



# LATHE SPECIALIST



**TURNING  
FOR  
THE WORLD**  
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ANYANG XINHENG MACHINE TOOL CO., LTD.

# TURNING FOR THE WORLD

PRECISION, INVENTION,  
AUTOMATION & REALIZATION

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# COMPANY PROFILE

Anyang Xinheng Machine Tool Co.,Ltd is located in Anyang, Henan Province, China. We have always been committed to the research and manufacture of machine tools.

Our factory covers more than 30,000 square meters and we have the latest manufacturing facility. We have attained ISO9001:2000 international quality control system certificate. Our products are exported overseas and very popular both at home and abroad. We are specialized in precision lathe manufacturing, covering oil country lathe, spherical turning lathe, CNC lathe, conventional lathe, heavy duty lathe, CNC roll turning lathe, automatic production line, etc. We supply the lathe with high quality and competitive price all over the world.

We can provide global quality warranty, and we also provide excellent service and qualified accessories for our lathe during the whole working life. Welcome to contact us!



# ABOUT US

**Purpose:** turning for the world.

**Mission:** craftsmanship builds the Chinese machine tool.

**Vision:** to build a centenary enterprise, to create a world brand.

**Value:** integrity of the heart, truth-seeking and refinement, focused and all-win.

**Development idea:** enterprise development, employee benefit, achievement sharing.

**Brand concept:** good quality parts, precision grade machine tools, high-quality employees and world-class brand.

**Quality philosophy:** quality assurance, factory direct, excellent quality.

**Quality principle:** strict process control, process discipline, strong after sale service.

**Production philosophy:** demand is planning, order is command, excellence makes value.

**Market concept:** we meet customers' need and build Xinheng a world famous brand.

**Marketing concept:** let Xinheng machine tool become the customer first choice.

**Service concept:** we set out from customers' need, and to achieve customer' s satisfaction.

**Innovative concept:** we are oriented by customers' demand and good at questioning and daring to surpass.

**Environmental-concept concept:** pleasant, green, harmonious, sharing.



### Conventional lathe (312/400mm guideway)

- » Our lathe bed is made of high strength cast iron, and treated by long time aging treatment, so the precision is good and durable.
- » Spindle bore diameter  $\phi 52/\phi 82/\phi 104$  mm.
- » There are oblique chip outlets in our lathe bed, easy for chip removing.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » DRO, quick change toolpost, grinding attachment, milling power head, rotary tailstock, motorized tailstock are for option.



### Technical parameter

Item	Unit	CD6132	CD6136	CD6140	CQ6140	CQ6240	CQ6150	CQ6250	CQ6161	CQ6261	CQ6166	CQ6266	
Capacity	Swing over bed	mm	$\phi 320$	$\phi 360$	$\phi 400$	400	500	610	660				
	Swing over carriage	mm	$\phi 180$	$\phi 200$	$\phi 240$	$\phi 210$	$\phi 300$	$\phi 370$	$\phi 400$				
	Swing over gap	mm	-	-	-	-	630	720	830	880			
	Max. length of workpiece	mm	750/1000	750/1000	750/1000	1000/2000/3000	1000/2000/3000	1000/2000/3000	1000/2000/3000	1000/2000/3000			
	Max. turning length	mm	600/850	600/850	600/850	850/1850/2850	850/1850/2850	850/1850/2850	850/1850/2850	850/1850/2850			
Spindle	Span of guideway	mm	312	312	312	400	400	400	400				
	Spindle nose type	-	C6	C6	C6	C6/D8	C6/D8/D8	C6/D8/D8	C6/D8/D8				
Spindle	Spindle taper	-	MT6	MT6	MT6	MT6/ $\phi 90$ 1:20	MT6/ $\phi 90$ 1:20/ $\phi 113$ 1:20	MT6/ $\phi 90$ 1:20/ $\phi 113$ 1:20	MT6/ $\phi 90$ 1:20/ $\phi 113$ 1:20				
	Spindle bore	mm	$\phi 52$	$\phi 52$	$\phi 52$	$\phi 52/80$	$\phi 52/80/105$	$\phi 52/80/105$	$\phi 52/80/105$				
	No. of spindle speeds	-	12	12	12	24	24	24	24				
	Range of spindle speeds	r/min	30-1600	30-1600	30-1600	16-1400	16-1400	16-1400	16-1400				
Toolpost	Cross section of tool shank	mm	20*20	20*20	20*20	25*25	25*25	25*25	25*25				
	Tool post type	mm	V4	V4	V4	V4	V4	V4	V4				
	Max. stroke of upper toolpost	mm	140	140	140	140	140	140	140				
Feed	No. of longitudinal feeding	mm/r	44; 0.039-1.05	44; 0.039-1.05	44; 0.039-1.05	64	64	64	64				
	No. of transverse feeding	mm/r	44; 0.019-0.52	44; 0.019-0.52	44; 0.019-0.52	64	64	64	64				
	No. and rang of metric threads	-	25; 0.5-20	25; 0.5-20	25; 0.5-20	44; 1-192	44; 1-192	44; 1-192	44; 1-192				
	No. and rang of inch threads	TPI	35; 80-1.75	35; 80-1.75	35; 80-1.75	21; 24-2	21; 24-2	21; 24-2	21; 24-2				
	No. and rang of modulus threads	-	24; 0.25-10	24; 0.25-10	24; 0.25-10	39; 0.25-48	39; 0.25-48	39; 0.25-48	39; 0.25-48				
Tailstock	No. and rang of diameter pitch threads	-	30; 160-3.5	30; 160-3.5	30; 160-3.5	37; 1-96	37; 1-96	37; 1-96	37; 1-96				
	Tailstock quill diameter	mm	60	60	60	75	75	75	75				
	Tailstock quill taper	-	MT4	MT4	MT4	MT5	MT5	MT5	MT5				
	Tailstock quill effective stroke	mm	100	100	100	150	150	150	150				
Others	Main motor power	kW	3	3	3	7.5	7.5	7.5	7.5				
	Width*Height	mm	970*1220	970*1250	970*1280	1000*1267	1037*1312	1081*1367	1106*1392				
	Length	mm	1940/2180	1940/2180	1940/2180	2650/3650/4800	2650/3650/4800	2650/3650/4800	2650/3650/4800				
	Net weight	kg	1300/1370	1350/1400	1400/1450	2070/2570/3200	2140/2640/3400	2250/2787/3600	2450/2880/3800				

Note: swing over bed/swing over gap/distance between centers (750mm-4000mm) can be customized.

### Conventional lathe (550/600mm guideway)

- » Our lathe bed is made of HT300 high strength cast iron, and treated by long time aging treatment, so the precision is good and durable.
- » The max. workpiece for our lathe is 1500/2000/3000/4000 kg.
- » There are oblique chip outlets in our lathe bed, easy for chip removing.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » DRO, quick change toolpost, grinding attachment, milling power head, rotary tailstock, motorized tailstock are for option.



### Technical parameter

Item	Unit	CW6163B	CW6263B	CW6180B	CW6280B	CW6194B	CW6294B	CW6180	CW61100
Capacity	Swing over bed	mm	$\phi 630$	$\phi 800$	$\phi 940$	$\phi 800$	$\phi 1000$	$\phi 800$	$\phi 1000$
	Swing over carriage	mm	$\phi 350$	$\phi 520$	$\phi 660$	$\phi 480$	$\phi 680$	$\phi 800$	$\phi 1000$
	Swing over gap	mm	-	$\phi 830$	-	$\phi 1000$	-	$\phi 1140$	-
	Max. length of workpiece	mm	1500/2000/3000	1500/2000/3000	1350/1850/2850	1350/1850/2850	1500/2000/3000	1500/2000/3000	1500/2000/3000
	Max. turning length	mm	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850
Spindle	Span of guideway	mm	550	550	550	600	600	600	600
	Max. weight of workpiece	t	1.5/3	1.5/3	1.5/3	2/4	2/4	2/4	2/4
Spindle	Spindle nose type	-	C11	C11	C11	C11/C15	C11/C15	C11/C15	C11/C15
	Center taper	-	MT5	MT5	MT5	MT6	MT6	MT6	MT6
	Spindle bore	mm	$\phi 100$	$\phi 100$	$\phi 100$	$\phi 100/\phi 140$	$\phi 100/\phi 140$	$\phi 100/\phi 140$	$\phi 100/\phi 140$
	No. of spindle speeds	-	18	18	18	18/6	18/6	18/6	18/6
Toolpost	Range of spindle speeds	r/min	7.5-1000	6-800	6-800	Forward: 6-750; Reverse: 10-775	Forward: 6-750; Reverse: 10-775	Forward: 6-750; Reverse: 10-775	Forward: 6-750; Reverse: 10-775
	Cross section of tool shank	mm	30*30	30*30	30*30	32*32	32*32	32*32	32*32
	Max. stroke of upper toolpost	mm	200	200	200	200	200	200	200
	Max. stroke of lower toolpost	mm	440	540	570	500	500	500	500
	No. of longitudinal and transverse feeding	-	64 kinds each	64 kinds each	64 kinds each	64 kinds each	64 kinds each	64 kinds each	64 kinds each
Feed	Ratio of transverse feed to longitudinal feed	-	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	No. and rang of metric threads	-	50; 1-240	50; 1-240	50; 1-240	50; 1-240	50; 1-240	50; 1-240	50; 1-240
	No. and rang of inch threads	-	26; 14-1	26; 14-1	26; 14-1	26; 14-1	26; 14-1	26; 14-1	26; 14-1
	No. and rang of modulus threads	-	53; 0.5-44	53; 0.5-44	53; 0.5-44	53; 0.5-120	53; 0.5-120	53; 0.5-120	53; 0.5-120
	No. and rang of diameter pitch threads	-	24; 28-1	24; 28-1	24; 28-1	24; 28-1	24; 28-1	24; 28-1	24; 28-1
Tailstock	Tailstock quill diameter	mm	100	100	100	$\phi 100$	$\phi 100$	$\phi 100$	$\phi 100$
	Tailstock quill taper	-	MT5	MT5	MT5	MT6	MT6	MT6	MT6
Power system	Tailstock quill effective stroke	mm	250	250	250	250	250	250	250
	Main motor power	kW	11	11	11	11	11	11	11
Others	Rapid traverse motor power	kW	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	Width*Height	mm	1393*1537	1473*1622	1430*1690	1450*1730	1450*1830	1450*1830	1450*1830
	Length	mm	3725/4225/5225	3725/4225/5225	3725/4225/5225	3670/3985/5165	3670/3985/5165	3670/3985/5165	3670/3985/5165
	Net weight	kg	3700/4200/4700	3900/4400/4900	4400/4900/5400	4900/5100/5500	4900/5100/5500	4900/5100/5500	5400/5600/6000

Note: swing over bed/swing over gap/distance between centers (750mm-12000mm) can be customized.

## Conventional lathe (755mm guideway) ↓

- » The max. workpiece for our lathe is 6000 kg.
- » Our chuck is  $\phi 1000$  mm made by Hohhot, the best and most famous chuck manufacturer in China, our chuck is durable.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » There are oblique chip outlets in our lathe bed, easy for chip removing.
- » DRO, quick change toolpost, grinding attachment, milling power head, rotary tailstock, motorized tailstock are for option.

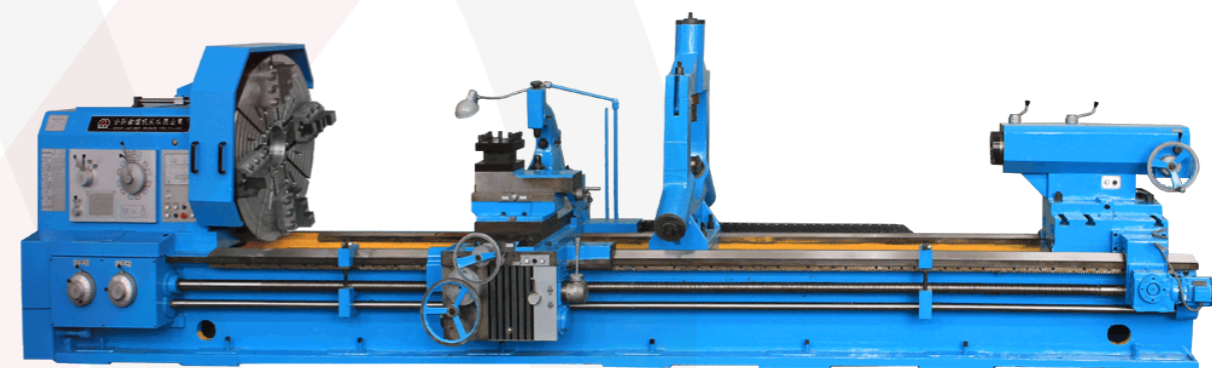


## Technical parameter ↓

Item	Unit	CW61100B	CW61125B	CW61140B	CW61160B
Capacity	Swing over bed	mm $\phi 1000$	$\phi 1250$	$\phi 1400$	$\phi 1640$
	Swing over carriage	mm $\phi 615$	$\phi 865$	$\phi 1015$	$\phi 1250$
	Max. length of workpiece	mm 1500/3000/5000/6000	1500/3000/5000/6000	1500/3000/5000/6000	1500/3000/5000/6000
	Max turning length	mm 1300/2800/4800/5800	1300/2800/4800/5800	1300/2800/4800/5800	1300/2800/4800/5800
	Span of guideway	mm 755	755	755	755
	Max weight of workpiece	t 6	6	6	6
Spindle	Spindle nose type	- A2-15	A2-15	A2-15	A2-15
	Front taper of spindle hole	- 1:20/Metric 140	1:20/Metric 140	1:20/Metric 140	1:20/Metric 140
	Spindle bore	mm $\phi 130$	$\phi 130$	$\phi 130$	$\phi 130$
	No. of spindle speeds	- Forward 21; Reverse 12	Forward 21; Reverse 12	Forward 21; Reverse 12	Forward 21; Reverse 12
Range of spindle speeds	r/min Forward 3.15-315; Reverse 3.5-291	Forward 3.15-315; Reverse 3.5-291	Forward 3.15-315; Reverse 3.5-291	Forward 3.15-315; Reverse 3.5-291	
Toolpost	Cross section of tool shank	mm 45*45	45*45	45*45	45*45
	Max stroke of upper Toolpost	mm 300	300	300	300
	Max stroke of lower Toolpost	mm 520	580	580	630
Feed	No. of longitudinal and transverse feeding	- 56 kinds each	56 kinds each	56 kinds each	56 kinds each
	No. and rang of metric threads	- 44; 1-120	44; 1-120	44; 1-120	44; 1-120
	No. and rang of inch threads	- 31; 28-1/4	31; 28-1/4	31; 28-1/4	31; 28-1/4
	No. and rang of modulus threads	- 45; 0.5-60	45; 0.5-60	45; 0.5-60	45; 0.5-60
	No. and rang of diameter pitch threads	- 38; 1/2-56DP	38; 1/2-56DP	38; 1/2-56DP	38; 1/2-56DP
Tailstock	Tailstock quill diameter	mm 160	160	160	160
	Tailstock quill taper	- MT6	MT6	MT6	MT6
	Tailstock quill max. stroke	mm 300	300	300	300
Others	Main motor power	kW 22	22	22	22
	Width*Height	mm 2150*1700	2150*1825	2150*2100	2150*2150
	Length	mm 4600/6100/8100/9100	4600/6100/8100/9100	4600/6100/8100/9100	4600/6100/8100/9100
	Net weight	kg 9200/10700/12100/12800	10200/11800/14800/15500	10300/11900/14900/15600	10500/12100/15100/16600
	Note: swing over bed/swing over gap/distance between centers (1500mm-12000mm) can be customized.				

## Conventional lathe (970mm guideway) ↓

- » The max. workpiece for our lathe is 10 ton.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » We have Germany made high precision lathe guide grinding machine to ensure the guide precision.
- » Our chuck is K78 series  $\phi 1250$  mm heavy duty chuck made by Hohhot, the best and most famous chuck manufacturer in China.
- » Motorized tailstock.
- » DRO, grinding attachment, milling power head, rotary tailstock, tailstock chuck are for option.

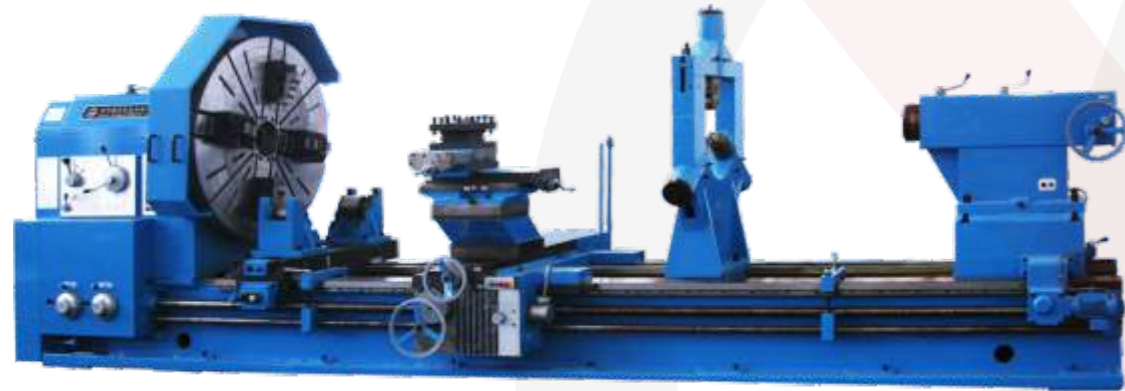


## Technical parameter ↓

Item	Unit	CW61125	CW61140	CW61160
Capacity	Swing over bed	mm $\phi 1250$	$\phi 1400$	$\phi 1600$
	Swing over carriage	mm $\phi 865$	$\phi 1010$	$\phi 1210$
	Max. length of workpiece	mm 3000/4000/5000/6000	3000/4000/5000/6000	3000/4000/5000/6000
	Max turning length	mm 2800/3800/4800/5800	2800/3800/4800/5800	2800/3800/4800/5800
	Span of guideway	mm 970	970	970
	Max weight of workpiece	t 10	10	10
Spindle	Front taper of spindle hole	- Metric 140	Metric 140	Metric 140
	Spindle bore	mm $\phi 130$	$\phi 130$	$\phi 130$
	No. of spindle speeds	- Forward 21; Reverse 12	Forward 21; Reverse 12	Forward 21; Reverse 12
	Range of spindle speeds	r/min Forward 3.15-315; Reverse 3.5-291	Forward 3.15-315; Reverse 3.5-291	Forward 3.15-315; Reverse 3.5-291
Toolpost	Cross section of tool shank	mm 45*45	45*45	45*45
	Max stroke of upper Toolpost	mm 300	300	300
	Max stroke of lower Toolpost	mm 650	650	650
Feed	No. of longitudinal and transverse feeding	- 56 kinds each	56 kinds each	56 kinds each
	No. and rang of metric threads	- 44; 1-120	44; 1-120	44; 1-120
	No. and rang of inch threads	- 31; 28-1/4	31; 28-1/4	31; 28-1/4
	No. and rang of modulus threads	- 45; 0.5-60	45; 0.5-60	45; 0.5-60
	No. and rang of diameter pitch threads	- 38; 1/2-56DP	38; 1/2-56DP	38; 1/2-56DP
Tailstock	Tailstock quill diameter	mm 220	220	220
	Tailstock quill taper	- MT6	MT6	MT6
	Tailstock quill max. stroke	mm 300	300	300
Others	Main motor power	kW 22	22	22
	Width*Height	mm 1995*2175	1995*2325	1995*2525
	Length	mm 6020/7020/8020/9020	6020/7020/8020/9020	6020/7020/8020/9020
	Net weight	kg 14500/15800/17000/18300	15000/16300/17500/18800	15500/16800/18000/19300
	Note: swing over bed/distance between centers (3000mm-16000mm) can be customized.			

## Conventional heavy duty lathe (1100mm guideway) ↓

- » The max. workpiece for our lathe is 16 ton.
- » Our lathe is equipped with 1100 mm rectangular guideways.
- » We have Germany made high precision lathe guide grinding machine to ensure the guide precision.
- » Our chuck is K78 series  $\phi 1250$  /  $\phi 1400$  /  $\phi 1600$  /  $\phi 2000$  mm heavy duty chuck made by Hohhot, the best and most famous chuck manufacturer in China.
- » Motorized rotary tailstock.
- » DRO, grinding attachment, milling power head and tailstock chuck are for option.



## Technical parameter ↓

Item	Unit	C61125	C61160	C61180	C61200
Capacity	Swing over bed	mm $\phi 1250$	1600	$\phi 1800$	$\phi 2000$
	Swing over carriage	mm $\phi 900$	$\phi 1250$	$\phi 1450$	$\phi 1650$
	Max. length of workpiece	mm 3000/4000/5000/6000	3000/4000/5000/6000	3000/4000/5000/6000	3000/4000/5000/6000
	Max. turning length	mm 2800/3800/4800/5800	2800/3800/4800/5800	2800/3800/4800/5800	2800/3800/4800/5800
	Span of guideway	mm 1100	1100	1100	1100
	Structure of guideway	-	Rectangular 2 guideways	Rectangular 2 guideways	Rectangular 2 guideways
Spindle	Max. weight of workpiece	t 16	16	16	16
	Front taper of spindle hole	-	Metric 140	Metric 140	Metric 140
	Spindle bore	mm $\phi 100$	$\phi 100$	$\phi 100$	$\phi 100$
	No. of spindle speeds	-	Forward 21; Reverse 12	Forward 21; Reverse 12	Forward 21; Reverse 12
	Range of spindle speeds	r/min	Forward 3.15-315; Reverse 3.5-291	Forward 3.15-315; Reverse 3.5-291	Forward 3.15-315; Reverse 3.5-291
	Toolpost	Cross section of tool shank	mm 50*50	50*50	50*50
Max. stroke of upper Toolpost		mm 360	360	360	360
Max. stroke of lower Toolpost		mm 740	850	900	900
Feed	No. of longitudinal and transverse feeding	-	56 kinds each	56 kinds each	56 kinds each
	No. and rang of metric threads	-	44; 1-120	44; 1-120	44; 1-120
	No. and rang of inch threads	-	31; 28-1/4	31; 28-1/4	31; 28-1/4
	No. and rang of modulus threads	-	45; 0.5-60	45; 0.5-60	45; 0.5-60
	No. and rang of diameter pitch threads	-	38; 1/2-56DP	38; 1/2-56DP	38; 1/2-56DP
Tailstock	Tailstock quill diameter	mm 260	260	260	260
	Tailstock quill taper	-	Metric 80	Metric 80	Metric 80
	Tailstock quill max. stroke	mm 300	300	300	300
Others	Main motor power	kW 30	30	30	30
	Width*Height	mm 2058*2200	2130*2380	2330*2480	2430*2580
	Length	mm 6120/7120/8120/9120	6120/7120/8120/9120	6120/7120/8120/9120	6120/7120/8120/9120
	Net weight	kg 18300/19900/21500/23100	19800/21400/23000/24600	20300/21900/235000/25100	20800/22400/24000/25600
	Note: swing over bed/distance between centers (3000mm-14000mm) can be customized.				

## Conventional heavy duty lathe (1600mm guideway) ↓

- » The max. workpiece for our lathe is 32 ton.
- » Our lathe is equipped with 1600 mm rectangular 3 guideways.
- » There are chip outlets at the bottom of our lathe bed, chip drops into chip container in the foundation, easy for chip removing.
- » Stepless speed regulation in the whole spindle speed range.
- » Powerful 75kW DC motor from Shanghai Nanyang, the best manufacturer of DC motor in China.
- » Disc spring is installed on the back of motorized rotary tailstock spindle to prevent damage to the mechanism due to thermal expansion of the workpiece.



## Technical parameter ↓

Item	Unit	C61160	C61200	C61250
Capacity	Swing over bed	mm $\phi 1600$	$\phi 2000$	$\phi 2500$
	Swing over carriage	mm $\phi 1250$	$\phi 1600$	$\phi 2000$
	Max. length of workpiece	mm 8000/10000/12000/16000	8000/10000/12000/16000	8000/10000/12000/16000
	Max. cutting force of single toolpost	kg 8000	8000	8000
	Total cutting force	kg 6000	6000	6000
	Max. cutting force	kg 16000	16000	16000
Spindle	Structure of guideway	-	Rectangular 3 guideways	Rectangular 3 guideways
	Span of guideway	mm 1600	1600	1600
	Max. weight of workpiece	t 32	32	32
	Spindle speed	-	Stepless	Stepless
	Spindle taper hole angle	° 75	75	75
	Spindle speed range	r/min	0.8-160	0.8-160
Toolpost	Spindle taper hole	-	Metric 120, taper 1:7	Metric 120, taper 1:7
	Face plate diameter	mm $\phi 1600$	$\phi 1800$	$\phi 2000$
	Max. stroke of transverse toolpost	mm 725	725	800
Feed	Max. stroke of lower toolpost	mm 600	600	600
	Feed grades	-	18	18
	Range of metric threads	mm	2-40	2-40
	Range of inch threads	-	1-14	1-14
	Range of modulus threads	mm	1.5-20	1.5-20
Tailstock	Tailstock quill diameter	mm $\phi 300$	$\phi 300$	$\phi 300$
	Tailstock quill taper	-	$\phi 100$ taper 1:7	$\phi 100$ taper 1:7
	Tailstock quill max. stroke	mm 300	300	300
	Main motor power	kW 75	75	75
Others	Width*Height	mm 2479*2280	2579*2580	2679*2680
	Length	mm 13577/15577/17577/21577	13577/15577/17577/21577	13577/15577/17577/21577
	Net weight	kg 45000/48000/52000/58000	47000/50000/54000/59000	48000/51000/55000/60000
	Note: swing over bed/distance between centers (5000mm-20000mm) can be customized.			

## Conventional heavy duty lathe (2090mm guideway) ↓

- » The max. workpiece for our lathe is 63 ton.
- » Our lathe is equipped with 2090 mm rectangular 3 guideways.
- » Power clamping screws from JAKOB ANTRIEBSTECHNIK from Germany are installed on our chuck.
- » Stepless speed regulation in the whole spindle speed range.
- » Powerful 144kW DC motor from Shanghai Nanyang, the best manufacturer of DC motor in China.
- » Disc spring is installed on the back of motorized rotary tailstock with SP class bearing to prevent damage to the mechanism due to thermal expansion of the workpiece.



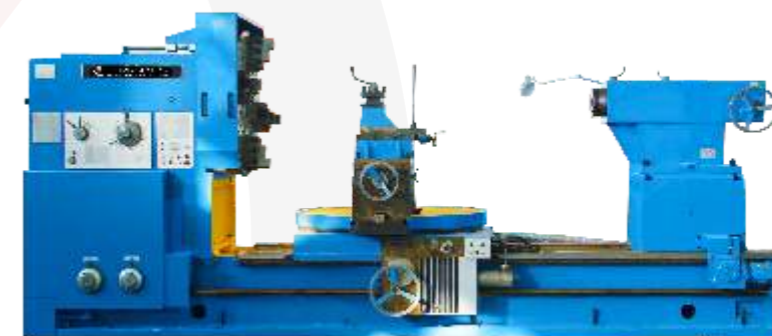
## Technical parameter ↓

Item	Unit	C61250
Capacity	Swing over bed	mm φ2500
	Swing over carriage	mm φ2200
	Length of workpiece	mm 5000-20000
	Max. torque of faceplate	N·m 120000
	Max. cutting force of single toolpost	N 120000
	Total cutting force	N 200000
	Span of guideway	mm 2090
	Structure of guideway	- Rectangular 3 guideways
	Max. weight of workpiece	t 63
Spindle	Spindle speed	- Stepless
	Spindle speed range	r/min 0.5-125
	Spindle taper hole	- φ196.869; taper1:4
	Face plate diameter	mm φ2200
Toolpost	Max. stroke of X-axis	mm 1000
	Rapid traverse speed of X-axis	mm/min 3000
	Rapid traverse speed of Z-axis	mm/min 6000
Tailstock	Tailstock quill diameter	mm φ560
	Tailstock quill stroke	mm 200
	Tailstock quill taper	mm 75°, φ160 ( taper 1:4)
Others	Main motor type	- DC motor
	Main motor power	kW 144; 540-1900r/min

**Note: swing over bed/distance between centers (5000mm-20000mm) can be customized.**

## Spherical turning lathe ↓

- » Max. diameter of sphere 550/900/1600/1800 mm.
- » After turning and surface hardening, sphere surface roughness can reach Ra0.2 μm or better, it is idea processing lathe for ball valve core.
- » Our lathe is a special designed sphere turning lathe with motorized rotary table, its precision and efficiency are high, our lathe is not ordinary lathe installed with simple ball turning attachment.
- » Our lathe bed is made of HT300 high strength cast iron, and treated by long time aging treatment, so the precision is good and durable.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » There are oblique chip outlets in our lathe bed, easy for chip removing.
- » Surface hardening device, quick change toolpost, DRO, grinding attachment, rotary tailstock, motorized tailstock are for option.



## Technical parameter ↓

Item	Unit	C6525	C6555	C6590A	C6590B	C65160	C65180
Capacity	Swing over bed	mm φ560	φ940	φ1430	φ1600	φ2000	φ2200
	Max. diameter of sphere	mm φ250	φ550	φ900	φ900	φ1600	φ1800
	Min. diameter of sphere	mm φ50	φ50	φ150	φ260	φ1000	φ1200
	Max. length of workpiece	mm 1000	1500	1500	1500	3000	3000
	Span of guideway	mm 400	550	600	755	1100	1100
	Max. weight of workpiece	t 0.3	1.5	2	6	16	16
	Spindle	Spindle nose type	- C6	C11	C11	A2-15	A2-15
Spindle bore		mm φ52	φ100	φ104	φ130	φ100	φ100
Front taper of spindle hole		mm MT6	Metric 120	Metric 120	Metric 140	Metric 140	Metric 140
No. of spindle speeds		- 24	18	18	21	21	21
Range of spindle speeds		r/min 10-1400	6-800	5.4-720	3.15-315	3.15-315	3.15-315
Spindle reverse speeds		r/min 14-1580	11-838	6.5-720	3.5-291	3.5-291	3.5-291
Chuck size		mm φ250	φ320	φ320	φ400	φ1250	φ1250
Toolpost	Cross section of tool shank	mm 25*25	30*30	32*32	45*45	50*50	50*50
	Swivel angle of toolpost	° ±90	±90	±90	±90	±55	±55
	Toolpost type	- V4	V4	V4	V4	V4	V4
Tailstock	Tailstock quill diameter	mm φ75	φ100	φ100	φ160	φ260	φ260
	Tailstock quill taper	- MT5	MT5	MT5	MT6	Metric 80	Metric 80
	Tailstock quill effective stroke	mm 150	250	250	300	300	300
Others	Main motor power	kW 7.5	11	11	22	30	30
	Length	mm 2668	3725	3360	4700	6120	6220
	Width	mm 1000	1430	1450	2500	2620	2720
	Height	mm 1367	1690	1950	2000	2520	2620
	Net weight	kg 2300	4400	5500	12000	20800	21300

## Conventional pipe threading lathe (550/600mm guideway) ↓

- » Spindle bore 130/200/225/280 mm.
- » Double hollow chucks.
- » The max. workpiece for our lathe is 3000/4000 kg.
- » There are oblique chip outlets in our lathe bed, easy for chip removing.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » Taper attachment, quick change toolpost, DRO, grinding attachment, milling power head, rotary tailstock, motorized tailstock are for option.



## Conventional pipe threading lathe (755mm guideway) ↓

- » Spindle bore 280/330/390/440/520 mm.
- » Double 4-jaw hollow chucks.
- » The max. workpiece for our lathe is 6000 kg.
- » There are oblique chip outlets in our lathe bed, easy for chip removing.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » Taper attachment, quick change toolpost, DRO, grinding attachment, milling power head, rotary tailstock, motorized tailstock are for option.



## Technical parameter ↓

Item	Unit	Q1213	Q1219	Q1222	Q1225	Q1227	
Capacity	Swing over bed	mm	φ630/800	φ630/800	φ630/800	φ800	
	Swing over carriage	mm	φ340/520	φ340/520	φ340/520	φ480	
	Distance between centers	mm	1500/3000	1500/3000	1500/3000	1500/3000	
	Pipe threading range	mm	φ30-126	φ50-193	φ50-220	φ50-250	φ50-270
	Span of guideway	mm	550	550	550	600	600
	Max. weight of workpiece	t	3	3	3	4	4
Spindle	Spindle bore	mm	φ130	φ200	φ225	φ255	φ280
	Spindle speed regulation	-	Forward: 18 gears; Reverse: 9 gears	Stepless in 4 gears	Stepless in 4 gears	Stepless in 4 gears	Stepless in 4 gears
	Spindle speed range	r/min	30-650	20-550	20-550	20-420	20-420
	Chuck	mm	φ400 3-jaw manual	φ520 4-jaw manual	φ520 4-jaw manual	φ630 4-jaw manual	φ630 4-jaw manual
Toolpost	Cross section of tool shank	mm	30*30	32*32	32*32	32*32	32*32
	Toolpost type	-	V4	V4	V4	V4	V4
Feed	Max. stroke of X-axis	mm	320/420	320/420	320/420	420	420
	Max. stroke of Z-axis	mm	1350/2850	1350/2850	1350/2850	1250/2750	1250/2750
	No. and range of X-axis feed	-	22/0.02-0.45	22/0.02-0.45	22/0.02-0.45	22/0.02-0.45	22/0.02-0.45
	No. and range of Z-axis feed	-	26/0.07-1.33	26/0.07-1.33	26/0.07-1.33	26/0.07-1.33	26/0.07-1.33
	Rapid traverse speed of X-axis	mm/min	2300	2300	2300	2300	2300
	Rapid traverse speed of Z-axis	mm/min	4000	4000	4000	4000	4000
	No. and rang of metric threads	-	52/1-24	1-15	1-15	1-15	1-15
	No. and rang of inch threads	-	40/28-2	14-1	14-1	14-1	14-1
Tailstock	Tailstock quill diameter	mm	φ100	φ100	φ100	φ120	φ120
	Tailstock quill taper	-	MT5	MT5	MT5	MT6	MT6
	Tailstock quill max. stroke	mm	250	250	250	250	250
Others	Main motor power	kW	11	11	11	15	15
	Rapid traverse motor power	kW	0.3	0.3	0.3	1.1	1.1
	Coolant pump motor power	kW	0.125	0.125	0.125	0.125	0.125
	Width*Height	mm	1500*1500	1550*1550	1650*1550	1700*1600	1700*1600
	Length	mm	3700/5200	3700/5200	3700/5200	4100/5600	4100/5600
	Net weight	kg	4000/5200	4300/5500	4500/5700	8000/9000	8000/9000

Note: swing over bed/distance between centers can be customized.

## Technical parameter ↓

Item	Unit	Q1227	Q1232	Q1238	Q1243	Q1250	
Capacity	Swing over bed	mm	φ1000	φ1000	φ1000	φ1200	
	Swing over carriage	mm	φ610	φ610	φ610	φ710	
	Distance between centers	mm	1500/3000	1500/3000	1500/3000	1500/3000	
	Pipe threading range	mm	φ130-270	φ190-320	φ190-380	φ270-430	φ330-510
	Span of guideway	mm	755	755	755	755	755
	Max. weight of workpiece	t	6	6	6	6	6
Spindle	Spindle bore	mm	φ280	φ330	φ390	φ440	φ520
	Spindle speed regulation	-	Forward: 12 gears	Forward: 9 gears	Forward: 9 gears	Forward: 9 gears	Forward: 9 gears
	Spindle speed range	r/min	16-380	7.5-280	6-205	4.9-180	4.9-180
	Chuck	mm	φ800 4-jaw manual	φ780 4-jaw electric	φ850 4-jaw electric	φ1000 4-jaw electric	φ1000 4-jaw electric
Toolpost	Cross section of tool shank	mm	45*45	45*45	45*45	45*45	45*45
	Toolpost type	-	V4	V4	V4	V4	V4
Feed	Max. stroke of X-axis	mm	520	520	520	520	520
	Max. stroke of Z-axis	mm	1350/2850	1350/2850	1350/2850	1350/2850	1350/2850
	No. and range of X-axis feed	-	40/0.05-1.5	32/0.05-0.75	32/0.05-0.75	32/0.05-0.75	32/0.05-0.75
	No. and range of Z-axis feed	-	40/0.1-3.0	32/0.1-1.5	32/0.1-1.5	32/0.1-1.5	32/0.1-1.5
	Rapid traverse speed of X-axis	mm/min	1870	1870	1870	1870	1870
	Rapid traverse speed of Z-axis	mm/min	3740	3740	3740	3740	3740
	No. and rang of metric threads	-	30/1-30	23/1-15	23/1-15	23/1-15	23/1-15
	No. and rang of inch threads	-	27/28-1	22/28-2	22/28-2	22/28-2	22/28-2
Tailstock	Tailstock quill diameter	mm	φ160	φ160	φ160	φ160	φ160
	Tailstock quill taper	-	MT6	MT6	MT6	MT6	MT6
	Tailstock quill max. stroke	mm	300	300	300	300	300
Power system	Main motor power	kW	22	22	22	22	22
	Rapid traverse motor power	kW	1.5	1.5	1.5	1.5	1.5
	Coolant pump motor power	kW	0.125	0.125	0.125	0.125	0.125
Others	Width*Height	mm	2100*1600	2100*1650	2100*1700	2100*1700	2100*1850
	Length	mm	4800/6300	4900/6400	4900/6400	5000/6500	5000/6500
	Net weight	kg	10000/11500	11500/13000	12800/14300	13000/14500	15000/16500

Note: swing over bed/distance between centers can be customized.



### ■ CNC lathe (260/312/400mm guideway) ↓

- » Our lathe bed is made of HT300 high strength cast iron, and treated by long time aging treatment, so the precision is good and durable.
- » The max. workpiece for our lathe is 1500/2000/2500/3000/4000 kg.
- » There are oblique chip outlets in our lathe bed, easy for chip removing.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » The precision of All our lathes is measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » Horizontal hydraulic turret, power tooling turret, pneumatic chuck, hydraulic tailstock, electrical rotary tailstock, milling power head and hydraulic steady rest are for option.



### ■ Technical parameter ↓

Item	Unit	CK0640	CK0660	CKD6136	CKD6140/A	CKQ6140	CKQ6150	CKQ6161	CKQ6166	CKQ6180	
Capacities	Swing over bed	mm	φ300	φ400	φ360	φ400	φ500	φ610	φ660	800	
	Swing over carriage	mm	φ120	φ150	φ200	φ220	φ210	φ280	φ400	φ540	
	Max. length of workpiece	mm	180	200	750/1000	750/1000	750/1000/2000	750/1000/2000	750/1000/2000	750/1000/2000	
Spindle	Max. turning length	mm	180	200	600/850	600/850	600/850/1850	600/850/1850	600/850/1850	600/850/1850	
	Span of guideway	mm	260	260	312	312	400	400	400	400	
	Spindle nose type	-	-	-	C6	C6	C6/D8	C6/D8/D8	C6/D8/D8	C6/D8/D8	
	Spindle center taper	-	-	-	MT6	MT6	MT6/φ90 1:20	MT6/φ90 1:20/φ113 1:20	MT6/φ90 1:20/φ113 1:20	MT6/φ90 1:20/φ113 1:20	
	Spindle bore	mm	φ40	φ48	φ52	φ52	φ52/φ80	φ52/φ80/φ105	φ52/φ80/φ105	φ52/φ80/φ105	
	Range of spindle speeds	r/min	3000	2800	1600/3000	1600	1500/1600	1500/1600	1500/1600	1500/1600	
	Chuck size	mm	Spring collet	Spring collet	200	250	250	250	250	250	
	Turret	Cross section of tool shank	mm	16*16	16*16	20*20	20*20	25*25	25*25	25*25	25*25
		Turret type	-	Gang tool	Gang tool	V4	V4	V4	V4	V4	V4
	Feed	Min. feed of X-axis/Z-axis	mm	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Feed speed range		mm/min	1-2000	1-2000	1-2000	1-2000	1-2000	1-2000	1-2000	1-2000	
Rapid traverse speed of X-axis/Z-axis		mm/min	6000/8000	6000/8000	4000/6000	4000/6000	4000/6000	4000/6000	4000/6000	4000/6000	
Tailstock	Max. stroke of X-axis	mm	190	220	210	210	250	260	340	410	
	Tailstock quill diameter	mm	-	φ52	φ60	φ60	φ75	φ75	φ75	φ75	
	Tailstock quill taper	-	-	MT4	MT4	MT4	MT5	MT5	MT5	MT5	
Power system	Tailstock quill max. stroke	mm	-	90	100	100	150	150	150	150	
	Main motor power	kW	4	4	5.5	5.5	7.5	7.5	7.5	7.5	
Others	CNC system	-	GSK928TD-L	GSK928TD-L	GSK928TD-L	GSK928TD-L	GSK928TD-L	GSK928TD-L	GSK928TD-L	GSK928TD-L	
	Width * Height	mm	1200*1600	1000*1600	1240*1700	1240*1700	2550/2750/3700	2550/2750/3700	2550/2750/3700	2550/2750/3700	
	Length	mm	1600	1700	2170/2415	2170/2415	1550*1700	1550*1700	1550*1800	1550*2000	
	Net weight	kg	800	1100	1400/1500	1700/1800	2100/2200/2700	2120/2240/2740	2250/2400/2800	2300/2450/2880	2400/2550/2980

Note: swing over bed/swing over gap/distance between centers (750mm-3000mm) can be customized.

### ■ CNC lathe (550/600mm guideway) ↓

- » Our lathe bed is made of HT300 high strength cast iron, and treated by long time aging treatment, so the precision is good and durable.
- » The max. workpiece for our lathe is 1500/2000/2500/3000/4000 kg.
- » There are oblique chip outlets in our lathe bed, easy for chip removing.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » The precision of All our lathes is measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » Horizontal hydraulic turret, power tooling turret, pneumatic chuck, hydraulic tailstock, electrical rotary tailstock, milling power head and hydraulic steady rest are for option.



### ■ Technical parameter ↓

Item	Unit	CK6163	CK6263	CK6180	CK6280	CK6194	CK6294	CKP6163	CKP6263	CKP6180	CKP6280	CKP6194	CKP6294	CKB6180	CKB61100	CKBP6180	CKBP61100
Capacity	Swing over bed	mm	φ630	φ800	φ940	φ630	φ800	φ940	φ800	φ1000	φ800	φ1000	φ800	φ1000	φ800	φ1000	φ1000
	Swing over carriage	mm	φ340	φ510	φ650	φ340	φ510	φ650	φ480	φ680	φ480	φ680	φ480	φ680	φ480	φ680	φ680
	Swing over gap	mm	-	φ800	-	φ970	-	φ1110	-	φ800	-	φ970	-	φ1110	-	-	-
Spindle	Max. length of workpiece	mm	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000	1500/2000/3000
	Max. turning length	mm	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850	1350/1850/2850
	Span of guideway	mm	550	550	550	550	550	550	550	550	550	550	550	600	600	600	600
	Max. weight of workpiece	t	1.5/3	1.5/3	1.5/3	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2/4	2.5/4	2.5/4	2.5/4	2.5/4
Turret	Spindle nose type	-	C11	C11	C11	C11	C11	C11	C11	C11	C11	C11	C11/C15	C11/C15	C11/C15	C11/C15	C11/C15
	Spindle center taper	-	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT6	MT6	MT6	MT6	MT6
	Spindle bore	mm	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100/φ140	φ100/φ140	φ100/φ140	φ100/φ140	φ100/φ140
Feed	Spindle speed range	r/min	12.5-1000 (stepless in 4 hydraulic gears)	10-800 (stepless in 4 hydraulic gears)	10-800 (stepless in 4 hydraulic gears)	27-1000 (stepless in 4 manual gears)	22-800 (stepless in 4 manual gears)	22-800 (stepless in 4 manual gears)	22-800 (stepless in 4 manual gears)	8-800 (stepless in 4 hydraulic gears)	8-800 (stepless in 4 hydraulic gears)	8-800 (stepless in 4 hydraulic gears)	8-800 (stepless in 4 hydraulic gears)	8-800 (stepless in 4 hydraulic gears)	8-800 (stepless in 4 hydraulic gears)	8-800 (stepless in 4 hydraulic gears)	8-800 (stepless in 4 hydraulic gears)
	Cross section of tool shank	mm	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32
	Turret type	-	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4	V4
Tailstock	Min. feed of X-axis/Z-axis	mm	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001
	Rapid traverse speed of X-axis/Z-axis	mm/min	3000/6000	3000/6000	3000/6000	3000/6000	3000/6000	3000/6000	3000/6000	3000/6000	3000/6000	3000/6000	3000/6000	4000/5000	4000/5000	4000/5000	4000/5000
	Max. stroke of X-axis	mm	390	475	475	390	475	475	475	475	475	475	475	420	420	420	420
Power system	Tailstock quill diameter	mm	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100	φ100
	Tailstock quill taper	-	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT5	MT6	MT6	MT6	MT6
Others	Tailstock quill max. stroke	mm	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
	Main motor power	kW	11	11	11	11	11	11	11	11	11	11	11	15	15	15	15
	Main motor speed	r/min	1460	1460	1460	1460	1460	1460	1460	1460	1460	1460	1460	970	970	970	970
	CNC system	-	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)	Fanuc 0i-TF(5)
Others	Width*Height	mm	1800*1880	1880*1930	1880*1930	1800*1880	1880*1930	1880*1930	1880*1930	1880*1930	1880*1930	1880*1930	1880*1930	1985*2105	1985*2105	1985*2105	1985*2105
	Length	mm	3895/4390/5390	3895/4390/5390	3895/4390/5390	3895/4390/5390	3895/4390/5390	3895/4390/5390	3895/4390/5390	3895/4390/5390	3895/4390/5390	3895/4390/5390	3895/4390/5390	3970/4510/5465	3970/4510/5465	3970/4510/5465	3970/4510/5465
	Net weight	kg	4000/4500/5000	4400/4900/5400	4700/5200/5700	4000/4500/5000	4400/4900/5400	4700/5200/5700	4000/4500/5000	4400/4900/5400	4700/5200/5700	4000/4500/5000	4400/4900/5400	4700/5200/5700	5300/5600/6000	5600/5900/6300	5300/5600/6000

Note: swing over bed/swing over gap/distance between centers (1000mm-8000mm)/ CNC system (FANUC/SIEMENS/GSK/KND) can be customized.

## ■ CNC lathe (755mm guideway) ↓

- » The max. workpiece for our lathe is 6000/8000 kg.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » 4 hydraulic gears, stepless in each gear.
- » Motorized tailstock.
- » The precision of All our lathes is measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » Horizontal hydraulic turret, power tooling turret, pneumatic chuck, hydraulic tailstock, electrical rotary tailstock, milling power head and hydraulic steady rest are for option.



## ■ Technical parameter ↓

Item	Unit	CK61100	CK61125	CK61140	CK61160	CK61100E	CK61125E	CK61140E	CK61160E
Capacity	Swing over bed	mm	φ1250	φ1400	φ1400	φ1000	φ1250	φ1400	φ1640
	Swing over carriage	mm	φ630	φ880	φ1030	φ1250	φ630	φ880	φ1250
	Max. length of workpiece	mm	1500/3000/5000	1500/3000/5000	1500/3000/5000	1500/3000/5000	1500/3000/5000	1500/3000/5000	1500/3000/5000
	Max. turning length	mm	1300/2800/4800	1300/2800/4800	1300/2800/4800	1300/2800/4800	1300/2800/4800	1300/2800/4800	1300/2800/4800
	Span of guideway	mm	755	755	755	755	755	755	755
Max. weight of workpiece	t	6	6	6	6	6	6	6	6
Spindle	Spindle nose type	-	A2-15	A2-15	A2-15	A2-15	A2-15	A2-15	A2-15
	Spindle center taper	-	MT6	MT6	MT6	MT6	MT6	MT6	MT6
	Spindle bore	mm	φ130	φ130	φ130	φ130	φ130	φ130	φ130
	Spindle speed range	r/min	3.15-315 (stepless in 4 hydraulic gears)	3.15-315 (stepless in 4 hydraulic gears)	3.15-315 (stepless in 4 hydraulic gears)	3.15-315 (stepless in 4 hydraulic gears)	3.15-315 (stepless in 4 hydraulic gears)	3.15-315 (stepless in 4 hydraulic gears)	3.15-315 (stepless in 4 hydraulic gears)
Turret	Chuck	mm	φ1000 4-jaw manual	φ1000 4-jaw manual	φ1000 4-jaw manual	φ1000 4-jaw manual	φ1000 4-jaw manual	φ1000 4-jaw manual	φ1000 4-jaw manual
	Cross section of tool shank	mm	40*40	40*40	40*40	40*40	40*40	40*40	40*40
Tailstock	Turret type	-	V4	V4	V4	V4	V4	V4	V4
	Tailstock quill diameter	mm	φ160	φ160	φ160	φ160	φ160	φ160	φ160
Power system	Tailstock quill taper	-	MT6	MT6	MT6	MT6	MT6	MT6	MT6
	Tailstock quill max. stroke	mm	300	300	300	300	300	300	300
	Main motor power	kW	30	22	22	22	30	30	30
	Main motor model	-	FANUC_ailP50	FANUC_ailP50	FANUC_ailP50	FANUC_ailP50	CTB-4030ZRD10-30MGP	CTB-4030ZRD10-30MGP	CTB-4030ZRD10-30MGP
Others	Main motor speed	r/min	575/1200	575/1200	575/1200	575/1200	1000	1000	1000
	CNC system	-	FANUC 0i-TF (5)	FANUC 0i-TF (5)	FANUC 0i-TF (5)	FANUC 0i-TF (5)	FANUC 0i-TF (5)	FANUC 0i-TF (5)	FANUC 0i-TF (5)
	Width*Height	mm	2530*2300	2530*2300	2780*2600	2780*2600	2530*2300	2530*2300	2780*2600
	Length	mm	4800/6300/8300	4800/6300/8300	4800/6300/8300	4800/6300/8300	4800/6300/8300	4800/6300/8300	4800/6300/8300
	Net weight	kg	9200/10700/12500	10200/11500/13500	11000/12300/14100	11400/12700/14500	9200/10700/12500	10200/11500/13500	11000/12300/14100

Note: swing over bed/swing over gap/distance between centers (1000mm-12000mm) can be customized.

## ■ CNC lathe (970mm guideway) ↓

- » The max. workpiece for our lathe is 10/12 ton.
- » We have Germany made high precision lathe guide grinding machine to ensure the guide precision.
- » 4 hydraulic gears, stepless in each gear.
- » Motorized rotary tailstock.
- » The precision of All our lathes is measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » Horizontal hydraulic turret, power tooling turret, pneumatic chuck, hydraulic tailstock, milling power head and hydraulic steady rest are for option.



## ■ Technical parameter ↓

Item	Unit	CK61125E	CK61140E	CK61160E	CK61180E
Capacity	Swing over bed	mm	φ1250	φ1600	φ1600
	Swing over carriage	mm	φ880	φ1210	φ1210
	Max. length of workpiece	mm	3000/5000/8000	3000/5000/8000	3000/5000/8000
	Max. turning length	mm	2800/4800/7800	2800/4800/7800	2800/4800/7800
	Span of guideway	mm	970	970	970
Max. weight of workpiece	t	10	10	10	10
Spindle	Spindle nose type	-	A2-15	A2-15	A2-15
	Spindle center taper	-	MT6	MT6	MT6
	Spindle bore	mm	φ130	φ130	φ130
	Spindle speed range	r/min	5-320 (stepless in 4 hydraulic gears)	5-320 (stepless in 4 hydraulic gears)	5-320 (stepless in 4 hydraulic gears)
Turret	Chuck	mm	φ1250 4-jaw manual	φ1250 4-jaw manual	φ1250 4-jaw manual
	Cross section of tool shank	mm	40*40	40*40	40*40
Tailstock	Turret type	-	V4	V4	V4
	Tailstock quill diameter	mm	φ220	φ220	φ220
Power system	Tailstock quill taper	-	MT6	MT6	MT6
	Tailstock quill max. stroke	mm	300	300	300
	Main motor power	kW	30	30	30
Others	CNC system	-	FANUC 0i-TF (5)	FANUC 0i-TF (5)	FANUC 0i-TF (5)
	Width*Height	mm	2665*2650	2665*2650	2665*2650
	Length	mm	6520/8520/11520	6520/8520/11520	6520/8520/11520
	Net weight	kg	13500/16500/20000	13500/16500/20000	13500/16500/20000

Note: swing over bed/distance between centers (3000mm-12000mm) can be customized.

## ■ CNC heavy duty lathe (1100mm guideway) ↓

- » The max. workpiece for our lathe is 16/20 ton.
- » Our lathe is equipped with 1100 mm rectangular guideways.
- » Our chuck is K78 series  $\phi 1250$  / $\phi 1400$  / $\phi 1600$  / $\phi 2000$  mm heavy duty chuck made by Hohhot, the best and most famous chuck manufacturer in China.
- » We have Germany made high precision lathe guide grinding machine to ensure the guide precision.
- » Motorized rotary tailstock.
- » The precision of All our lathes is measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.



## ■ Technical parameter ↓

Item	Unit	CKH61125	CKH61160	CKH61200	CKHJ61125	CKHJ61160	CKHJ61200
Capacity	Swing over bed	mm $\phi 1250$	$\phi 1600$	$\phi 2000$	$\phi 1250$	$\phi 1600$	$\phi 2000$
	Swing over carriage	mm $\phi 900$	$\phi 1250$	$\phi 1600$	$\phi 900$	$\phi 1250$	$\phi 1600$
	Max. length of workpiece	mm 5000/8000/12000	5000/8000/12000	5000/8000/12000	5000/8000/12000	5000/8000/12000	5000/8000/12000
	Max. turning length	mm 4800/7800/11800	4800/7800/11800	4800/7800/11800	4800/7800/11800	4800/7800/11800	4800/7800/11800
	Span of guideway	mm 1100	1100	1100	1100	1100	1100
	Structure of guideway	-	Rectangular 2 guideways	Rectangular 2 guideways	Rectangular 2 guideways	Rectangular 2 guideways	Rectangular 2 guideways
	Max. weight of workpiece	t 16	16	16	16	16	16
Spindle	Spindle nose type	- A2-15	A2-15	A2-15	A2-15	A2-15	A2-15
	Spindle center taper	$^{\circ}$ 75	75	75	75	75	75
	Spindle bore	mm $\phi 100$	$\phi 100$	$\phi 100$	$\phi 100$	$\phi 100$	$\phi 100$
	Spindle speed range	r/min 3-320 (stepless in 4 hydraulic gears)	3-320 (stepless in 4 hydraulic gears)	3-320 (stepless in 4 hydraulic gears)	Forward:3.15-315(21 gears); Reverse:3.5-291(12 gears)	Forward:3.15-315(21 gears); Reverse:3.5-291(12 gears)	Forward:3.15-315(21 gears); Reverse:3.5-291(12 gears)
Chuck	Chuck	mm $\phi 1250$ 4-jaw manual	$\phi 1400$ 4-jaw manual	$\phi 1600$ 4-jaw manual	$\phi 1250$ 4-jaw manual	$\phi 1400$ 4-jaw manual	$\phi 1600$ 4-jaw manual
	Cross section of tool shank	mm 50*50	50*50	50*50	50*50	50*50	50*50
Turret	Turret type	- V4	V4	V4	V4	V4	V4
	Tailstock quill diameter	mm 260	260	260	260	260	260
Tailstock	Tailstock quill taper	- Metric 80	Metric 80	Metric 80	Metric 80	Metric 80	Metric 80
	Tailstock quill max. stroke	mm 300	300	300	300	300	300
	Main motor power	kW 30	30	30	30	30	30
Power system	Main motor model	- FANUC $\alpha 30/6000i$	FANUC $\alpha 30/6000i$	FANUC $\alpha 30/6000i$	Y200L-4-B3	Y200L-4-B3	Y200L-4-B3
	Main motor speed	r/min 115/2300	115/2300	115/2300	1470	1470	1470
	CNC system	- FANUC 0i-TF (1)	FANUC 0i-TF (1)	FANUC 0i-TF (1)	FANUC 0i-TF (1)	FANUC 0i-TF (1)	FANUC 0i-TF (1)
Others	Width*Height	mm 3200*2220	3200*2750	3200*2950	3200*2220	3200*2750	3200*2950
	Length	mm 8400/11400/15400	8400/11400/15400	8400/11400/15400	8400/11400/15400	8400/11400/15400	8400/11400/15400
	Net weight	kg 26000/32600/41400	29500/36100/44900	33500/40100/48900	26000/32600/41400	29500/36100/44900	33500/40100/48900

Note: swing over bed/distance between centers (3000mm-20000mm) can be customized.

## ■ CNC heavy duty lathe (1600mm guideway) ↓

- » The max. workpiece for our lathe is 32/40 ton.
- » Our lathe is equipped with 1600 mm rectangular 3 guideways.
- » There are chip outlets at the bottom of our lathe bed, chip drops into chip container in the foundation, easy for chip removing.
- » X axis feed adopts Wittenstein Alpha planetary reducer from Germany.
- » Z axis feed adopts Atlanta precision gear and gear rack from Germany.
- » Stepless speed regulation in the whole spindle speed range.
- » Powerful 75kW DC motor from Shanghai Nanyang, the best manufacturer of DC motor in China.
- » Disc spring is installed on the back of motorized rotary tailstock spindle to prevent damage to the mechanism due to thermal expansion of the workpiece.



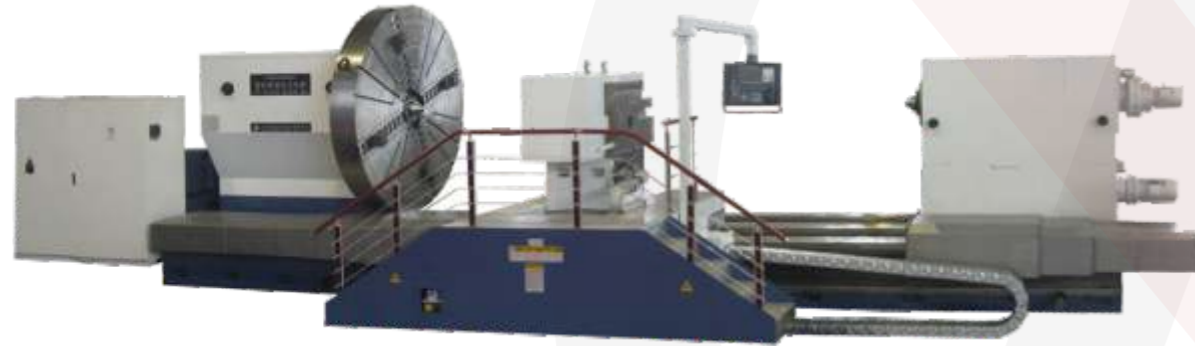
## ■ Technical parameter ↓

Item	Unit	CK61160	CK61200	CK61250
Capacity	Swing over bed	mm $\phi 1600$	$\phi 2000$	$\phi 2500$
	Swing over carriage	mm $\phi 1250$	$\phi 1600$	$\phi 2000$
	Max. length of workpiece	mm 5000/8000/12000	5000/8000/12000	5000/8000/12000
	Span of guideway	mm 1600	1600	1600
	Structure of guideway	-	Rectangular 3 guideways	Rectangular 3 guideways
	Max. faceplate torque	kN.m 80	80	80
	Max. weight of workpiece	t 32	32	32
Spindle	Taper hole of spindle	- $75^{\circ}$ ; $\phi 120$	$75^{\circ}$ ; $\phi 120$	$75^{\circ}$ ; $\phi 120$
	Spindle speed regulation	-	Stepless	Stepless
	Spindle speed range	r/min 0.8-160	0.8-160	0.8-160
	Face plate diameter	mm 1600/1800	1600/1800	1600/1800
	Chuck	mm $\phi 1600$ mm 4-jaw manual	$\phi 1800$ mm 4-jaw manual	$\phi 2000$ mm 4-jaw manual
Turret	Cross section of tool shank	mm 70*70	70*70	70*70
	Turret size	mm 440*440	440*440	440*440
	Turret type	-	V4	V4
	Max. cutting force of single turret	kN 80	80	80
Tailstock	Total cutting force	kg 16000	16000	16000
	Tailstock quill diameter	mm $\phi 300$	$\phi 300$	$\phi 300$
	Tailstock quill taper	-	$\phi 100$ taper 1:7	$\phi 100$ taper 1:7
	Tailstock quill max. stroke	mm 300	300	300
	Main motor power	kW 75	75	75
Power system	Spindle motor type	-	DC motor	DC motor
	Main motor speed	r/min 400-1200	400-1200	400-1200
Others	CNC system	-	FANUC 0i-TF(1)	FANUC 0i-TF(1)
	Width*Height	mm 2280*3500	2280*3500	2280*3500
	Length	mm 10600/13600/176000	10600/13600/176000	10600/13600/176000

Note: swing over bed/distance between centers (4000mm-20000mm) can be customized.

## ■ CNC heavy duty lathe (2090mm guideway) ↓

- » The max. workpiece for our lathe is 63/80 ton.
- » Our lathe is equipped with 2090 mm rectangular 3 guideways.
- » SP class spindle bearings.
- » Power clamping screws from JAKOB ANTRIEBSTECHNIK from Germany are installed on our chuck.
- » Stepless speed regulation in the whole spindle speed range.
- » Powerful 144kW DC motor from Shanghai Nanyang, the best manufacturer of DC motor in China.
- » Disc spring is installed on the back of motorized rotary tailstock with SP class bearing to prevent damage to the mechanism due to thermal expansion of the workpiece.



## ■ Technical parameter ↓

Item	Unit	CK61250(63T)	
Capacity	Swing over bed	φ2500	
	Swing over carriage	φ2200	
	Max.length of workpiece	5000/8000/12000	
	Span of guideway	2090	
	Structure of guideway	Rectangular 3 guideways	
	Max faceplate torque	kN·m	120
Spindle	Max.weight of workpiece	t	63
	Taper hole of spindle	-	75° φ196.869
	Spindle speed regulation	-	Stepless
	Spindle speed range	r/min	0.5-125
	Face plate diameter	mm	2200
	Chuck	mm	φ2500mm 4-jaw manual
Turret	Cross section of tool shank	mm	80*80
	Stroke of X-axis (transverse)	mm	1000
	Rapid traverse speeds of X-axis	mm/min	3000
	Stroke of Z-axis (longitudinal)	mm	5000-18000
	Rapid traverse speeds of Z-axis	mm/min	6000
	Max. stroke of tool plate	mm	300
	Max. cutting force of single turret	kN	120
Tailstock	Total cutting force	kN	200
	Tailstock quill diameter	mm	560
	Tailstock quill taper	-	75° φ160 (taper 1:4)
Power system	Tailstock quill max. stroke	mm	200
	Main motor power	kW	144
	Main drive motor type	-	DC motor
	Main drive motor speed range	r/min	540-1900
Others	CNC system	-	FANUC 0i-TF(1)
	Width*Height	mm	4000*3800
	Length	mm	12000/15000/19000

Note: swing over bed/distance between centers (5000mm-20000mm) can be customized.

## ■ CNC roll turning lathe ↓

- » Max. roll turning diameter 500/650/850/1000/1250/1600 mm.
- » Spindle is made of chrome molybdenum alloy steel, with good rigidity, suitable for heavy cutting.
- » Rectangular 3 guideways.
- » The max. workpiece for our lathe is 3600/4000/8000/20000 kg.
- » Rotary tailstock.
- » Equipped with CAXA automatic programming software, the outer circle and pass of the roll can be automatically programmed.
- » Horizontal hydraulic turret, power tooling turret, pneumatic chuck, hydraulic tailstock, electrical rotary tailstock, milling power head and hydraulic steady rest are for option.



## ■ Technical parameter ↓

Item	Unit	CK8450	CKQ8465	CKQ8485	CK8465	CK8485	CKQ84100	CK84100	CK84125	CK84160
Capacities	Max roll turning diameter	mm	φ500	φ650	φ850	φ650	φ850	φ1000	φ1250	φ1600
	Max. length of workpiece	mm	2500/3000	2500/3000	2500/3000	3500/5000	3500/5000	3500/5000	5000/6000/8000	5000/6000/8000
	Max. turning length	mm	2300/3000	2300/3000	2300/3000	3000/4800	3000/4800	3000/4800	4800/5800/7800	4800/5800/7800
	Span of guideways	mm	850/900	850/900	850/900	1100	1100	1100	1450	1450
	Max. weight of workpiece	kg	3600/4000	3600/4000	3600/4000	8000	8000	8000	20000	20000
	Spindle	Spindle nose type	-	C2-11	C2-11	C2-11	A2-15	A2-15	A2-15	A2-15
Spindle bore		mm	φ100	φ100	φ100	φ130	φ130	φ130	φ96	φ96
Taper hole of spindle		-	Metric120	Metric120	Metric120	Metric 140	Metric 140	Metric 140	Metric 140	Metric 140
Taper of spindle center		-	MT5	MT5	MT5	MT6	MT6	MT6	MT6	MT6
Spindle speed range		r/min	10-500	10-500	10-500	8-350	8-350	8-350	5-200	5-200
Chuck (4-jaw manual)		mm	φ500-630	φ500-630	φ500-630	φ630-800	φ630-800	φ630-800	φ800-1125	φ800-1125
Turret	Cross section of tool shank	mm	40*40	40*40	40*40	40*40	40*40	40*40	50*50	50*50
	Turret type	-	V4	V4	V4	V4	V4	V4	V4	V4
Feed	Max. stroke of X-axis	mm	330	330	330	450	450	450	450	450
	Min. feed of X-axis/Z-axis	mm	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	Rapid traverse speed of X-axis	m/min	3	3	3	3	3	3	3	3
Tailstock	Rapid traverse speed of Z-axis	m/min	6	6	6	6	6	6	6	6
	Tailstock quill diameter	mm	200	200	200	220	220	220	300	300
	Tailstock quill taper	-	MT5	MT5	MT5	MT6	MT6	MT6	MT6	MT6
Others	Tailstock quill max. stroke	mm	310	310	310	330	330	330	310	310
	CNC system	-	FANUC	FANUC	FANUC	FANUC	FANUC	FANUC	FANUC	FANUC
	Spindle motor power	kW	AC22 (30)	AC22 (30)	AC22 (30)	AC30/AC45	AC30/AC45	AC30/AC45	AC75	AC75
Machining accuracy	Machining accuracy	-	IT6-IT7	IT6-IT7	IT6-IT7	IT6-IT7	IT6-IT7	IT6-IT7	IT6-IT7	IT6-IT7
	Surface roughness	μm	Ra 0.8	Ra 0.8	Ra 0.8	Ra 0.8	Ra 0.8	Ra 0.8	Ra 0.8	Ra 0.8

## ■ CNC oil country lathe (550/600mm guideway) ↓

- » Spindle bore 130/200/225/280 mm.
- » Double hollow chucks.
- » The max. workpiece for our lathe is 3000/4000 kg.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » The precision of All our lathes will be measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » Horizontal hydraulic turret, power tooling turret, pneumatic chuck, hydraulic tailstock, electrical rotary tailstock, milling power head and hydraulic steady rest are for option.
- » The precision of our lathe complies with API spec 5B standard for threading.



## ■ Technical parameter ↓

Item	Unit	QKJ1213	QK1219	QK1222	QK1225	QK1227	
Capacity	Swing over bed	mm	φ630/800	φ630/800	φ630/800	φ800	
	Swing over carriage	mm	φ340/520	φ340/520	φ340/520	φ480	
	Distance between centers	mm	1000/1500/3000	1000/1500/3000	1000/1500/3000	1000/1500/3000	
	Pipe threading range	mm	φ30-126	φ50-193	φ50-220	φ120-250	φ130-270
	Span of guideway	mm	550	550	550	600	600
	Max. weight of workpiece	t	3	3	3	4	4
Spindle	Spindle bore	mm	φ130	φ200	φ225	φ255	φ280
	Spindle speed regulation	-	stepless in 3 manual gears	stepless in 4 manual /hydraulic gears	stepless in 4 manual /hydraulic gears	stepless in 4 manual /hydraulic gears	stepless in 4 manual /hydraulic gears
	Spindle speed range	r/min	30-720	20-550	20-550	20-420	20-420
Turret	Chuck	mm	φ400 3-jaw manual	φ500 3-jaw manual	φ500 3-jaw manual	φ630 4-jaw manual	φ630 4-jaw manual
	Cross section of tool shank	mm	32*32	32*32	32*32	32*32	32*32
Feed	Turret type	-	V4	V4	V4	V4	V4
	Max. stroke of X-axis	mm	320/420	320/420	320/420	420	420
	Max. stroke of Z-axis	mm	850/1350/2850	850/1350/2850	850/1350/2850	850/1350/2850	850/1350/2850
	Rapid traverse speed of X-axis	mm/min	4000	4000	4000	4000	4000
	Rapid traverse speed of Z-axis	mm/min	6000	6000	6000	6000	6000
Tailstock	Tailstock quill diameter	mm	φ100	φ100	φ100	φ120	φ120
	Tailstock quill taper	-	MT5	MT5	MT5	MT6	MT6
	Tailstock quill max. stroke	mm	250	250	250	250	250
Power system	Main motor power	kW	11	11	11	15	15
	Coolant pump motor power	kW	0.125	0.125	0.125	0.125	0.125
Others	CNC system	-	Siemens 808D	Siemens 808D	Siemens 808D	Siemens 808D	Siemens 808D
	Width*Height	mm	1800*1850	1880*1850	1880*1850	1930*1900	1930*1900
	Length	mm	3300/3800/5300	3300/3800/5300	3300/3800/5300	3600/4100/5600	3600/4100/5600
	Net weight	kg	4500/5000/6000	4600/5100/6100	4700/5200/6200	6000/6500/7500	6200/6700/7700

Note: swing over bed/distance between centers can be customized.

## ■ CNC oil country lathe (755mm guideway) ↓

- » Spindle bore 280/330/390/440/520 mm.
- » Double 4-jaw hollow chucks.
- » The max. workpiece for our lathe is 6000 kg.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » The precision of All our lathes will be measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » Horizontal hydraulic turret, power tooling turret, pneumatic chuck, hydraulic tailstock, electrical rotary tailstock, milling power head and hydraulic steady rest are for option.
- » The precision of our lathe complies with API spec 5B standard for threading.



## ■ Technical parameter ↓

Item	Unit	QK1232	QK1238	QK1243	QK1250	QK1263	
Capacity	Swing over bed	mm	φ1000	φ1000	φ1000	φ1400	
	Swing over carriage	mm	φ610	φ610	φ610	φ710	
	Distance between centers	mm	1500/3000	1500/3000	1500/3000	1500/3000	
	Pipe threading range	mm	φ190-320	φ190-380	φ270-430	φ330-510	φ330-630
	Span of guideway	mm	755	755	755	755	1100
	Max. weight of workpiece	t	6	6	6	6	10
Spindle	Spindle bore	mm	φ330	φ390	φ440	φ520	φ640
	Spindle speed regulation	-	stepless in 3 manual/hydraulic gears	stepless in 3 manual/hydraulic gears	stepless in 3 manual/hydraulic gears	stepless in 3 manual/hydraulic gears	stepless in 3 manual/hydraulic gears
	Spindle speed range	r/min	10-280	8-205	8-205	8-190	2-120
Turret	Chuck	mm	φ780 4-jaw electric	φ850 4-jaw electric	φ1000 4-jaw electric	φ1000 4-jaw electric	φ1250 4-jaw manual
	Cross section of tool shank	mm	40*40	40*40	40*40	50*50	50*50
Feed	Turret type	-	V4	V4	V4	V4	
	Max. stroke of X-axis	mm	520	520	520	520	750
	Max. stroke of Z-axis	mm	1250/2750	1250/2750	1250/2750	1250/2750	1250/2750
	Rapid traverse speed of X-axis	mm/min	4000	4000	4000	4000	4000
	Rapid traverse speed of Z-axis	mm/min	4000	4000	4000	4000	4000
Tailstock	Tailstock quill diameter	mm	φ160	φ160	φ160	φ160	φ260 (rotary quill)
	Tailstock quill taper	-	MT6	MT6	MT6	MT6	Metric 80
	Tailstock quill max. stroke	mm	300	300	300	300	300
Power system	Main motor power	kW	22	22	22	22	37
	Coolant pump motor power	kW	0.125	0.125	0.125	0.125	0.125
Others	CNC system	-	Siemens 808D	Siemens 808D	Siemens 808D	Siemens 808D	Siemens 808D
	Width*Height	mm	2080*2080	2220*2120	2220*2120	2300*2200	2500*2500
	Length	mm	5000/6500	5000/6500	5000/6500	5000/6500	5600/7100
	Net weight	kg	11500/12500	12000/13000	13000/14000	15000/16000	18000/19300

Note: swing over bed/distance between centers can be customized.

## ■ Slant bed CNC oil country lathe ↓

- » Spindle bore 120/150/200/225/230/280/305/390/520 mm.
- » Double pneumatic/electrical hollow chucks.
- » 45° slant bed, with good precision and rigidity, easy for chip removing.
- » Our lathe guide is quenched by induction quenching device, hardened layer thickness is 2-3mm, hardness is 52 HRC.
- » Horizontal hydraulic turret, power tooling turret, electrical rotary tailstock, milling power head and hydraulic steady rest are for option.
- » The precision of our lathe complies with API spec 5B standard for threading.



## ■ Technical parameter ↓

Item	Unit	QKX1212	QKX1215	QKX1222	QKX1227	QKX1238	QKX1250	QKX1219J	QKX1222J	QKX1225J	QKX1227J
<b>Bed slant angle</b>	°	45	45	45	45	45	45	45	45	45	45
Capacity	Swing over bed	mm	φ630	φ630	φ680	φ900	φ1200	φ1200	φ600	φ600	φ600
	Max turning diameter	mm	φ600	φ600	φ600	φ600	φ710	φ710	φ450	φ450	φ450
	Swing over cross slide	mm	φ440	φ440	φ450	φ600	φ710	φ710	φ450	φ450	φ450
	Distance between centers	mm	1000	1000	920	1000	1000	4000	600	600	600
Spindle	Pipe threading range	mm	φ110	φ140	φ220	φ300	φ380	φ500	φ190	φ220	φ275
	Spindle nose type	-	A2-11	A2-11	A2-15	Short cylinder	Thread	Thread	Short cylinder	Short cylinder	Short cylinder
	Spindle bore	mm	φ120	φ150	φ230	φ305	φ390	φ520	φ200	φ225	φ255
	Max spindle speed	r/min	800	800	550	350	190	190	550	550	450
Turret	Cross section of tool shank	mm	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32	32*32
	Turret type	-	H8 Hydraulic	H8 Hydraulic	H8 Hydraulic	H8 Hydraulic	H8 Hydraulic	H8 Hydraulic	V4 Electric	V4 Electric	V4 Electric
Feed	Stroke of X-axis	mm	335	335	350	375	375	350	350	350	350
	Stroke of Z-axis	mm	1100	1100	1140	1250	1250	3750	600	600	600
	Rapid traverse speed of X-axis	mm/min	4000	4000	4000	10000	10000	10000	4000	4000	4000
	Rapid traverse speed of Z-axis	mm/min	6000	6000	6000	12000	12000	12000	6000	6000	6000
Tailstock	Tailstock quill diameter	mm	φ130	φ130	φ140	φ170	φ170	φ170	Without tailstock	Without tailstock	Without tailstock
	Tailstock quill taper	-	MT5	MT5	MT6	MT6	MT6	MT6	-	-	-
	Tailstock quill max stroke	mm	100	100	200	180	180	180	-	-	-
Power system	Main motor power	kW	15	15	22	22	22	22	22	22	22
	Coolant pump motor power	kW	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Others	Width*Height	mm	2050*2300	2050*2300	2100*2300	2182*2100	2482*2300	2482*2300	2250*2350	2250*2350	2250*2350
	Length	mm	4850	4850	6600	6700	7000	10000	5100 (including chip conveyor)	5100 (including chip conveyor)	5100 (including chip conveyor)
	Net weight	kg	7500	7500	12000	14300	21500	28000	10300	10500	11500

## ■ High performance CNC oil country lathe ↓

- » Spindle bore 190/350 mm.
- » Double pneumatic hollow chucks.
- » 45° slant bed, with good precision and rigidity, easy for chip removing.
- » Equipped with 2 turrets for rough and finish turning, the threading efficiency is 4 times of ordinary oil country lathe.
- » Both X and Z axes adopt linear guideway.
- » 132kW DC spindle motor.
- » The precision of our lathe complies with API spec 5B standard for threading.



## ■ Technical parameter ↓

Item	Unit	QKH-178	QKH-340
<b>Bed slant angle</b>	°	45	45
Capacities	Pipe threading range	mm	φ60-178
	Pipe type	-	ERW; High frequency welded steel pipe; Seamless steel pipe
	Quality standard of threads	-	API-5B
	Range of workpiece length	m	6-12.5
Spindle	Form of guideway	mm	Linear guideway
	Spindle speed range	r/min	50-900
Chuck	The distance between spindle center to floor	mm	1200
	Front chuck type	-	Hydraulic, pre-centering
Turret	Rear chuck type	-	Hydraulic
	Upper turret type	-	6-position
Others	Lower turret type	-	Fixed
	Repeat positioning precision of lower turret	mm	±0.005
	CNC system	mm	FANUC
Others	Main motor power	kW	132
	Workpiece surface roughness	-	Ra1.6
	Width*Height	mm	2120*2100
	Length	mm	4448
	Lathe weight	kg	16500
	Feeding equipment weight	kg	7000

## ■ Slant bed CNC lathe (AP series) ↓

- » Spindle is made of chrome molybdenum alloy steel, with good rigidity, suitable for heavy cutting.
- » P4 class precision NSK/NTN spindle bearings.
- » HIWIN/PMI P4 class precision ball screw.
- » Power tool is for option.
- » The precision of All our lathes will be measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » GSK980T CNC system.



## ■ Technical parameter ↓

Item	Unit	AP32	AP36	AP36B	AP46DP	
Capacity	Bed slant angle	°	30	30	45	
	Swing over bed	mm	Φ320	Φ360	Φ360	Φ420
	Swing over carriage	mm	Φ110	Φ110	Φ110	Φ360
	Max. turning length	mm	260	230	330	200 (Turret)/ 280 (Gang tool post)
	Max. carriage length	mm	700	700	600	500
Spindle	Spindle nose type	-	A2-5	A2-5	A2-5	
	Spindle bore	-	Φ51	Φ48	Φ56	Φ52
	Allowable bar diameter through spindle bore	mm	Φ40	Φ40	Φ42	Φ42
	Max. spindle speed	r/min	4500	4500	5000	5000
	Spindle motor power	kW	3.7	5.5	5.5	7.5
Collet/Chuck specification	-	CL42-A5 Collet	CL42-A5 Collet	CL42-A5 Collet	6 inch Chuck	
Stroke & Feed	Max. X-axis stroke	mm	300	380	410	750
	Max. Z-axis stroke	mm	280	250	330	290
	Rapid traverse speed of X-axis/Z-axis	m/min	X:20/Z:20	X:20/Z:20	X:24/Z:24	X:18/Z:24
	Max. feeding speed of X-axis/Z-axis	m/min	5	5	5	5
Accuracy	Repeat positioning accuracy of X-axis/Z-axis	mm	0.003	0.003	0.003	0.003
	Positioning accuracy of X-axis/Z-axis	mm	0.006	0.006	0.006	0.005
Turret	Turret type	-	Gang tool post	Gang tool post	Gang tool post	Hydraulic turret + Gang tool post
	No. of switching positions	-	-	-	-	8
	Cross section of tool shank	mm	20*20	20*20	20*20	20*20
	Boring bar diameter	mm	Φ25	Φ25	Φ25	Φ20 (Hydraulic turret)/ Φ25 (Gang tool post)
Others	CNC system	-	GSK988T	GSK988T	GSK988T	GSK988T
	Length*Width*Height	mm	1780*1380*1550	2120*1520*1650	2600*1700*1600	2000*1550*1600
Weight	kg	1250	1570	3000	2600	

## ■ Slant bed CNC lathe (AD series) ↓

- » Spindle is made of chrome molybdenum alloy steel, with good rigidity, suitable for heavy cutting.
- » P4 class precision NSK/NTN spindle bearings.
- » Auto Strong hydraulic chuck.
- » C3 class ball screw with NSK ball screw bearings.
- » GSA hydraulic turret.
- » Hydraulic tailstock with programmable quill.
- » Fanuc Oi-TF CNC system.



## ■ Technical parameter ↓

Item	Unit	AD15B	AD25	AD35	AD45	
Capacities	Bed slant angle	°	45	45	45	45
	Swing over bed	mm	φ440	φ520	φ660	φ850
	Max. length of workpiece	mm	600/850/1100	625/1000/1500/2000/3000	890/1640/2000/3000	1500/2000/3000
	Max. turning diameter (shaft/disc workpiece)	mm	φ220/φ320	φ360/φ420	φ420/φ550	φ650 /φ800
	Max. turning length	mm	450/700/950	530/905/1405/1905/2905	780/1530/1890/2890	1420/1920/2920
Max. weight of workpiece	kg	500	800	1000	1000	
Spindle	Spindle nose type	-	A2-6	A2-8	A2-8	A2-11
	Spindle bore	mm	φ62	φ87	φ92	φ131
	Max. torque of spindle	N·m	128	338	652/313 (Dual speed motor)	1534
	Front bearing inner diameter	mm	φ100	φ130	φ160	200
	Spindle speed range	r/min	45-4000	35-3500	25-2500	10-2000
	Bore diameter of hollow hydraulic chuck	mm	φ52	φ72	φ81	φ120
Chuck	inch	8	10/12	12	15	
Turret	Cross section of tool shank	mm	25*25	25*25	25*25	32*32
	Turret type	-	H8 (hydraulic)	H12 (hydraulic)	H12 (hydraulic)	H12 (hydraulic)
	Max. boring diameter	mm	φ40	φ40	φ50	φ60
Stroke & Feed	Stroke of X-axis	mm	190	230	305	450
	Stroke of Z-axis	mm	460/710/960	590/965/1465/1965/2965	855/1605/1965/2965	1450/1950/2950
	Rapid traverse speed of X-axis	m/min	18	12	12	12
	Rapid traverse speed of Z-axis	m/min	20	15	15	15
Tailstock	Tailstock stroke	mm	460	490/865/1365/1865/2865	706/1456/1816/2816	1900
	Tailstock quill diameter	mm	φ80	φ85	φ110	φ140
	Tailstock quill taper	-	MT 5	MT 5	MT 5	MT 6
	Tailstock quill max. stroke	mm	80	80	100	130
Others	Main motor power	kW	Fanuc AC11/9	Fanuc AC18.5/15	Fanuc AC30/22	Fanuc AC100
	CNC system	-	Fanuc Oi-TF(5)	Fanuc Oi-TF(1)	Fanuc Oi-TF(1)	Fanuc Oi-TF(1)
	Width*Height	mm	1485*1700	1545*1950	1820/2130	2350/2600
	Length	mm	2575/2875/3470	3000/3380/4550/4960/6160	3620/4725/5825/7000	6360/6860/7860
	Net weight	kg	3600/4200/4800	5000/5500/6500/7500/8500	8000/10000/11000/15000	15000/16000/18000

## ■ Slant bed CNC lathe (AE series) ↓

- » X/Z axes repositioning accuracy 0.003 mm, X/Z axes positioning accuracy 0.005 mm.
- » Ultra-precision spindle, spindle nose runout 0.003 mm, spindle bore runout 0.002 mm, balance grade G1.
- » The spindle is equipped with NSK P4 grade ultra-precision NN type bearings with optimized span (4 bearings in the front and 2 bearings in the back), precision and rigidity are warranted under the condition of high speed rotation and heavy cutting.
- » Both X and Z axes adopt precision linear guides from HIWIN/PMI.
- » Both X and Z axes adopt C3 class precision ball screws from HIWIN/PMI with P4 class precision NSK/NTN ball screw bearings.
- » Rapid traverse speed is up to 30 m/min, if necessary, 36 m/min can be realized.



## ■ Technical parameter ↓

Item	Unit	AE40	AE45	AE50	AE40T	AE46DP	AE50B	
Capacity	Bed slant angle	°	45	45	30	45	30	
	Swing over bed	mm	φ420	φ510	φ520	φ420	φ520	
	Swing over carriage	mm	φ400	φ450	φ500	φ400	φ500	
	Max. length of workpiece	mm	610	820	720	610	-	720
	Max. turning length	mm	380	600	500	380	280 (Turret) 200 (Gang toolpost)	500
Spindle	Max. swing over gang toolpost	mm	-	-	-	φ160	-	
	Spindle nose type	-	A2-6	A2-6	A2-8	A2-6	A2-6	
	Spindle bore	mm	φ56	φ62	φ82	φ56	φ48	φ62
	Allowable bar diameter through spindle bore	mm	φ50	φ55	φ75	φ50	φ42	φ55
	Max. spindle speed	r/min	4500	4500	3000	4500	5000	4000
Turret	Chuck	inch	8	10	12	8	6	10
	Cross section of tool shank	mm	25*25	25*25	25*25	25*25	20*20	25*25
	Turret type	-	Hydraulic turret	Hydraulic turret	Hydraulic Turret	Hydraulic turret	Hydraulic Turret	Hydraulic Turret
	No. of switching positions	-	8	8	8	8	8	8
Stroke & Feed	Boring bar diameter	mm	φ32	φ32	φ40	φ32	φ20 (Hydraulic turret) φ25 (Gang toolpost)	φ40
	X-axis effective stroke	mm	215	230	255	215	780	255
	Z-axis effective stroke	mm	400	620	520	400	290	520
	Rapid traverse speed of X-axis/Z-axis	m/min	X:18/Z:24	X:18/Z:24	X:24/Z:30	X:18/Z:24	X:18/Z:24	X:24/Z:30
	Max. feeding speed of X-axis/Z-axis	m/min	5	5	5	5	5	5
Tailstock	Tailstock quill diameter	mm	φ80	φ80	φ80	φ80	-	φ80
	Tailstock quill taper	-	MT5	MT5	MT5	MT5	-	MT5
	Tailstock quill max. stroke	mm	100	100	100	100	-	100
Accuracy	Repeat positioning accuracy of X-axis/Z-axis	mm	0.003	0.003	0.003	0.003	0.003	0.003
	Positioning accuracy of X-axis/Z-axis	mm	0.005	0.005	0.005	0.005	0.005	0.005
	Spindle motor power	kW	11-15	11-15	11-15	11-15	7.5-11	11-15
Others	Electricity capacity	KVA	15	15	15	15	12	15
	CNC system	-	Siemens 808D	Siemens 808D	Siemens 808D	Siemens 808D	Siemens 808D	Siemens 808D
	Length*Width*Height	mm	2300*1600*1950	2600*1700*1960	2650*1850*1850	2500*1750*1950	2000*1550*1600	2650*1850*1850
	Net weight	kg	3000	3800	4000	3000	1800	4000

## ■ Slant bed CNC turning center (AE-YD series) ↓

- » Total 8 power heads can be installed, milling, drilling, tapping and reaming functions can be realized.
- » X/Y/Z axes repositioning accuracy 0.003 mm, X/Y/Z axes positioning accuracy 0.005 mm.
- » Ultra-precision spindle, spindle nose runout 0.003 mm, spindle bore runout 0.002 mm, balance grade G1.
- » The spindle is equipped with NSK P4 grade ultra-precision NN type bearings with optimized span.
- » Y-axis effective stroke 220 mm.
- » Both X and Z axes adopt precision linear guides from Rexroth.



## ■ Technical parameter ↓

Item	Unit	AE45YD	AE46YD	AE52YD	
Capacity	Bed slant angle	°	30	30	
	Swing over bed	mm	φ450	φ500	φ500
	Swing over carriage	mm	φ130	φ200 (Disc type)	φ200 (Disc type)
	Max. swing over gang toolpost	mm	φ130	φ140	φ140
Spindle	Spindle nose type	-	A2-5	A2-5	A2-6
	Spindle bore	mm	φ56	φ56	φ66
	Allowable bar diameter through spindle bore	mm	φ40	φ40	φ50
	Max. spindle speed	r/min	4500	4500	4500
Turret	Collet specification	-	CL42-A5	CL42-A5	CL52-A6
	Cross section of tool shank	mm	20*20	20*20	20*20
	Turret type	-	Hydraulic turret	Hydraulic Turret	Hydraulic Turret
	No. of switching positions	-	8	8	8
Power Head	Boring bar diameter	mm	φ25	φ25	φ25
	Power head tool collet Specification	-	ER20 (Axial*4+Radial*4)	ER20 (Axial*4+Radial*4)	ER20 (Axial*4+Radial*4)
	Max power head speed	r/min	3000	3000	3000
	Max. drilling diameter (Copper and aluminum)	mm	φ12	φ12	φ12
Stroke & Feed	Max. tapping diameter (Copper and aluminum)	mm	M12	M12	M12
	Tool diameter	mm	φ2-φ13	φ2-φ13	φ2-φ13
	X-axis effective stroke	mm	500	450	450
	Y-axis effective stroke	mm	240	220	220
	Z-axis effective stroke	mm	450	350	410
Accuracy	Rapid traverse speed of X-axis/Z-axis	m/min	X:24/Z:24	X:30/Z:30	X:30/Z:30
	Rapid traverse speed of Y-axis	m/min	15	15	15
	Repeat positioning accuracy of X-axis/Z-axis	mm	0.003	0.003	0.003
Others	Positioning accuracy of X-axis/Z-axis	mm	0.006	0.005	0.005
	Spindle motor power	kW	7.5	7.5	5.5
	Electricity capacity	KVA	13	13	16
	CNC system	-	GSK988T	Syntec 21TB	Syntec 21TB
Others	Length*Width*Height	mm	2500*1800*1800	2400*1800*2150	2400*1800*2150
	Net weight	kg	3000	3000	3000



### ■ Slant bed CNC turning center (AE-Y series) ↓

- » Equipped with 12 positions power tooling turret which can realize milling, drilling, tapping and reaming functions.
- » X/Y/Z axes repositioning accuracy 0.003 mm, X/Y/Z axes positioning accuracy 0.005 mm, positioning accuracy of C-axis 0.001°
- » Ultra-precision spindle, spindle nose runout 0.003 mm, spindle bore runout 0.002 mm, balance grade G1.
- » The spindle is equipped with NSK P4 grade ultra-precision NN type bearings with optimized span.
- » Y-axis effective stroke is up to ±50 mm.
- » Both X and Z axes adopt precision linear guides from HIWIN/PMI.



### ■ Technical parameter ↓

Item	Unit	AE45Y	AE55Y	
Capacity	Bed slant angle	°	45	
	Swing over bed	mm	φ510	
	Swing over carriage	mm	φ420	
	Max. length of workpiece	mm	720	
	Max. turning length	mm	500	
	Max. drilling and milling diameter	mm	0°φ420/90°φ420	
Spindle	Spindle nose type	-	A2-5	
	Spindle bore	mm	φ52	
	Allowable bar diameter through spindle bore	mm	φ45	
	Max. spindle speed	r/min	4500	
	Chuck	inch	8	
Turret	Cross section of tool shank	mm	20*20	
	Turret type	-	Power tooling turret	
	No. of switching positions	-	12	
	Boring bar diameter	mm	φ25	
	Turret motor power	kW	2.7	
	Max. speed of turret motor	r/min	3000	
	Live tool holder	-	BMT40 ER16	
	Power head tool collet Specification	-	ER25	
	Stroke & Feed	X-axis effective stroke	mm	230
		Y-axis effective stroke	mm	±30
Z-axis effective stroke		mm	500	
Rapid traverse speed of X-axis/Z-axis		m/min	X:30/Z:30	
Rapid traverse speed of Y-axis		m/min	15	
Max. feeding speed of X-axis/Z-axis		m/min	5	
Tailstock	Tailstock quill diameter	mm	φ80	
	Tailstock quill taper	-	MT5	
	Tailstock quill max. stroke	mm	100	
Accuracy	Repeat positioning accuracy of X-axis/Z-axis	mm	0.003	
	Positioning accuracy of X-axis/Z-axis	mm	0.005	
	Positioning accuracy of C-axis	°	0.001	
	Spindle motor power	kW	11-15	
Others	Electricity capacity	KVA	15	
	CNC system	-	Fanuc 0i-TF	
	Length*Width*Height	mm	2600*1700*1960	
	Net weight	kg	3800	

### ■ Slant bed CNC turning center (AE-CX/X series) ↓

- » Equipped with 12 positions power tooling turret which can realize milling, drilling, tapping and reaming functions.
- » X/Z axes repositioning accuracy 0.003 mm, X/Z axes positioning accuracy 0.005 mm, positioning accuracy of C-axis 0.001°
- » Ultra-precision spindle, spindle nose runout 0.003 mm, spindle bore runout 0.002 mm, balance grade G1.
- » The spindle is equipped with NSK P4 grade ultra-precision NN type bearings with optimized span.
- » Both X and Z axes adopt C3 class precision ball screws from HIWIN/PMI with P4 class precision NSK/NTN ball screw bearings.
- » Rapid traverse speed is up to 30 m/min, if necessary, 36 m/min can be realized.



### ■ Technical parameter ↓

Item	Unit	AE45CX	AE55X
Capacity	Bed slant angle	°	45
	Swing over bed	mm	φ510
	Swing over carriage	mm	φ450
	Max. length of workpiece	mm	820
	Max. turning length	mm	600
	Max. drilling and milling diameter	mm	0°φ420/90°φ420
Spindle	Spindle nose type	-	A2-6
	Spindle bore	mm	φ62
	Allowable bar diameter through spindle bore	mm	φ55
	Max. spindle speed	r/min	4500
	Chuck	inch	10
Turret	Cross section of tool shank	mm	20*20
	Turret type	-	Power tooling turret
	No. of switching positions	-	12
	Boring bar diameter	mm	φ20
	Turret motor power	kW	2.2
	Max. speed of turret motor	r/min	4000
	Rated cutting torque	N·m	14
	Live tool holder	-	VDI30 DIN69880
	Power head tool collet Specification	-	ER25
	Stroke & Feed	X-axis effective stroke	mm
Z-axis effective stroke		mm	620
Rapid traverse speed of X-axis/Z-axis		m/min	X:18/Z:24
Max. feeding speed of X-axis/Z-axis		m/min	5
Tailstock quill diameter		mm	φ80
Tailstock quill taper		-	MT5
Accuracy	Repeat positioning accuracy of X-axis/Z-axis	mm	0.003
	Positioning accuracy of X-axis/Z-axis	mm	0.005
	Positioning accuracy of C-axis	°	0.001
	Spindle motor power	kW	11
Others	Electricity capacity	KVA	20
	CNC system	-	Fanuc 0i-TF
	Length*Width*Height	mm	2800*1600*1950
	Net weight	kg	3800

## Vertical CNC lathe ↓

- » The max. workpiece for our lathe is 500/600/1500 kg.
- » Max. height of workpiece 700/800 mm.
- » Both X and Z axes adopt precision linear guides from HIWIN.
- » Both X and Z axes adopt precision ball screws from HIWIN with precision FAG ball screw bearings.
- » Waterproof hydraulic chuck.
- » The precision of All our lathes is measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » Hydraulic controlled double tool toolpost, horizontal hydraulic turret, power tooling turret and milling power head are for option.



## Technical parameter ↓

Item	Unit	VTL500	VTL700	VTL900	VTL1250
Capacity	Max. swing diameter	mm φ500	φ770	φ970	φ1300
	Max. turning diameter	mm φ500	φ700	φ900	φ1250
	Max. swing diameter over carriage	mm φ500	φ400	φ600	φ800
	Max. height of workpiece	mm 700	700	700	800
	Max. weight of workpiece	kg 500	500	600	1500
Spindle	Rated power of main motor	kW 11	11	15	15
	Spindle speed range	r/min 50-1200	50-1200	50-800	20-300
	Speed ratio of reducer	- 1:4.84	1:4.84	1:4.84	1:4.84
	Synchronous belt reduction ratio	- 1:2.5	1:2.5	1:2.5	1:2.5
Feed	Spindle nose type	- A2-6	A2-8	A2-11	A2-11
	Max. stroke of X-axis	mm 300	570	630	810
	Max. stroke of Z-axis	mm 500	750	750	850
	X-axis roller linear rail width	mm 35	45	45	55
	Z-axis roller linear rail width	mm 45	55	55	55
	X-axis ball screw diameter * pitch	mm 32*10	40*10	40*10	50*10
	Z-axis ball screw diameter * pitch	mm 40*10	50*10	50*10	50*10
	Feeding speed of X-axis/Z-axis	mm/min 0.05-4000	0.05-4000	0.05-4000	0.05-4000
	Rapid traverse speed of X-axis/Z-axis	m/min 15	15	15	15
	Feeding motor torque of X-axis/Z-axis	N·m 15	15	18	23
Turret	Cross section of tool shank	mm 32*32	32*32	32*32	32*32
	Turret type	- V4	V4	V4	V4
	Boring bar diameter	mm φ40	φ40	φ40	φ40
	Repeat positioning accuracy of X-axis/Z-axis	mm 0.01	0.01	0.01	0.01
Precision	Positioning accuracy of X-axis/Z-axis	mm 0.02	0.02	0.02	0.02
	CNC system	- Fanuc 0i-TF	Fanuc 0i-TF	Fanuc 0i-TF	Fanuc 0i-TF
Others	Length*Width*Height	mm 1205*1200*2430	1500*1360*2726	1550*1760*3067	1650*1860*3070
	Net weight	kg 5000	6600	8600	9600

## High precision vertical CNC lathe ↓

- » X/Z axes repositioning accuracy 0.004 mm, X/Z axes positioning accuracy 0.008 mm, positioning accuracy of C-axis 0.001°
- » Ultra-precision spindle, spindle nose runout 0.003/0.004 mm.
- » The spindle is equipped with NSK precision bearings.
- » Waterproof hydraulic chuck from AUTO STRONG; Hydraulic turret from LIO SHING.
- » Both X and Z axes adopt precision linear guides from HIWIN.
- » Both X and Z axes adopt precision ball screws from HIWIN with precision NSK ball screw bearings.
- » Hydraulic controlled double tool toolpost, horizontal hydraulic turret, power tooling turret and milling power head are for option.



## Technical parameter ↓

Item	Unit	VLA450	VLA550	VLA650	VLA850
Capacities	Max. swing diameter	mm φ600	φ760	φ840	φ950
	Max. turning diameter	mm φ450	φ550	φ650	φ850
Spindle	Spindle nose	- A2-8	A2-8	A2-11	A2-11
	Spindle bore	mm φ72	φ86	φ86	φ100
	Spindle speed	r/min 2500	2000	1500	1200
	Inner diameter of spindle front bearing	mm φ120	φ130	φ160	φ180
	Chuck diameter	mm/inch φ304/12	φ381/15	φ450/18	φ610/24
Turret	Spindle end radial runout	mm 0.003	0.003	0.003	0.004
	Cross section of tool shank	mm 25*25	25*25	25*25	32*32
	Boring bar diameter	mm φ40	φ50	φ50	φ50
	Turret type	- H8	H8	H8	H8
Stroke	Tool disc swing	mm 400	450	480	520
	Stroke of X-axis	mm 270	350	380	880
	Stroke of Z-axis	mm 600	700	850	950
Servo motor	Spindle servo motor power	kW 15	18.5	18.5	18.5
	Main motor max. torque	N·m 180	240	240	275
	Spindle max. torque	N·m 450	600	720	825
	Servo motor power of X-axis	kW 2.5	3	3	3
	Servo motor torque of X-axis	N·m Stall torque 20/Max. torque 45	Stall torque 27/Max. torque 68	Stall torque 27/Max. torque 68	Stall torque 30/Max. torque 83
	Servo motor power of Z-axis	kW 3	3	3	3
Rapid traverse	Servo motor torque of Z-axis	N·m Stall torque 27/Max. torque 68	Stall torque 36/Max. torque 90	Stall torque 36/Max. torque 90	Stall torque 38/Max. torque 130
	Rapid traverse speed of X-axis	m/min 16	15	15	12
	Rapid traverse speed of Z-axis	m/min 16	15	15	12
Accuracy	Repeat positioning accuracy of X-axis/Z-axis	mm 0.004	0.004	0.004	0.004
	Positioning accuracy of X-axis/Z-axis	mm 0.008	0.008	0.008	0.008
Hydraulic station	Hydraulic station volume	L 80	80	80	80
	Motor power	kW 2.2	3	3.75	3.75
	Flow rate	L/min 30	30	40	40
Others	CNC system	- FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF	FANUC 0i-TF
	Length*Width*Height	mm 1680*3320*2700	1850*3500*2700	1900*3620*2900	2500*3760*3300
	Net weight	kg 6000	8000	8600	11000

## Vertical CNC Piston lathe

- » Genuine CNC piston lathe for camless oval turning.
- » Piston diameter range 50-200 mm, piston length up to 200 mm.
- » 6 mm super big ovality amount.
- » Vertical structure with symmetrical spindle structure, thermal deformation has little effect on the consistency of machining accuracy, effectively eliminating the dimensional error caused by the temperature rise of the spindle.
- » The processes of finish grooving, finish top surface turning, finish skirt oval turning can be completed simultaneously, avoiding secondary clamping of pistons, effectively improving pistons processing accuracy, reducing logistics time for pistons transition, and improving processing efficiency.
- » X1, Z1, X2, Z2, W2 and C, total of 6 coordinate axes.



## Technical parameter

Item	Unit	VPL15	VPL20	
Capacities	Max. piston diameter	mm	φ150	φ200
	Max. piston length	mm	160	200
	Max. piston ovality amount	mm	6	6
Spindle	Max. spindle speed	r/min	4000	3000
	Spindle nose type	-	A2-6	A2-6
	Main motor power	kW	5.5	5.5
Fixture	Fixture type	-	hydraulic type	pneumatic type
Toolpost	Toolpost type	-	Gang tool type	Gang tool type
	Tool quantity	pcs	5	5
X1 axis	X1-axis stroke	mm	150	115
	X1-axis servo motor power	kW	1.4	0.9
	Rapid traverse speed of X1-axis	m/min	12	12
X2 axis/ Ovality generator	X2-axis stroke	mm	16	15
	X2-axis linear motor power	kW	1.44	1.5
	Rapid traverse speed of X2-axis	m/min	12	12
Z axis	Z-axis stroke	mm	280	350
	Z-axis servo motor power	kW	3	1.5
	Rapid traverse speed of Z-axis	m/min	12	12
Tailstock	Tailstock stroke	mm	260	350
Accuracy	Repeat positioning accuracy of X2-axis	mm	±0.0005	± 0.001
	Positioning accuracy of X2-axis	mm	± 0.001	± 0.005
	Positioning accuracy of C-axis	°	0.001	0.003
Others	CNC system	-	Fanuc 31i	COPLEY+piston curved surface control software
	Length*Width*Height	mm	1300*2400*2500	2800*1600*2500
	Net weight	kg	3500	5000

## Slant bed CNC Piston lathe

- » Genuine CNC piston lathe for camless oval turning.
- » Economical horizontal slant bed type.
- » Piston diameter range 50-200 mm.
- » 2.2 mm ovality amount.
- » Double screen.
- » The precision of All our lathes is measured and compensated by RENISHAW laser interferometer, to make sure both positioning precision and repositioning precision are excellent.
- » Fanuc 0i-TF CNC system + piston curved surface control software.



## Technical parameter

Item	Unit	HPL12	HPL20	
Capacities	Max. piston diameter	mm	φ50-φ120	φ60-φ200
	Max. piston ovality amount	mm	2.2	2.2
	Max. amount of piston curved line	mm	±2.4	±2.4
Spindle	Spindle type	-	Mechanical spindle unit	Mechanical spindle unit
	Spindle speed	r/min	100-3000	100-3000
	Max. toolpost tracking spindle speed	r/min	400-1500	400-1500
	Spindle taper	-	MT5	MT6
Linear motor	Spindle runout	mm	0.003	0.003
	Linear motor type	-	Voice coil motor	Voice coil motor
	Linear motor stroke	mm	2.2	2.2
Feed	Max. transverse stroke	mm	210	230
	Max. longitudinal stroke	mm	310	600
	Servo motor power of X-axis	N·m	8	10
	Servo motor power of Z-axis	N·m	8	10
Tailstock	Tailstock quill diameter	mm	52	70
	Tailstock quill taper	mm	MT4	MT5
	Tailstock quill max. stroke	mm	110	100
Accuracy	Curved line and ovality machining accuracy (for one time ovality)	mm	±0.003	±0.003
Others	CNC system	-	Fanuc 0i-TF	Fanuc 0i-TF
	Main Motor Power	kW	5.5	7.5
	Coolant tank volume	L	70	80
	Length*Width*Height	mm	2450*1750*1650	2670*2080*1835
	Net weight	kg	2800	4000

## ■ Fire sprinkler production line ↓

Nowadays, almost all buildings are equipped with fire sprinkler system. There are huge demand of fire sprinklers in the world very year. Fire sprinkler production line is developed under such circumstances by Anyang Xinheng Machine Tool Co., Ltd, and this production line is widely applied in fire sprinkler filed.

The whole processes, including brass rod cutting, heating, hot forging, trimming, shot blasting, machining, deflector assembling, glass bulb seat machining, O ring assembling, final assembling and pressure testing, are fully automatic with very few labor cost.



## ■ Product range ↓

All ordinary fire sprinklers, such us pendent, uprights, sidewalls, and concealed sprinklers, can be produced by our production line.

The productivity can be customized according customer' s actual requirement.



## ■ Key equipment introduction ↓



Automatic CNC lathe for fire sprinkler



Glass Bulb Seat Lathe



Glass Bulb Assembling Maching



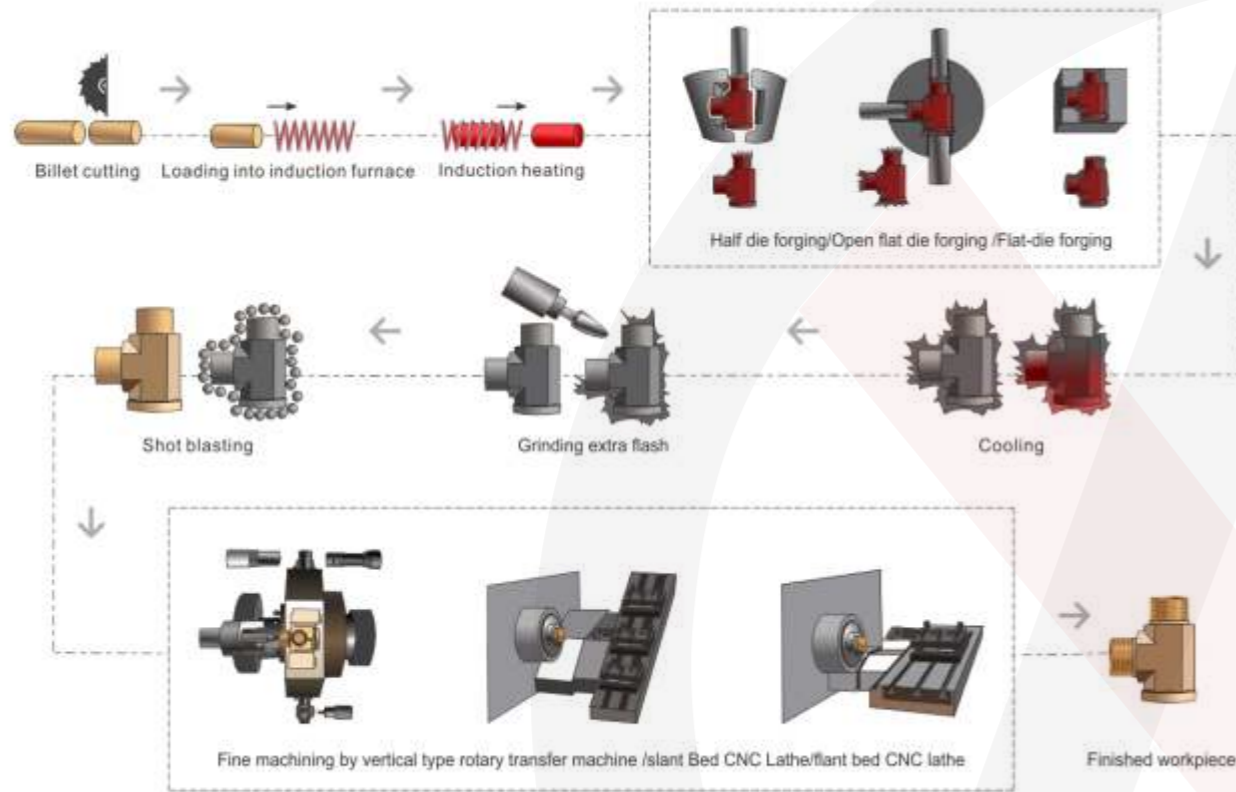
Pressure Tester for Fires Sprinkler



Please scan the code to check the production line video

### ■ Brass fitting production line ↓

Brass fitting production line mainly consists of brass rod cutting machine, automatic heating furnace, hot forging press, trimming press (if necessary), shot blasting machine, rotary transfer machine or slant bed CNC lathe.



### ■ Product range ↓

The brass fitting production line can be used to produce brass various brass fittings, such nut, tap, valve body, extinguisher body, water meter shell, gas valve, rotor, plumbing connector, etc.



### ■ Key equipment introduction ↓



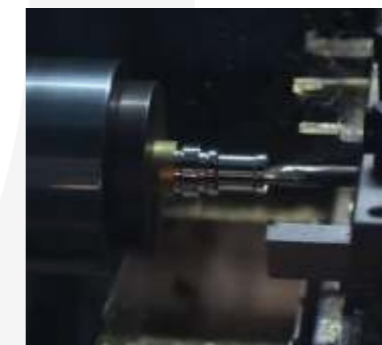
Automatic heating furnace



Hot forging press



Flat bed CNC valve lathe



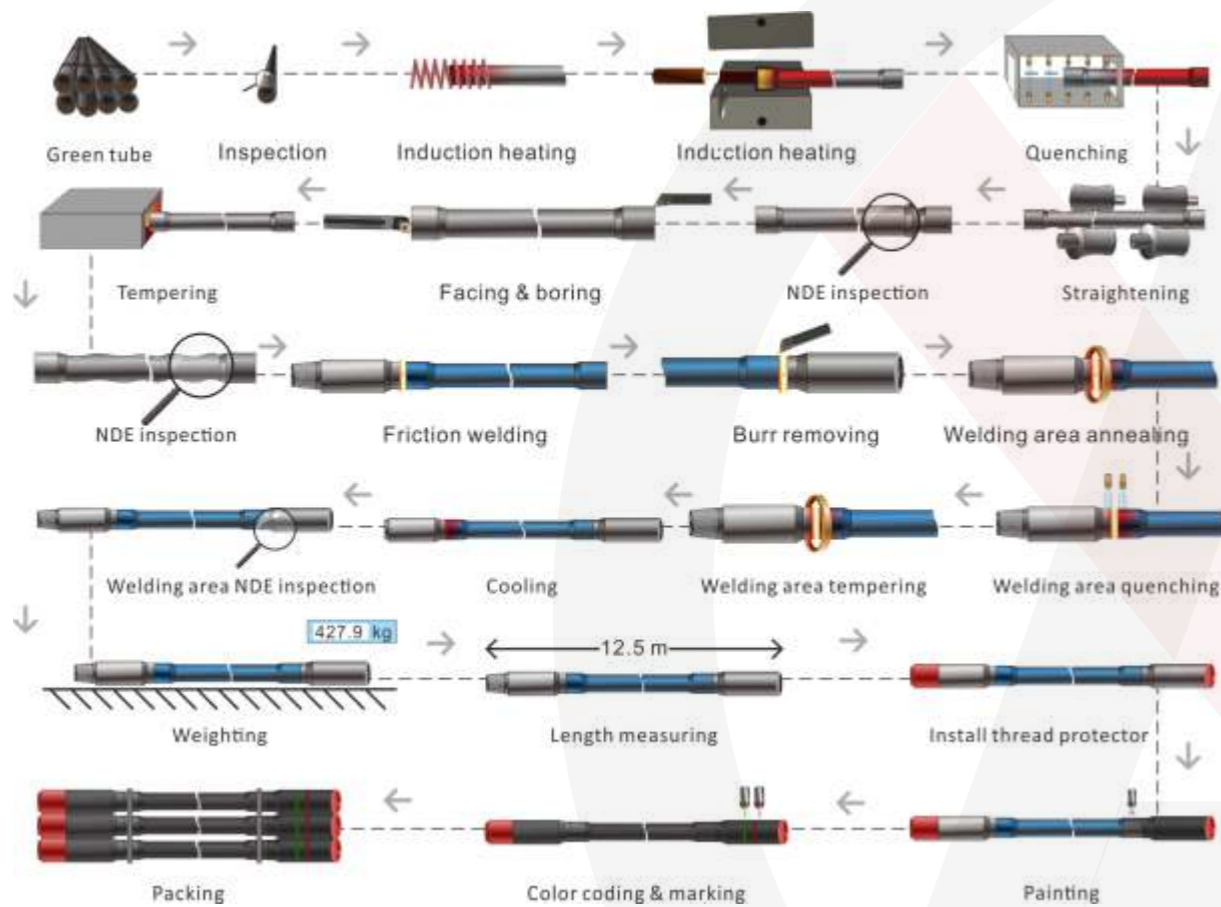
Rotary transfer machine



Please scan the code to check the production line video

### Drill pipe production Line

The production line for the processing and production of oil drilling pipe, drill collar, oil casting, and sucker rod, mainly divided into three steps, using the upsetting machine, heat treatment machines, pipe threading lathes and some other machines. The production line is fully automatic. It can produce high quality and strong rigidity drill pipe in short time.



### Product range

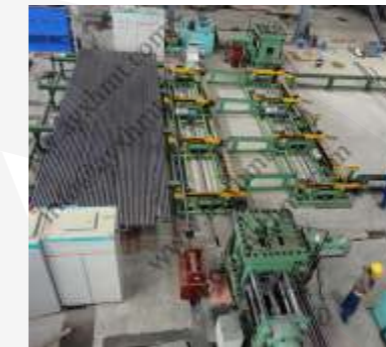
Drill pipe diameter range: from 60.3 mm to 168.3 mm (from 2<sup>3</sup>/<sub>8</sub>" to 6<sup>5</sup>/<sub>8</sub>" )

Steel grade: E75, X95, G105 and S135

Upsetting forms: EU, IU and IEU.



### Key equipment introduction



Hydraulic upsetting press



Oil country lathe



Hydraulic friction welding machine



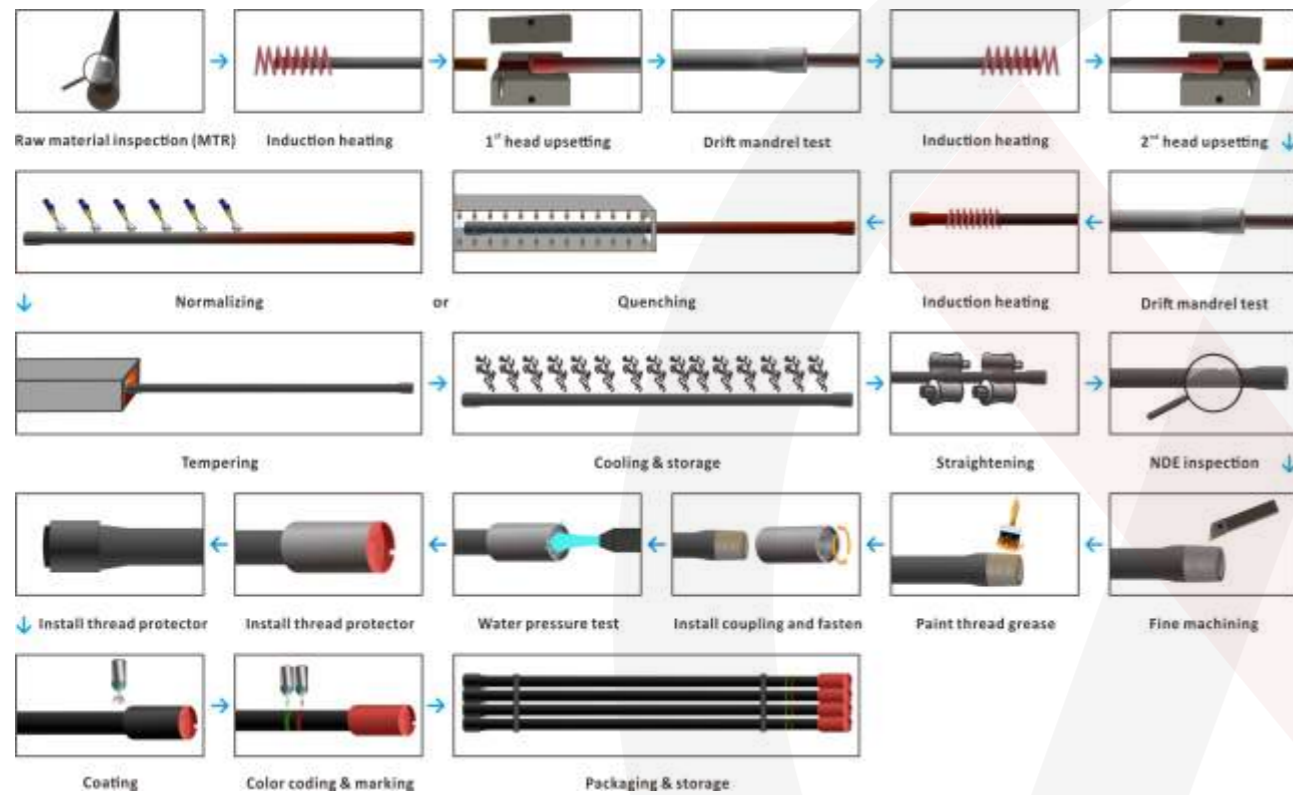
Welding area heat treatment line



Please scan the code to check the production line video

### API 5CT Tubing Production Line ↓

API 5CT external-upset tubing production line is composed by induction heating furnace, automatic feeding and discharging device, hydraulic upsetting press, drift mandrel testing machine, tubing heat treatment line, hydraulic straightening machine, oil country lathe, hydrostatic testing machine, pipe coupling fitting machine, coating machine, color coding machine, etc.



### Product range ↓

Labels	Outside diameter D mm	Nominal linear mass threaded and coupled kg/m	Upset			
			Outside diameter D <sub>4</sub> mm +1.59 0	Length from end of pipe to start of taper L <sub>ce</sub> mm +0 -25.4	Length from end of pipe to end of taper L <sub>a</sub> mm	Length from end of pipe to start of pipe body L <sub>b</sub> mm max.
1	2					
2	2	3	4	5	6	7
1.05	1.2	26.67	1.79	33.4	60.32	—
1.05	1.54	26.67	2.29	33.4	60.32	—
1.315	1.8	33.4	2.68	37.31	63.5	—
1.315	2.24	33.4	3.33	37.31	63.5	—
1.66	2.4	42.16	3.57	46.02	66.68	—
1.66	3.07	42.16	4.57	46.02	66.68	—
1.9	2.9	48.26	4.32	53.19	68.26	—
1.9	3.73	48.26	5.55	53.19	68.26	—
2-3/8	4.7	60.32	6.99	65.89	101.6	152.4
2-3/8	5.95	60.32	8.85	65.89	101.6	152.4
2-3/8	7.45	60.32	11.09	65.89	101.6	152.4
2-7/8	6.5	73.02	9.67	78.59	107.95	158.75
2-7/8	7.9	73.02	11.76	78.59	107.95	158.75
2-7/8	8.7	73.02	12.95	78.59	107.95	158.75
2-7/8	9.45	73.02	14.06	78.59	107.95	158.75
3-1/2	9.3	88.9	13.84	95.25	114.3	165.1
3-1/2	12.95	88.9	19.27	95.25	114.3	165.1
4	11	101.6	16.37	107.95	114.3	165.1
4-1/2	12.75	114.3	18.97	120.65	120.65	171.45

Steel: H40, J55, L80, N80, C90, T95, P110 or other steel brands.

### Key equipment introduction ↓



Hydraulic upsetting press



Drift mandrel testing machine



Oil country lathe



Hydrostatic testing machine



Please scan the code to check the production line video

## ■ Piston Production Line ↓

Automated material sorting and material loading/unloading on the entire production line result in dramatic reduction of labor requirement.

With online inspection and instant automatic compensation of machining dimensions, higher machining yield rate can be achieved.

Exclusive twin machining position design allows simultaneous material loading/unloading on one position during machine on the other side. material loading/unloading time can be saved  
quick tool and fixture change system design reduces time of shifting one model to a completely different one

## ■ Product range ↓



## ■ Key equipment introduction ↓

### Casting and Heat treatment



Melt



Degassing



Deslagging



Inspection



Casting



Casting riser cutting



Salt core rinse



Heat treatment

### Machining process



Rough turning O.D + Finish turning register + Finish turning register + Finish turning oil grooving + Processed hole



Rough pin bore + Circlip groove + Finish turning chamfer + Finish pin bore



Pin hole polishing



oil hole drilling



Register turning and center hole drilling



Oval turning



Drilling drain hole on the pin boss



Riser removing &

### Surface treatment and inspection



Surface



Coating



Inspection + mark



Package



Lathe optional ↓

» System



Siemens



Fanuc



GSK



KND

» Guideway



Linear guideway



Double bed saddle



Saddle

» Headstock



NSK bearing



SKF bearing

» Turret



Follow rest



Steady rest



Vertical 4-position turret



Vertical 6-position turret

» Chuck



3-jaw chuck



4-jaw chuck



Independent chuck



Self centering chuck



Horizontal 6-position turret



Horizontal 8-position turret



Horizontal 12-position turret



Protective cover of turret



Composite chuck



Hydraulic chuck



Pneumatic chuck



Protective cover of chuck



Taper ruler



Grinding head



Milling head



boring tool holder



