940 : auto 4 gear steps, stepless in step.10-800 AK-940J:18 gear speed, 6-800 AK-940A : auto 6 gear steps, manual 3 gear speed. 7-800
Center height from bed	mm	315	400	470
Min.feed increment of X-/Z-axis	mm	0.001/0.001	0.001/0.001	0.001/0.001
Rapid speeds of X-/Z-axis	mm/min	3000/6000	3000/6000	3000/6000
Max.travel of x-axis	mm	390	475	475
Tool-post working position		V4/V6/H6/H8	V4/V6/H6/H8	V4/V6/H6/H8
Indexing time	s	2.4(V4)/2.2(V6)	2.4(V4)/2.2(V6)	2.4(V4)/2.2(V6)
Indexing repeatility	mm	0.008	0.008	0.008
Section of tool shank	mm	□32	□32	□32
Diameter of tailstock quill	mm	100	100	100
Travel of tailstock quill	mm	250	250	250
Taper hole of tailstock quill		Morse 5	Morse 5	Morse 5
Workpiece accuracy		IT6-IT7	IT6-IT7	IT6-IT7
Surface roughness	μm	Ra1.6	Ra1.6	Ra1.6
Main motor power	kw	11	11	11

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

ZHENGZHOU
TIMEWAY MACHINE TOOL CO., LTD.
TIMAC

Full Function CNC Lathe

Features:

1.These lathes are semi-closed loop CNC machine tools suitable to turn various complicated shaft, sleeve and disk-like workpieces, such as turning of internal and external cylindrical, conical and other circumgyration surface as well as various metric, inch, modular and diametric pitch threads.
2. They can also be used for oil grooves and keyways broaching, end-facing, grooving and chamfering etc.
3. The unique construction developed using FEA techniques to provide maximum stiffness under the heaviest cutting conditions.
4. The machining accuracy is about IT5-IT6, and the surface roughness is about Ra0.4um for nonferrous metal cutting and Ra0.8um for ferrous metal's.
5. As universal CNC lathes, they are especially suitable for the machining of high precision workpieces, and also widely used to machining parts in batches in the fields of automobile, motorcycle, railroad, aero-craft, home-appliance, bearing, hardware, etc.

AK-45

Specification	Unit	AK-10	AK-15B	AK-25	AK-35	AK-45
Swing over bed	mm	360	440	520	660	850
Max. turning dia. over bed	mm	300	320	420	550	800
Max. turning dia. over cross slide	mm	170	220	360	420	650
Max. turning length	mm	500/750/1000	450/700/950	530/905/1405/1905/2905/3905	780/1530/1890/2890/3890	900/1400/1900/2900/3900
Distance between centers	mm	600/800/1100	600/850/1100	625/1000/1500/2000/3000/4000	890/1640/2000/3000/4000	1000/1500/2000/3000/4000
Max. bar capacity	mm	36	52	70	80	120/150
X-axis travel	mm	170	190	230	305	450
Z-axis travel	mm	510/760/1010	510/760/1010	590/965/1465/1965/2965/3965	855/1605/1965/2965/3965	950/1450/1950/2950/3950
Rapid traverse(X/Z-axis)	m/min	18/20	18/20	12/15	12/15	12/15
Cutting feed(X/Z-axis)	mm/min	5000	5000	5000	5000	5000
Hand feed(X/Z-axis)	mm/min	1260	1260	1260	1260	1260
Spindle speed	rpm	50-5000	50-4500	35-3500	25-2500	0-2000
Spindle nose		A2-5	A2-6	A2-8	A2-8	A2-11/A2-15
Chuck size		6"	8"	10"	12"	15"
Spindle front end bearing(dia)	mm	80	100	130	160	200
Spindle bore(dia)	mm	50	62	87	92	131
Number of stations		8	8	12	12	12
Indexing time	s	0.58	0.58	1	1	0.9
Tool shank size	mm	25 × 25	25 × 25	25 × 25	25 × 25	32 × 32
Boring bar shank dia	mm	32	40	40	50	60
Main spindle motor	kw	7.5/11	9.0/11	18.5/15	30/22	100
X-axis servo motor	kw	1.2	1.6	1.6	3	4
Z-axis servo motor	kw	1.8	1.6	3	4	7
Max travel of tailstock	mm	360/610/860	360/610/860	490/865/1365/1865/2865/3865	760/1500/1900/2900/3900	900/1400/1900/2900/3900
Tailstock quill dia	mm	80	80	85	110	140
Tailstock travel	mm	100	100	80	100	130
Tailstock quill taper hole		MT-4	MT-4	MT-5	MT-5	MT-6
Coolant capacity	L	120	120	200/230/280/330	200/250/280/350	450
Total power	kw	20	25	30	46	130
X-axis positioning accuracy	mm	0.025	0.025	0.025	0.025	0.025
X-axis repositioning accuracy	mm	0.01	0.01	0.01	0.01	0.01
X-axis reverse warp	mm	0.012	0.012	0.012	0.012	0.012
Z-axis positioning accuracy	mm	0.016	0.016	0.016	0.016	0.016
Z-axis repositioning accuracy	mm	0.007	0.007	0.007	0.007	0.007
Z-axis reverse warp	mm	0.006	0.006	0.006	0.006	0.006

▶According to customer's need, the lathes can be equipped with double chucks, double saddles, or double spindles.

Add: 5-1-16,S/W Zone, North Circle-Sangyuan Road, Zhengzhou, China
Tel: +86-371-60308992 Fax: +86-371-60308995
E-mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

CNC Turning Center

Features:

1.These CNC turning centers are semiclosed loop CNC machine tools suitable to turn various complicated shaft,sleeve and disklike workpiece such as turning of internal and external cylindrical, conical and other circumgyrationsurface as well as various metric, inch, modular and diametric pitch threads.
2. They can also be used for oil grooves and keyways broaching, end-facing, grooving and chamfering etc.
3. Besides turning applications, they can also be used to drill and mill for various complicated workpiece machining by its X/Z/C 3axis combined motion.
4. The unique construction developed using FEA techniques to provide maximum stiffness under the heaviest cutting conditions.
5. The machining accuracy is about IT5～IT6, and the surface roughness is about Ra0.4um for nonferrous metalcutting and Ra0.8um for ferrous metals.
6. As universal CNC lathes, they are especially suitable for the machining of high precision workpieces, and alsowidely used to machining parts in batches in the fields of automobile, motorcycle, railroad, aero-craft, home-appliance, bearing, hardware, etc.

AK-15M

AK-25M

Specification	Unit	AK–15M	AK–25M	AK–35M
Swing over bed	mm	440	520	660
Max. turning dia. over bed	mm	300	420	550
Max. turning dia. over cross slide	mm	190	300	360
Max. turning length	mm	450	530/905	780/1530
Distance between centers	mm	600	625/1000	890/1640
Max.bar capacity	mm	52	72	80
X–axis travel	mm	180	230	305
Z–axis travel	mm	480	590/965	855/1605
Rapid traverse(X/Z–axis)	m/min	18/20	12/15	12/15
Cutting feed(X/Z–axis)	mm/min	5000	5000	5000
Hand feed(X/Z–axis)	mm/min	1260	1260	1260
Spindle speed	rpm	50–4500	35–3500	25–2500
Spindle nose		A2–6	A2–8	A2–8
Chuck size		8"	10"	12"
Spindle front end bearing(dia)	mm	100	130	160
Spindle bore(dia)	mm	62	87	92
C–axis indexing(incrementle unit)		0.001	0.001	0.001
Number of stations		8	12	12
Indexing time	s	0.58	0.4	1
Tool shank size	mm	25 × 25	25 × 25	25 × 25
Boring bar shank dia	mm	40	40	50
Tool speed	rpm	40–4000	40–4000	40–4000
Main spindle motor	kw	9.0/11	18.5/15	30/22
X–axis servo motor	kw	1.6	3	3
Z–axis servo motor	kw	3	3	4
Tool driving motor	kw	A3/10000I	A3/10000I	A3/10000I
Max travel of tailstock	mm	460	490/865	760/1500
Tailstock quill dia	mm	80	85	110
Tailstock travel	mm	130	80	100
Tailstock quill taper hole		MT–4	MT–5	MT–5
Coolant capacity	L	200	200/230	200/250
Total power	kw	25	38	46
X–axis positioning accuracy	mm	0.025	0.025	0.025
X–axis repositioning accuracy	mm	0.01	0.01	0.01
X–axis reverse warp	mm	0.012	0.012	0.012
Z–axis positioning accuracy	mm	0.016	0.016	0.016
Z–axis repositioning accuracy	mm	0.007	0.007	0.007
Z–axis reverse warp	mm	0.006	0.006	0.006

Add: 5–1–16,S/W Zone, North Circle–Sangyuan Road, Zhengzhou, China
Tel: +86–371–60308992 Fax: +86–371–60308995
E–mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com

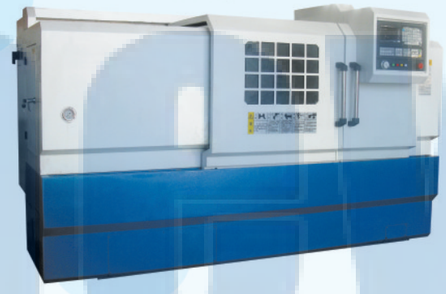
ZHENGZHOU
TIMEWAY MACHINE TOOL CO., LTD.
TIMAC

CNC Horizontal Lathe

Features:

1.These series are economical and practical CNC lathes. With optimized structures, unfailing performance, high quality, simple programming, and easy handling, they are suitable for turning of complicated shaft, sleeve, and disk type workpieces such as turning of internal and external cylindrical, conical, arc surfaces and various threads, and even drilling, boring and reaming holes. And they are especially fit for turning of diversified workpieces on small and medium batches.
2. They are of high versatility, high efficiency, low inferiority and good conformability. So to be widely used in various trades, such as automobile industry, petroleum industry, military industry, and so on.
3. AK series accomplish step-less spindle speed-changing by means of main motor frequency conversion and 4-shift hydraulic gear-change.
4. AK…J series obtain 12 speeds all manually.
5. AK…P series spindle speed changing introduces main motor frequency conversion and 4-shift manual gear-change.

AK-420



AK-420J

Specifcation	Unit	AK–420 AK–420J AK–420P	AK–520 AK–520J AK–520P
Swing over bed	mm	420	520
Swing over cross slide	mm	210	320
Max. length of workpiece	mm	500/750/1000/1500/2000/3000	500/750/1000/1500/2000/3000
Max. turning length	mm	310/580/830/1330/1830/2830	310/580/830/1330/1830/2830
Width of bed	mm	400	400
Spindle nose		A2–6	A2–8
Chuck size	mm	200	250
Spindle bore	mm	58	80
Taper hole of spindle	mm	1:20/63	1:20/80
Spindle speed and range	rpm	AK–420: auto 4gear steps, stepless in step 27.5–2200 AK–420J: 12 gear speed, 35–1600 AK–420P: 4 gear steps, stepless in step 14–1600	AK–520: auto 4gear steps, stepless in step 25–2000 AK–520J: 12 gear speed, 35–1600 AK–520P: 4 gear steps, stepless in step 14–1600
Center height from bed	mm	225	270
Min. feed increment of X–/Z–axis	mm	0.001/0.001	0.001/0.001
Rapid speeds of X–/Z–axis	mm/min	4000/6000	4000/6000
Max. travel of X–axis	mm	300	300
Tool–post working position		V4/V6/H6	V4/V6/H6
Indexing time	s	2.4(V4)/2.2(V6)/1.6(H6)	2.4(V4)/2.2(V6)/1.6(H6)
Indexing repeatility	mm	0.008	0.008
Section of tool shank	mm	□25	□25
Diameter of tailstock quill	mm	85	85
Travel of tailstock quill	mm	150	150
Taper hole of tailstock quill		Morse 5	Morse 5
Workpiece accuracy		IT6–IT7	IT6–IT7
Surface roughness	μm	Ra1.6	Ra1.6
Main motor power	kw	7.5	7.5

Add: 5–1–16,S/W Zone, North Circle–Sangyuan Road, Zhengzhou, China
Tel: +86–371–60308992 Fax: +86–371–60308995
E–mail: info@timewaymachine.com timewaymachine@yahoo.com.cn http://www.timewaymachine.com