GENERTEC

Genertec Machine Tool

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Group Profile

Genertec is a Chinese state-owned enterprise that was established in 1998 and focuses on advanced manufacturing and technical services, medical and healthcare, and trade and engineering services. It owns four listed companies and has won numerous awards for its performance. Genertec is a leader in the development of high-end CNC machine tools, and it also promotes the industrialization of new solvent-based cellulose fiber. In the medical and healthcare industry, it is a major player, with over 48,000 beds and a complete service chain. The company has also been instrumental in introducing advanced technology and equipment to China, and it has contributed significantly to the Belt and Road Initiative. Genertec aims to become a world-class enterprise with global competitiveness.

Manufacturing of high-end numerically-controlled machine tools is the top one core business of Genertec. In recent years, the group has incorporated seven of the 18 leading machine tool manufacturers in the industry through mergers and acquisitions. These enterprises, with a history of about 70 years, play a significant role in developing the machine tool industry of China.

At present, Genertec has grown into a leading machine tool company in China, which boasts the most comprehensive product categories, provides the widest range of services, and maintains comprehensive technological competitiveness. Besides, Genertec provides the largest number of high-end core equipment for key industries and areas.

GENERAL

GENERTEC

GENERAL

CONTENTS

通用技术机床
GENERTEC MACHINE TOOL

CKE SERIES

FLAT BED CNC LATHE

Technical parameters

Specification		Unit	CKE6150Z	CKE6150i	CKE6163Z	CKE6180Z
Max. swing diameter over bed		mm	Φ500		Φ630	Φ800
Max. swing diameter over cross slide		mm	Φ280		Φ320	Φ490
Max. workpiece length		mm	750/1000/1500/2000	750/1000	1000/1500/2000/3000/4000/5000	
Max. cutting length		mm	680/930/1430/1930	680/930	795/1245/1845/2745/3665/4745 (Vertical 4-position) 690/1140/1740/2640/3560/4640 (Horizontal 6-position) 700/1150/1750/2650/3570/4650 (Horizontal 8-position)	
Max. turning diameter	Vertical 4-position	mm	Φ500		Φ630	Φ800
	Opt:Horizontal 6-position	mm	Φ400		Φ620	Φ620
	Opt:Horizontal 8-position	mm	Φ370		Φ620	Φ620
Spindle center height		mm	250		315	400
Bed guideway width		mm	400		550	550
Spindle						
Spindle motor power		kW	7.5/11 (Servo motor)	11/15 (Servo motor)	11 (inverter-driven motor)	
Spindle type		r/min	Gear box	Bele driven	Gear box	
Spindle bore		mm	Φ82		Φ100	
Chuck size		mm	Φ250	Φ254	Φ315	Φ400
Taper of spindle bore			Front end Φ90 1:20	Front end Φ100 1:20	Front end Φ120 1:20	
Type of spindle nose			D8	A2-8	C11	
Spindle speed ranges		r/min	7~2200 3 range manual(auto)	30~3000 Single spindle	10~1000 4 range manual(auto)	
Tailstock						
Tailstock quill diameter		mm	Φ75		Φ100	
Tailstock quill travel		mm	150		240	
Tailstock quill taper			MT 5		MT 6	
Travel						
Max. travel of X-axis		mm	280		320	400
Max. travel of Z-axis		mm	685/935/1435/1935	685/935	800/1250/1850/2750/3670/4750	
Rapid traverse of X/Z axis		m/min	4/8(750、1000、1500) 4/6 (2000)	4/8	4/7.5(1000、1500、2000)、 4/4(3000)、 4/3.5(4000、5000)	
Tool post						
Tool shank size (Vertical 4-positon)		mm	25×25	25×25	32×32(32×25 Horizontal 8-position)	
Accuracy						
X/Z axis positioning accuracy		mm	0.018/ 0.021(750) 0.024(1000) 0.026(1500、2000)	0.018/ 0.021(750) 0.024(1000)	0.018/0.024(1000) 0.026(1500、2000) 0.030(3000、4000、5000)	
X/Z axis repeatability accuracy		mm	0.006/ 0.008(750) 0.011(1000) 0.014(1500、2000)	0.006/ 0.008(750) 0.011(1000)	0.006/ 0.011(1000) 0.014(1500、2000、3000、4000、5000)	
General						
Machine dimensions(L×W×H)		mm	2586×1749×1620(750) 2836×1749×1620(1000) 3336×1749×1620(1500) 3836×1749×1620(2000)	2586×1749×1620(750) 2836×1749×1620(1000)	3455×2020×1805(1000) 3905×2020×1805(1500) 4505×2020×1805(2000) 5405×2020×1805(3000) 6455×2020×1805(4000) 7535×2020×1805(5000)	
Machine weight		kg	2550 (750) 2600 (1000) 2700 (1500) 2800 (2000)	2550 (750) 2600 (1000)	4800/5100/5600/ 5900/7100/8100	5300/5600/6100/ 6400/7600/8600

Standard configurations

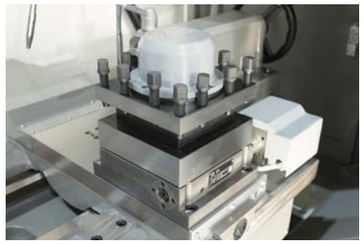
- 3-Jaw manual chuck
- Manual tailstock
- FANUC 0i-TF (5) Plus system
- Vertical 4-position turret
- Heat exchanger
- Manual speed shift

Optional

- 4-Jaw manual chuck
- Horizontal 6-position turret
- Hydraulic tailstock
- Follow rest
- GSK system
- Automatic speed shift
- Hydraulic chuck
- Horizontal 8-position turret
- Hydraulic station
- Steady rest
- Siemens system
- Air conditioner

CAK SERIES

FLAT BED CNC LATHE



Technical parameters

Specification		Unit	CAK5085
Max. swing diameter over bed		mm	Φ500
Max. cutting length		mm	850
Max. cutting diameter		mm	Φ500
Max.swing diameter over slide		mm	Φ300
Center height	To the bed	mm	250
	To the ground	mm	1130
Spindle			
Form and codes of spindle nose			A_2-8
Spindle bore		mm	Φ78
Steps of spindle speed			Electric 4 steps , stepless
Range of spindle speed		r/min	15-220;71-710;215-2200
Power of main motor		kW	7.5/11(servo motor)
Diameter of chuck		mm	Φ250
Travel			
Rapid traverse of X axis		m/min	6
Rapid traverse of Z axis		m/min	12
Travel on X axis		mm	270
Travel on Z axis		mm	850
Tailstock			
Diameter of tailstock sleeve		mm	Φ75
Travel of tailstock sleeve		mm	150
Taper of tailstock		Morse	5#
General			
Electrical capacity		KVA	15
CNC Controller			GSK980TDi
Machine weight	GW	kg	2800
Overall dimension	LxWxH	mm	2770×1700×1735

Standard configurations

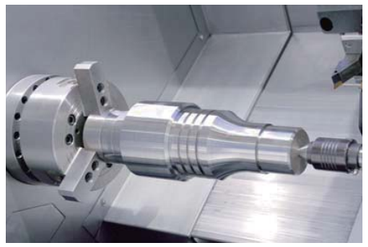
- GSK980TDI(automatic shift)
- 7.5KW main servo motor
- Domestic screw
- Automatic shift headstock /manual shift headstcok
- Φ250 three-jaw manual chuck
- Manual tail seat
- Vertical four-station tool holder

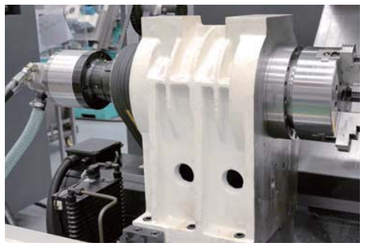
Optional

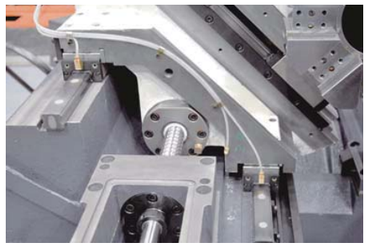
- FANUC 0i-TF Plus
- Φ315 manual 3-jaw chuck/Φ250,Φ315 manual 4-jaw chuck
- Domestic 10"/12" inch solid hydraulic chuck
- Domestic 10"/12" inch hollow hydraulic chuck
- Hydraulic tailstock (single fluid tailstock)
- Horizontal six-position tool turret
- Steady rest (Φ20-Φ125/Φ120-Φ190/Φ140-Φ210 roller type)
- Follow rest (Φ20-Φ90)
- Rear chip conveyor (85 specifications and below)
- Φ82 hole spindle through hole
- Electric box air conditioner
- Safety door switch
- Ordinary packing case
- Fumigated wooden cases for export

CLS SERIES

Slant Bed CNC Lathe







Technical parameters

Specification		Unit	CLS-20		CLS-20H	
Max. swing diameter over bed		mm	Φ500		Φ538	
Max. turning diameter	Shaft parts	mm	Φ260		Φ240	
	Disc parts	mm	Φ300		Φ300	
Max. turning length		mm	450		450	
Guideway type			Linear guideway		Linear guideway	
Spindle						
Chuck size			8”	10”	8”	10”
Type of spindle nose			A2-6	A2-8	A2-6	A2-8
Spindle speed range		rpm	45 ～ 4500	35 ～ 3500	45 ～ 4500	35 ～ 3500
Spindle motor power		KW	11/15 FANUC 0i-TF(5)		11/15 FANUC 0i-TF(5)	
Spindle bore		mm	Φ62	Φ87	Φ62	Φ87
Max. bar capacity (Equipped with through-hole hydraulic chuck)		mm	Φ51	Φ74	Φ51	Φ74
Travel						
Max. travel of X/Z axis		mm	165/500		165/500	
Rapid traverse of X/Z axis		m/min	20/24		20/24	
Cutting feed rate		mm/min	0 ～ 5000		0 ～ 5000	
Tool post						
Turret type and tool numbers			Hydraulic 8-position turret (Opt:12-position turret)		Servo power 12-position turret	
Tool shank size		mm	25×25		25×25	
Indexing time(adjacent/farthest)		s	0.45/1.8 (0.43/0.93 12-position turret)		0.36/0.99	
Tailstock						
Max. travel of tailstock			460		460	
Diameter of tailstock quill			Φ80		Φ80	
Tailstock quill stroke		mm	130		130	
Taper of tailstock			MT 4		MT 4	
Accuracy						
X/Z axis positioning accuracy		mm	0.008/0.008		0.008/0.008(C:44")	
X/Z axis repeatability accuracy		mm	0.004/0.004		0.004/0.004(C:18")	
Controller						
CNC Controller			FANUC 0i-TF Plus、Sinumerik 828D、GSK 988T		FANUC 0i-TF Plus(5)、HNC808Di、Mitsubishi E80B、GSK 988TD	
General						
Machine dimensions(L×W×H)		mm	2950×2700×1990 (Rear chip conveyor) 3950×1800×1990 (Side chip conveyor)		2950×2700×1990 (Rear chip conveyor) 3950×1800×1990 (Side chip conveyor)	
Machine weight		kg	4000		4000	

Standard configurations

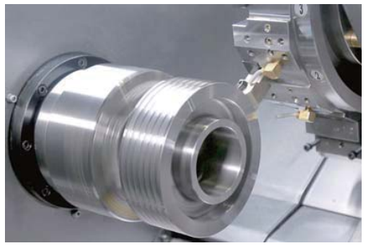
- NSK spindle bearings and X/Z axis bearings
- X/Z ball screws&linear guideways
- Non through-hole hydraulic chuck
- Hydraulic tailstock
- Heat exchanger
- Automatic lubrication system
- Standard toolkit

Optional

- X/Z THK ball screws& THK linear guideways
- Through-hole hydraulic chuck
- Tool presetter
- Air conditioner
- Oil mist separator
- Bar feeder and parts catcher
- Automatic door

DT SERIES

Slant Bed CNC Lathe



Technical parameters

Specification	Unit	DT-40		DT-40H		DT-40HY		DT-40Plus		DT-50		DT-50H	
Max. swing diameter over bed	mm	Φ580								Φ680			
Max. turning diameter(Shaft/Disc)	mm	Φ360/Φ400		Φ350/Φ350		Φ350/Φ380		Φ360/Φ400		Φ460/Φ500		Φ450/Φ450	
Max. turning length	mm	580/1080		550/1030(ITALY) 440/855(CHINA)		525/1025(ITALY) 440/855(CHINA)		580/1080		580/1080		555/1055(ITALY) 445/945(CHINA)	
Guideway type		Linear guideway								Linear guideway			
Spindle													
Type of spindle nose		A_2-6	Opt: A_2-8	A_2-6	Opt: A_2-8	A_2-6	Opt: A_2-8	A_2-6	Opt: A_2-8	A_2-8			
Chuck size	inch	8	10	8	10	8	10	8	10	10			
Spindle speed range	rpm	4000	3500	4000	3500	4000	3500	5000 motor spindle	4000 motor spindle	3500		3500	
Spindle bore	mm	Φ70	Φ87	Φ70	Φ87	Φ70	Φ87	Φ70	Φ87	Φ87			
Max.bar capacity (Equipped with through-hole hydraulic chuck)	mm	Φ51	Φ73	Φ51	Φ73	Φ51	Φ73	Φ51	Φ73	Φ73			
Spindle motor power	kW	11/15						11/15	15/18.5	15/18.5			
Travel													
Max. travel of X axis	mm	215(235 CHINA VDI)				225		215 (235 CHINA VDI)		265			
Max. travel of Z (Y)axis	mm	600/1100		570/1050(ITALY) 455/885(CHINA)		550/1050(±50) 455/870(CHINA)		600/1100		600/1100		565/1045(ITALY) 445/885(CHINA)	
Rapid traverse of X/Z(Y) axis	m/min	30/30				30/30(12)		30/30		30/30			
Tool post													
Turret type and tool numbers		Servo 12-position turret		Live tooling 12-position turret		Live tooling 12-position turret		Servo 12-position turret		Servo 12-position turret		Live tooling 12-position turret	
Tool shank size	mm	25×25								25×25			
Indexing time(adjacent/farthest)	s	0.29/0.79		0.49/0.96(ITALY) 0.62/0.88(CHINA)		0.49/0.96(ITALY) 0.62/0.88(CHINA)		0.29/0.79		0.29/0.79		0.49/0.96(ITALY) 0.62/0.88(CHINA)	
Tailstock													
Diameter of tailstock quill	mm	Φ85								Φ85			
Tailstock quill stroke	mm	140								140			
Accuracy													
X/Z(C、Y)axis positioning accuracy	mm	0.005/ 0.007、0.008		0.005/0.007、 0.008 (C:31”)		0.005/0.007、0.008 (C:31” Y:0.005)		0.005/ 0.007、0.008		0.005/ 0.007、0.008		0.005/0.007、 0.008 (C:31”)	
X/Z(C、Y)axis repeatability accuracy	mm	0.003/ 0.004、0.005		0.003/0.004、 0.005 (C:13”)		0.003/0.004、0.005 (C:13” Y:0.005)		0.003/ 0.004、0.005		0.003/ 0.004、0.005		0.003/0.004、 0.005 (C:13”)	
Controller													
CNC Controller		FANUC 0i-TF Plus(5)/FANUC 0i-TF Plus(1)/SIEMENS SINUMERIK 828D											
General													
Machine dimensions(L×W×H) Without chip conveyor	mm	4110×1925×2010(600) 4640×1925×2010(1000)				4110×1925×2010(600) 4640×1925×2010(1000)		4110×1925×2010(600) 4640×1925×2010(1000)		4110×1925×2010(600) 4640×1925×2010(1000)			
Machine weight	kg	5300/6300				5500/6500		5300/6300		5500/6500			

Standard configurations

- Servo 12-position turret for DT series
- China or Italy 12-position live tooling turret for DT-H(Y) series
- NSK spindle bearings and X/Z axis bearings
- X/Z THK ball screws & X/Z THK linear guideways
- Non through-hole hydraulic chuck
- Hydraulic tailstock
- Heat exchanger
- Chain-type chip conveyor
- Automatic lubrication system
- Standard toolkit

Optional

- Screw drive tailstock
- Tool presetter
- Air conditioner
- Oil mist separator
- Through-hole hydraulic chuck and cylinder
- Bar feeder and parts catcher
- China hydraulic steady rest
- Germany hydraulic steady rest
- Automatic door

UPT350

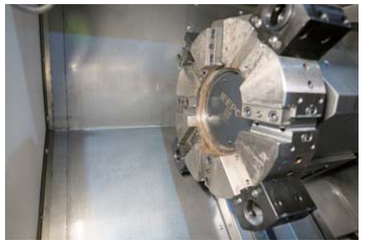
Ultra-precision single-point diamond lathe

Technical parameters

Specification		Unit	UPT350
Maximum workpiece diameter		mm	Φ350
Maximum spindle speed		r/min	4000
Spindle rotation accuracy	Axial	nm	40
	Radial	nm	40
C-axis feedback partition rate		”	0.02
C-axis positioning accuracy		”	2
C-axis Repeat Positioning Accuracy		”	1.5
X/Z axis maximum speed		m/min	2/2
X/Z axis feedback resolution		nm	0.032
Linear axis travel	X-axis	mm	300
	Z-axis	mm	300
Guideway Straightness	X-axis	μm	0.3 (full stroke)
	Z-axis	μm	0.3 (full stroke)
X / Z axis unidirectional repeatability		μm	0.15 (full stroke)

T5.2 SERIES

Slant Bed CNC Lathe



Technical parameters

Specification	Unit	T5.2-500Q
Max. turning diameter	mm	Φ380
Max. turning length	mm	500(Different fixture parameters are different)
Max. swing diameter over bed	mm	Φ560
Max. swing diameter over slide	mm	Φ350
The height from spindle center to the bottom of the bed	mm	1015
Spindle		
Spindle bore type		A2-6
Front bearing diameter	mm	Φ100
The taper of front spindle,taper hole		1:20；Φ70
Spindle bore	mm	Φ65
Max.diameter of bar	mm	Φ50
Standard chuck diameter	inch	8
Max.spindle speed	r/min	4500(It is limited by chuck and fixture)
Rated torque	Nm	136 （769r/min）
Max.torque	Nm	245 (576r/min)
Main motor output power continuous/15 minutes	kW	11/15
Three axis		
Rapid speed X/Z	m/min	30
X/Z axis travel	mm	200/560
Tail platform		
Tail platform travel	mm	500
Tail drive mode		Servo-drive
Tail cone taper	Mohs	MT-5(Live center)
Turret		
Turret type		Horizontal eight- position servo turret
Center height	mm	80
Precision of repeatability of turret rotation	sec	±1.6
End face cutter clamp	mm	25×25
Reducer	mm	Φ32
Boring tool holder	mm	Φ40
Coolant and chip removal		
Pressure of cooling pump	bar	3
Flow of cooling pump	L/min	66
Water tank capacity	L	160
Type of chip conveyor		Chain
Others		
Total power capacity	kVA	27
CNC Controller		Fanuc 0i-TF Plus TYPE(5)
Machine net weight	kg	4200
Overall dimension (LxWxH)	mm	2750×1890×1900(Main machine)

Standard configurations

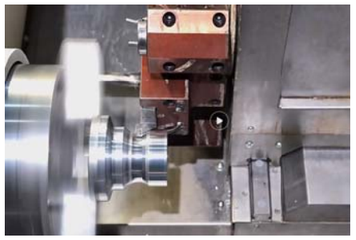
- FANUC 0i-TF Plus TYPE(5)
- THK ball guide/screw
- Side chip conveyor
- Heat exchanger
- Nachi pump group
- A2-6 Spindle
- Taiwan/South Korea 8 inch hollow chuck
- Domestic hollow cylinder
- 11/15kW main motor
- Servo tail seat
- Morse 5 live center

Optional

- Increase spindle head
- Enlarged main motor
- Two-axis roller Guide
- Automatic door
- Electric cabinet air conditioner
- Rear chip conveyor (including 30m pump)
- The 30m head pump is replaced by a 2Mpa pump
- Add 7Mpa independent cooling system
- Nachi hydraulic station valve set

HTC40 SERIES

Slant Bed CNC Lathe



Technical parameters

Specification	Unit	HTC40Hm/500
Maximum cutting diameter	mm	Φ350
Maximum cutting length	mm	450
Maximum turning diameter on the bed	mm	Φ560
Maximum turning diameter on the carriage	mm	Φ350
The center of the spindle is from the bottom of the bed	mm	1110
Spindle		
Spindle end type and code		A2-8
Inner diameter of front bearing	mm	Φ120
Taper of spindle front hole and cone hole		1:20；Φ90
Diameter of spindle through hole	mm	Φ80
Maximum pass bar diameter	mm	Φ50
Standard chuck diameter	inch	8
Maximum spindle rotation	r/min	4000
Rated torque of spindle	Nm	130（769r/min）
Maximum spindle torque	Nm	230（576r/min）
Main motor output power(Continuous/15 minutes)	kW	11/15
Two axes		
X/Z-axis fast moving speed	m/min	30
X/Z-axis travel	mm	220/510
Tailstock		
Tailstock travel	mm	450
Tailstock drive mode		Hydraulic cylinder drive
Tailstock cone hole taper		MT-5
Tool turret		
Tool turret form		Horizontal 12-station BMT55 power tool holder
The center height of tool turret	mm	100
Repeated positioning accuracy of tool turret transposition	Sec.	±1.6
Cooling and chip conveyor		
Cooling pump pressure	bar	3
Cooling pump flow	L/min	66
Water tank capacity	L	160
Form of chip conveyor		Chain plate type
Others		
CNC Controller		FANUC-0i-TF Plus(5)
Net weight of machine tool	kg	4500
Machine dimensions (length X width X height)	mm	2750×1900×2200

Standard configurations

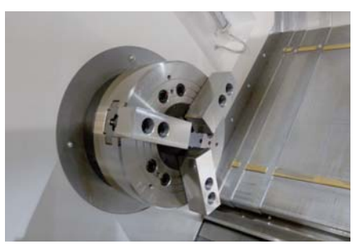
- FANUC system (5)
- 11/15kW A2-8 spindle unit
- Imported lead screw and linear guideway
- M-type turning center with 12-station power tool turret
- South Korea 8 inch hollow chuck cylinder
- Side chip conveyor

Optional

- Siemens System (HTC40H/500)/FANUC 15/18.5 (HTC40H/500)
- Roller guide rail
- Servo tailstock (HTC40H/500)
- Rear chip conveyor (500 specifications)
- Change Korean 10/12 inch solid chuck cylinder
- Change Korean 10/12 inch hollow chuck cylinder
- Change small spindle tail stock (500 specifications)
- Entrance grating ruler (500)
- Automatic import tool control instrument
- Three - and Y-axis tool holder based on m-type.
- Small spindle tailstock, dead center (500 specifications)

HTC63/80 SERIES

Slant Bed CNC Lathe



Technical parameters

Specification		Units	HTC63150ny	HTC80Sm/3000
Maximum turning diameter on bed		mm	1000	980
Maximum cutting length		mm	1400	3000
Maximum cutting diameter	Shaft class/ Disk class	mm	630/ 630	800/ 940
Maximum turning diameter on a skateboard		mm	630	805
Spindle				
Spindle end type and code			A2-11	A2-15
Main shaft hole diameter		mm	130	180
Maximum pass bar diameter		mm	115	162
Spindle speed range / Maximum output torque of spindle		r/min/Nm	20 ～ 1200/2450	20 ～ 1500/5400
C-axis maximum RPM/torque			24/1900	24/1900
Main motorOutput power （30 minutes/continuous）		kW	37/30	45/37
Chuck diameter		inch	15″	18″
Stroke				
X/Y/Z-axis fast shift speed		m/min	12/10/12	12/-/12
X/Y/Z-axis stroke		mm	410/+ 100/1450	510/-/3050
Tailstock				
Tailstock sleeve diameter		mm	180	230
Tailstock sleeve stroke		mm	160	180
Tailstock spindle cone hole taper		Mohs	6#	Metric 80
Tool turret				
Standard knife holder form			Horizontal 12 station power	Horizontal 12 station power
External round knife		mm	32×25	32×32
Boring bar diameter		mm	Φ50/Φ40/Φ32/Φ25	Φ80/Φ40/Φ32/Φ25
Maximum drilling capacity of power tool		mm×mm	22×0.20	30×0.20
Maximum tapping capacity of power tool		mm×mm	M18×2/M27×1.5	M22×2.5/M33×2
Maximum milling capacity of power tool		mm×mm×mm/min	25×20×40	40×20×35
Controller				
CNC Controller			FANUC-0i-TF Plus(5)	FANUC-0i-TF Plus(5)
Others				
Machine weight		kg	18000	23000
Dimension of machine （L×W×H）		mm	5400×2825×2680	6790×3050×2680

Standard configurations

- FANUC 0i-TF system (main servo)
- Combination of sliding and rolling guides
- Imported supine 12 power tool holder, including a straight, 90° power head and a standard non-power tool holder
- Korea (or Taiwan)15" medium real chuck
- A2-11 gearshift spindle
- Domestic chip conveyor

Optional

- Add 35-235/100-320mm domestic steady rest
- Add 85-350mm import steady rest
- Change Korea (or Taiwan)15"/18" hollow chuck
- Change Korea (or Taiwan)18"/21" solid chuck
- Add a 24" manual tool adjuster
- Add 1.5 m /2 m servo tail seat +W shaft inlet screw
- Secondary spindle
- add Y-axis
- Siemens System (m type)

T6 SERIES

CNC Vertical Lathe

SMTCL

Technical parameters

Specification	Unit	T6-60H
Max. turning diameter	mm	Φ600
Max. turning length	mm	650
Max, swing diameter over bed	mm	Φ700
Max. swing diameter over slide	mm	ϕ390
Distance between end of spindle to bed bottom	mm	918
Spindle		
Spindle nose		A2-11
Inner diameter of front bearing	mm	ϕ160
Chuck diameter	inch	15
Max. spindle speed	r/min	2500
Rated torque	Nm	850（246r/min）
Output power of main motor con/30 minutes	kW	22/30
Axes		
Rapid movement on X and Z axis	m/min	20
Travel on X/Z axis	mm	330/653
Turret		
Turret Mode		Horizontal 8-position power turret
Height of center	mm	125
Repeatability of turret	Sec.	±1.6
Cylindrical tool holder	mm	25×25
End-face tool holder	mm	25×25
Boring tool holder	mm	Φ40
Reducer	mm	ϕ32,ϕ25
Coolant and chip removal		
Pressure of cooling pump	bar	4
Flow rate of cooling pump	L/min	100
Capacity of water tank	L	400
Type of chip conveyor		Chain-type
Electrical		
Total power capacity	kVA	60
CNC Controller		FANUC 0i-TF Plus(1)
Others		
Net weight	kg	7500
Overall dimension (L×W×H)	mm	2235×1900×3030

Standard configurations

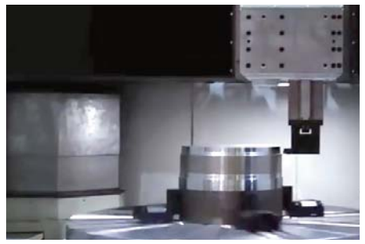
- Fanuc 0i-TF Plus TYPE(1)
- Taiwan 15 inch solid chuck and oil cylinder
- 22/30kW,α main motor
- 8-station servo tool holder IEEPO
- Rear chip conveyor

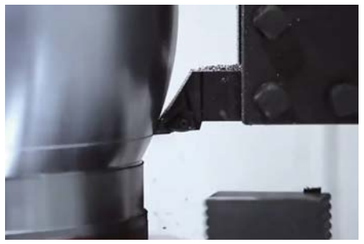
Optional

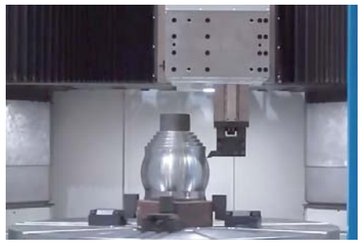
- FANUC(1)system α series motor
- Siemens 828D system 1ph main motor
- Increase the height by 200
- 8/12-position servo tool turret
- Integrated automatic door
- Remove the primary circuit valve set and line
- Increase the wooden cover of the packing box

VTC SERIES

CNC Vertical Lathe







Technical parameters

Specification	Unit	VTC160100S
Main Parameter		
Diameter of worktable	mm	1400
Worktable External clamping range	mm	300-1260
Worktable Internal clamping range	mm	350-1390
Max swing diameter	mm	1600
Max cutting diameter	mm	1600
Max weight of workpiece	Kg	6000
Max height of workpiece	mm	1000
Max torque of worktable	N．m	13300
Max speed of worktable	r/min	280
Variable frequency main motor power	kW	37
Ram		
Cross section of ram	mm	200×200
Travel of X axis	mm	-50 ～ +1520
Travel of Z axis	mm	1000
Feed speed		
Cutting feed speed range	mm/min	1-1000
Rapid traverse X/Z axis	mm/min	12000/8000
Cutter		
Turning tool bar size	mm	40×40
Maximum cutting force of cutter	kN	20
Electrical		
Total electric capacity	KVA	90
CNC Controller		SIEMENS 828D
Others		
Machine Tool Weight	Kg	20000

Standard configurations

- ΦSiemens 828D system
- Φ1400mm manual 4-jaw chuck
- Station tool magazine (automatic tool change)
- Semi-closed protection
- Chip conveyor & external cooling

Optional

- FANUC 0i-TF CNC System
- Maximum workpiece height 600mm
- X/Z axis import linear scale
- Standard round/internal hole turning tool holder/sleeve
- Φ1400mm hydraulic 3/6-jaw chuck
- Φ1400mm magnetic sucker
- 8/12-station tool magazine (automatic tool changer)

CK52 SERIES

CNC Double-Column Vertical Lathe

Technical parameters

Specification	Unit	CK5235X20-32	CK5250X31-63	CK5280X40-125	CK52100X45-150
Max.Turning Diameter	mm	3500	5000	8000	10000
Max. Turning Height	mm	2000	3150	4000	4500
Max. Workpiece Weight	t	32	63	125	150
Table Dia.	mm	3150	4500	6300	7100
Table Speed Range（Infinitely）	r/min	0.63~63	0.4~40	0.2~20	0.2~20
Max. Torque of Table	kN.m	80	125	460	460
Horizontal Stroke of Railhead	mm	-50~2030	-50~2765	-50~4400	-50~5400
Stroke Ram	mm	1250	1600	2000	2500
Feed Range of Railhead	mm/min	0.1~1000	0.1~1000	0.1~1000	0.1~1000
Rapid Speed of Railhead	mm/min	4000	4000	4000	4000
Ram Section	mm	240×240	240×240	320×320	320×320
Arbor Section	mm	50×50	50×50	70×70	70×70
Max. Cutting Force of Railhead	kN	40	50	80	100
Max. Stroke of Crossrail	mm	1650	2800	3500	3750
Crossrail Elevating Speed	mm/min	310	310	310	310
Crossrail Motor Power	kw	11	18.5	45	55
Main Motor Power	kw	55	90	132	132
CNC Controller		SIEMENS 828D	SIEMENS 828D	SIEMENS 828D	SIEMENS 828D

CXH52 SERIES

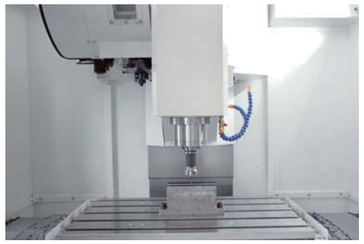
Double-Column Vertical Turning and Milling Machining Center

Technical parameters

Specification		Unit	CXH5225×20/16	CXH5235×25/32
Max. Machining Diameter		mm	2500	3500
Max. Workpiece Height		mm	2000	2500
Max. Workpiece Weight		mm	16(⩽ 50 r/min)	32
Table Diameter		mm	2250	3150
Max. Table Torque		kN.m	32	80
Table Speed Range	Turning	r/min	1.6 ～ 160	0.63~63
	Milling	r/min	0.02 ～ 5	0.001~1
Max. Cutting Force of Toolhead		kN	35	40
Toolhead Horizontal Travel/Ram Travel		mm	-50 ～ 2050/1250	-2300~2600/1250
Toolhead Feed Range		mm/min	0.1 ～ 1000	0.1~1000
Toolhead Rapid Speed		mm/min	4000	4000
Ram Section		mm	280×280	280×280
Arbor Section		mm	40×40	50×50
Motor Power for Milling		kw	31	31
Milling Spindle Speed Range		r/min	10 ～ 2000	20~2000
Tool Magazine Capacity			12	12
Crossrail Travel		mm	1650	2150
Crossrail Travel Speed		mm/min	300	310
Motor Power for Crossrail		kw	7.5	11
Main Motor Power (AC)		kw	2×31	60
Machine Weight（Approximately）		t	42	75

VDLS SERIES

Vertical Machining Center



DMTG

Technical parameters

Specification	Unit	VDLS850	VDLS1000	VDLS1200	VDLS1300
Table					
Worktable size(L×W)	mm	1000×500	1120×560	1220×620	1300×560
Max. load	kg	600	750	1200	750
T-slots (numbers*width* centre distance)	mm	5×18×100	5×18×100	5×18×100	5×18×100
Travel					
X/Y/Z axis travel	mm	860/510/560	1040/600/620 / 1040/580/620	1220/620/685	1290/600/620 / 1290/580/620
X/Y/Z axis guide way type		Linear guideway	Linear guideway / X/Y Linear guideway Z Box way	X/Y Linear guideway Z Box way	Linear guideway / X/Y Linear guideway Z Box way
Distance from spindle center to column	mm	607	629 / 666	660	629 / 666
Distance from spindle nose to table	mm	145~705	125~745	95~780	125~745
Spindle					
Spindle motor power	kW	7.5/11	7.5/11 / 11/15	11/15	7.5/11 / 11/15
Max. spindle speed	r/min	12000 Direct-driven / Opt:8000 Belt-driven	12000 Direct-driven / Opt:8000 Belt-driven/ Gear-driven	Opt:6000 Belt-driven/ Gear-driven	12000 Direct-driven / Opt:8000 Belt-driven/ Gear-driven
Spindle taper		No.40(7:24)	No.40(7:24)	No.50(7:24)	No.40(7:24)
Feedrate					
Rapid traverse of X/Y/Z axis	m/min	36/36/30	36/36/30 / 24/24/20 Opt:(36/36/20)	36/36/20	36/36/30 / 24/24/20 Opt:(36/36/20)
Max. cutting feed rate	m/min	10	10	10	10
ATC					
Tool magazine capacity		24T/Arm	24T/Arm	24T/Arm	24T/Arm
Tool shank type		BT40	BT40	BT50	BT40
Max. tool weight	kg	8	8	15	8
Max. tool diameter (w/o adjacent tools)	mm	Φ78/155	Φ78/155	Φ125/250	Φ78/155
Tool change time (T-T)	S	2.7	2.7	3.5	2.7
Accuracy					
X/Y/Z axis positioning accuracy	mm	0.008/0.008/0.008	0.016/0.008/0.008	0.016/0.008/0.008	0.019/0.008/0.008
X/Y/Z axis repeatability accuracy	mm	0.005/0.005/0.005	0.006/0.005/0.005	0.006/0.005/0.005	0.008/0.005/0.005
CNC controller					
CNC controller		FANUC 0i-MF(5)Plus,FANUC 0i-MF(1) Plus,SIEMENS 828D,MITSUBISHI M80B		FANUC 0i-MF(1)Plus SIEMENS 828D	FANUC 0i-MF(5)/(1)Plus, SIEMENS 828D,MITSUBISHI M80B
General					
Machine dimensions(L×W×H)	mm	2496×2530×2679	2800×2671×2820	2990×2641×2759	3100×2671×2820
Machine weight	kg	5600	7000	8500	7200

Standard configurations

- 24T arm-type ATC
- Ball screw and linear guideway
- Spindle oil chiller
- Spindle coolant ring
- Spindle air blow
- Heat exchanger
- Compact oil-water separator
- Screw-type chip conveyor
- Rigid tapping
- Workpiece coolant system
- Air gun
- Automatic lubrication system

Optional

- Coolant through spindle and high-pressure unit
- High volume flushing system
- 4th axis rotary table
- Air conditioner
- Chain-type chip conveyor and chip cart
- Tool probe & workpiece probe
- M30 automatic power off

VMC SERIES

Vertical Machining Center

Technical parameters

Specification	Unit	VMC1300B
Worktable		
Worktable Size	mm	1400×700
Allowed Max. loading	kg	1000
Size of T-slot	mm× pcs	18×5
Machining range		
Max. travel of worktable-X/Y/Z axis	mm	1300/700/700
Distance between spindle end to worktable surface	mm	150~850
Distance between spindle center to guide-way base surface	mm	789
Spindle		
Taper (7:24)		BT50
Max. spindle speed	r/min	6000
Rated output torque	N.m	71.6
Main motor power	kW	15/18.5
Driving mode		Synchronous toothed belt
Feed		
Rapid movement X/Y/Z axis	m/min	24/24/20
Feed rate	mm/min	1-10000
Tool magazine		
Mode		ATC with robot arm
Shank mode		MAS 403 BT50
Pull stud		MAS 403 p50T-1
Type		Nearest tool selection in bi-direction
Capacity	Pcs	20
Max. tool length	mm	300
Max. tool weight	kg	15
Max.dia of tool disk	mm	Φ125 Full /Φ250 Adjacent
Change time (T-T)	s	3.5
Electrical		
Total power capacity	kVA	37
CNC Controller		FANUC 0i-TF Plus(1)
Others		
Machine Weight	kg	9500
Overall dimension (L*W*H)	mm	5026×2970×3361(without chip conveyor)

Standard configurations

- Fanuc 0i-MF Plus TYPE(1) system beta motor
- BT50-6000rpm spindle
- 15/18.5Kw main motor
- 20 mechanical arm tool magazine
- Front chain chip conveyor
- X,Y axis THK ball guide rail
- Z axis hard rail
- THK screw
- Full protection (excluding right upper cover)
- Cold and heat exchanger

Optional

- Fanuc(1) system α motor
- Siemens 828D (240)/(260)
- Increase GTP reducer (oil cooler, main motor unchanged)
- Separate oil adding and cooling machine for mechanical spindle
- Change roller guide (XYZ) -1300 above XY
- Additional reserved robot interface
- Automatic front door
- Electric cabinet air conditioner
- Spindle internal cooling
- Three axis grating ruler

VDU SERIES

Five-Axis Vertical Machining Center

Technical parameters

Specification	Unit	VDU650
Table		
Work table size	mm	Φ650
Max. load	Kg	600
Clamping area	mm	Φ800×500
T-slots (numbers*width* centre distance)		8×18×45°
Table indexing（A axis×C axis）		±130° ×360°
Rotating speed(A/C axis)	rpm	15/30
Travel		
X/Y/Z axis travel	mm	650/650/500
X/Y/Z axis guideway type		Linear roller guideway
Distance from spindle nose to table	mm	150 ～ 650
Feedrate		
X/Y/Z axis rapid traverse	m/min	45/45/45(OP:60/60/60)
Max. Cutting feedrate	m/min	30
Spindle		
Spindle type		Direct drive spindle
Spindle motor power	kW	8
Spindle motor torque	N.m	44
Max. spindle speed	rpm	12000(Opt:15000)
ATC		
Tool magazine capacity		20T Spindle direct take type Opt:30/40/40/60
Tool shank type		HSK-A63
Max.tool weight	kg	8
Max.tool diameter(w/o adjacent tools)	mm	Φ76（Φ125）
Max.tool length	mm	300
Accuracy		
X/Y/Z axis positioning accuracy	mm	0.008
X/Y/Z axis repeatability accuracy	mm	0.005
A/C axis positioning accuracy	inch	10″ (A)、8″ (C)
A/C axis repeatability accuracy	inch	4″ (A)、3″ (C)
CNC controller		
CNC controller		SIEMENS SINUMERIK ONE
General		
Machine dimensions(L×W×H)	mm	5300×2600×3235
Machine weight	kg	15000

Standard configurations

- Ball screw and linear guideway(Taiwan, China)
- Chain-type chip conveyor and chip cart
- Air conditioner
- 20T Arm-type ATC
- Spindle air blow
- Rigid tapping
- Spindle oil chiller
- Workpiece Coolant system
- Air gun
- Automatic lubrication system

Optional

- 30T/40T/50T/60T ATC
- 15000rpm Direct drive spindle
- 2Mpa coolant through spindle/7Mpa coolant through spindle
- 3 Axis linear scale(Heidenhain)
- High volume flushing system
- Tool probe & workpiece probe

DTC SERIES

CNC Drilling and Tapping Center

Technical parameters

Specification	Unit	DTC500
Worktable		
Size	mm	650×400
Allowed Max. loading	kg	250
Size of T-slot	mm×pcs	14×3
Machining range		
Max.travel of worktable-X/Y/Z axis	mm	500/400/300
Distance between spindle end to table surface(Max./ Min.)	mm	460/160
Distance between spindle center to guide-way base surface	mm	445
Spindle		
Taper (7:24)		BT30
Max.spindle speed	r/min	20000
Rated output torque(S1/S2)	N.m	11.8/17.5
Main motor power(S1/S2)	kW	3.7/5.5
Tools		
Shank mode		MAS 403 BT30
Feed		
Rapid movement（X/Y/Z axis）	m/min	48/48/48
3 axes driving motor power（X/Y/Z）	kW	2.5/2.5/2.7
3 axes driving motor torque (X/Y/Z)	N.m	8/8/12
Feed rate	mm/min	0-20000
Tool magazine		
Mode		Turret type servo tool magazine
Type		Nearest tool selection in bi-direction
Capacity	Pcs	21
Max.tool length	mm	250
Max.tool weight	kg	3
Max.dia of tool disk(Ful/Adjacent)	mm	Φ65/Φ100
Change time (T-T)	s	1.6
General		
Machine Weight	kg	2800
Total power capacity	kVA	19
Overall dimension (L*W*H)	mm	2420×1800×2600

Standard configurations

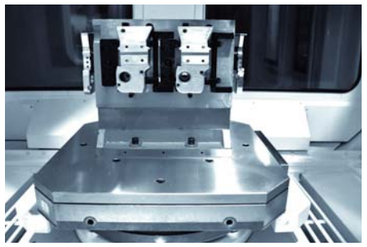
- Fanuc 0i-MF Plus TYPE(5) system alpha motor
- BT30-20000rpm spindle
- THK guide rail (Z axis roller, XY ball)
- THK screw
- Cold and heat exchanger
- 21 tool turret
- Chip receiving tank

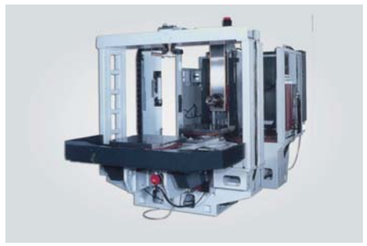
Optional

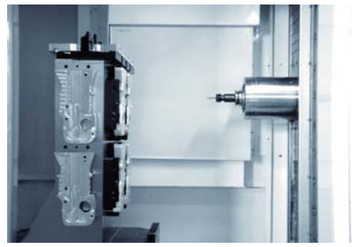
- Chain-type chip conveyor
- 24000 rpm spindle
- The 4th rotary table
- Tool measurement system
- Mitsubishi M80 system
- Air conditioner
- Oil cooler

MDH (HMC) SERIES

Horizontal Machining Center







Technical parameters

Specification	Unit	MDH40P	MDH50PS	MDH50	MDH50A	MDH65S	MDH65	MDH65A	MDH80S	MDH80	MDH80A	MDH100S	MDH125
Table													
Worktable size （L*W)	mm	400×400	500×500	500×500	500×500	630×630	630×630	630×630	800×800	800×800	800×800	1000×1000	1250×1250
No. of pallet		2		2	Single table	2	2	Single table	2	2	Single table	2	2
Table type		IT Opt:BRT		IT Opt:BRT			IT Opt:BRT			IT Opt:BRT			IT Opt:BRT
Table indexing		IT(1°×360°) BRT(0.001°×360°)		IT(1°×360°) BRT(0.001°×360°)			IT(1°×360°) BRT(0.001°×360°)			IT(1°×360°) BRT(0.001°×360°)			IT(1°×360°) BRT(0.001°×360°)
Table indexing time	S	1.9(90°)		1.7(90°)			1.7(90°)			4.5(90°)			5(90°)
Pallet changing time	S	5		6	—	6	12	—	12	12.5	—	12.5	35
Max. table load	Kg	400		800			1300			2000			3000
Travel													
X/Y/Z axis travel	mm	630/620/710		780/750/800			1050/900/900		1050/900/800	1400/1100/1050		1400/1100/1000	1700/1400/1240
X/Y/Z axis guide way type		Linear roller guideway											
Distance from table surface to spindle center	mm	80~700		80~830			80~980			80~1180			70~1470
Distance from spindle nose to table	mm	150~860		150~950			200~1100		300~1100	200~1250		250~1250	360~1600
Feedrate													
Rapid traverse of X/Y/Z axis	m/min	60		54			54			45			45
Max. cutting feed rate		40		20			20			20			20
Spindle													
Spindle taper		No.40 (7:24)		No.50 (7:24)			No.50 (7:24)			No.50 (7:24)			No.50 (7:24)
Max spindle speed	rpm	10000(Direct driven) Opt:12000 (Direct driven)		8000(Motorized) Opt:12000(Motorized) Opt:6000(Gear drive)			8000(Motorized) Opt:12000(Motorized) Opt:6000(Gear drive)			8000(Motorized) Opt:12000(Motorized) Opt ① :4000(Gear drive) Opt ② :4000(Gear drive)			6000(Motorized) Opt:8000, 12000 (Motorized) Opt:6000(Gear drive)
Spindle motor power (Continueous/30 min)	kW	10000rpm:7.5/11 12000rpm:7.5/11		8000rpm:18.5/22 12000rpm:25/30 6000rpm:22/26			8000rpm:18.5/22 12000rpm:25/30 6000rpm:22/26			8000rpm:18.5/22 12000rpm:25/30 ① 4000rpm:22/26 ② 4000rpm:30/37			6000rpm:37/55 8000rpm:25/30 12000rpm:25/30 6000rpm:22/26
ATC													
Tool magazine capacity	T	40 (Opt:60/80/120)		40 (Opt:60/80/120)			40 (Opt:60/80/120)			40 (Opt:60/80/120)			40 (Opt:60/80)
Tool shank type		BT40		BT50			BT50			BT50			BT50
Max. tool length	mm	350		500			500			500			500
Max. tool weight	Kg	8		25			25			25			25
Max. tool diameter (w/o adjacent tools)	mm	Φ82(Φ150)		Φ115(Φ270)			Φ115(Φ270)			Φ115(Φ270)			Φ115(Φ270)
Tool changing time(T-T)	s	1.2		2.2			2.2			2.5			2.5
Accuracy													
X/Y/Z axis positioning accuracy	mm	0.008		0.008			0.010			0.010			X:0.015 Y:0.012 Z:0.012
X/Y/Z axis repeatability accuracy	mm	0.005		0.005			0.006			0.006			X:0.007 Y:0.007 Z:0.007
CNC controller													
CNC controller		FANUC 31i		FANUC 31i			FANUC 31i			FANUC 31i			FANUC 31i
General													
Machine dimensions(L×W×H)	mm	5952×2558×2771	5952×2558×2771	4912×3200×3125	4190×3200×3125	4912×3200×3125	6145×3342×3359	6450×3342×3350	6145×3342×3350	6153×3717×3827	5050×3682×3827	6153×3717×3827	8175×6087×3702
Machine weight	Kg	8000	8000	15000	14000	15000	18000	16500	18500	24000	21000	24500	32500

Standard configurations

- Spindle with two speed range
- Core-cooled ball screws
- Chain type tool magazine
- Screw type chip conveyor(Double-side mounted)
- Auto lubrication system
- Rigid tapping
- Heat exchanger

Optional

- Built-in-rotary table(BRT)
- High volume flushing system
- Air conditioner
- HEIDENHAIN linear scale
- Gear box spindle
- Ceiling shower
- Tool probe &work piece probe
- Oil-water separator system
- Chain-type chip conveyor
- Mist collector
- 60T/80T/120T Chain type tool magazine(60T/80T MDH125)
- Coolant-through spindle coolant system and high-pressure unit

GMC SERIES

Gantry Machining Center

Technical parameters

Specification		Unit	GMC1530RV
Worktable			
Table size		mm	1500×3000
Distance between two columns		mm	1750
Allowable maximum load		kg	10000
T-slot size		mm×piece	22×9
Machining range			
Max travel of worktable-X axis		mm	3000
Max travel of the saddle-Y axis		mm	1550
Max travel of spindle-Z axis		mm	750
Distance from spindle end to worktable	maximum	mm	950
	minimum	mm	200
Spindle			
Taper bore(7:24)			BT50
Speed range		r/min	40 ～ 6000
Max output torque		N·m	460/552
Main motor power		kW	12/14.4
Spindle diameter		mm	ϕ100
Section of ram		mm×mm	400×320
Feed rate			
Cutting feedrate range		mm/min	1 ～ 8000
Rapid traverse of X/Y/Z axis		m/min	20/20/16
Positioning accuracy (Executive standard: GB/T19362.1-2003)			
X axis		mm	0.03 0.020(Optional grating ruler)
Y axis		mm	0.025 0.020(Optional grating ruler)
Z axis		mm	0.015 0.010(Optional grating ruler)
Repeatability (Executive standard:GB/T19362.1-2003)			
X //Y/Z axis		mm	0.014/0.012/0.006
Overall electrical capacity		KVA	50
Machine tool overall (length × width × height)		mm	8300×4500×5000
Machine covers area (length × width)		mm	10300×6300
Machine weight		kg	22000

Standard configurations

- Siemens 828D system
- Taiwan spindle maximum rotation 6000 RPM
- Domestic carbon fiber coupling; Imported spindle reducer
- X/Y/Z axis imported ball screw drive
- Germany Stobo reducer
- Imported linear guide rail
- Okada 24 disc tool magazine
- Double helix + single chain chip conveyor
- X - axis metal protection puller, Y - axis organ protection

Optional

- Fanuc 0i system
- Manual right Angle milling head
- Manual 90 degree universal milling head
- Manual extension head
- Manual 90 degree deep boring and milling head
- Manual 45 degree universal milling head
- Reserve manual head interface (including connecting disc)
- Spindle internal cooling 20bar
- Reserve the fourth axis interface (only open the fourth axis function)
- XYZ grating ruler

TX61 SERIES

DRO Horizontal Milling and Boring Machine

Standard configurations(TX6111D,TX6111C/3)

- Spindle taper：ISO50# 7:24
- Electric control：Mitsubishi PLC
- X/Y coordinate detection element：Ball grating(From British Newall)
- Fixed facing plate
- Domestic famous brand spindle bearing, leading screw bearing
- Domestic famous brand X/Y/Z/W trapezoidal screw
- Domestic famous brand X/Z cable cover
- Rotary table optical manual positioning device
- Domestic famous brand hydraulic system

Optional(TX6111D,TX6111C/3)

- TX6111D End support (with DRO device, Z axis travel will reduce to 900mm (TX6111C/3 will reduce to 850mm) when equipping end support)
- Z axis ball grating scale and DRO display (Display accuracy:0.020/300mm，0.045/full stroke)
- Tapping bar device（TX11A-8101 , Tapping range：M8~M24）
- Boring bar device（TX11A-8102,d=40，L=150）
- Boring bar device(TX11A-8102, d=40, L=150)

Standard configurations(TX6113D,TX6113C/2)

- Spindle taper：ISO50# 7:24, tool shank BT50
- Electric control：Mitsubishi PLC
- TX6113D X/Y coordinate detection element：Ball grating scale (TX6113C/2 adopts ball grating scale on X/Y/Z/B)（From British Newall）
- Fixed facing plate
- Domestic famous brand spindle bearing, leading screw bearing
- Domestic famous brand X/Y/Z/W/U trapezoidal screw
- Domestic famous brand X/Z cable cover
- Rotary table optical manual positioning device
- Domestic famous brand hydraulic system (TX6113C/2 able to clamp X/Y/Z/B by hydraulic)

Optional(TX6113D,TX6113C/2)

- End support (with DRO display device, Z axis travel will reduce to 1200mm when equipping end support)
- Spindle head vertical travel Y=2000
- Rotary table 1600X1800 (Z=1900)
- TX6113D Z axis ball grating scale
- Tapping bar device（TX13C-8201 ,Tapping range：M8~M24）
- Boring bar device（T13C-8204）
- Centering device(T13C-8204)

Technical parameters

Specification	Units	TX6111D	TX6111C/3	TX6113D	TX6113C/2
Spindle head					
Boring spindle diameter	mm	110	110	130	130
Spindle taper	--	ISO 50	ISO50	ISO50 (7:24)	ISO50 (7:24)
Spindle speed	r/min	18 steps 9 ～ 1000	18 steps 9 ～ 1000	18 steps 6.6 ～ 755	18 step 6.6 ～ 755
Main motor power	kW	7.5	7.5	15	15
Spindle max torque	Nm	1000	1000	2000	2000
Spindle max resistance	N	15000	15000	25000	25000
Min distance from spindle center to table surface	mm	0	0	0	0
Max drilling diameter of spindle	mm	65	65	80	80
Max boring diameter of spindle	mm	300	300	350	350
Machine travel					
Table cross travel (X)	mm	1000	1600	2000	2000
Vertical travel of spindle head(Y)	mm	900	1400	1600	1600
Table longitude travel (Z)	mm	1400	1400	2000	2000
Spindle axial travel (W)	mm	600	600	900	900
Facing head slide travel(U)	mm	170	170	200	200
Rotary table					
Table size	mm	1000×1100	1100×1200	1400×1600	1400×1600
Max loading capacity	kg	2500	4000	10000	10000
Facing head					
Facing head dia.	mm	540	540	670	670
Facing head speed	r/min	14 steps 6 ～ 221	14 steps 6 ～ 221	14 steps 4.4 ～ 165	14 steps 4.4 ～ 165
Max torque of facing head	Nm	1500	1500	3000	3000
Max boring diameter of facing head	mm	600	600	700	700
Feed speed range					
Spindle and table longitude and cross feed capacity (calculate as per spindle)	mm/r	12 steps 0.04 ～ 6	12 steps 0.04 ～ 6	12 steps 0.04 ～ 6	12 steps 0.04 ～ 6
Spindle and table longitudes and cross feed capacity (calculate as per facing head)	mm/r	12 steps 0.06 ～ 6	12 steps 0.06 ～ 6	12 steps 0.06 ～ 9	12 steps 0.06 ～ 9
Facing ehad slide feed capacity (calculate as per facing head)	mm/r	12 steps 0.04 ～ 6	12 steps 0.04 ～ 6	12 steps 0.04 ～ 6	12 steps 0.04 ～ 6
Others					
Overall electrical capacity	kVA	15	15	26	30
Machine dimension(L×W×H)	mm	5215×2140×3040	5215×3500×3300	6400×4500×4300	7520×4560×4085
Machine weight	kg	12000	18300	31500	34000

Options

- Reduction Sleeve Morse
- Pull Stud
- TX68 End Support
- TX6113C/2 End Support

M/900V

Precision Vertical Coordinate Boring Machine

Technical parameters

Specification	Unit	M/900V
Worktable		
Table size (mmxmm)	mm	900×1200
T-slot width (mm) x number	mm	187
Table load capacity (kg)	kg	2000
Travel		
X-axis travel	mm	1100
Y-axis travel	mm	800
Z-axis travel	mm	800
Distance from spindle end to table surface	mm	100-900
Spindle motor power	kW	53.4/65
Spindle		
Spindle speed (r/min)	r/min	8000
Spindle taper hole		7:24
Torque (N-m)	N-m	170
Tool internal cooling function (MPa)	MPa	5
Feedrate		
Feed rate	mm/min	1~10000
X, Y, Z axis rapid traverse speed	m/min	24
Linear axis accuracy		
Positioning accuracy (mm)	mm	0.003
Repeat positioning accuracy (mm)	mm	0.0015
Automatic tool change system		
Tool magazine capacity	pcs	32
Maximum tool size (diameter x length)	mm	Φ125, Φ220 x 400
Maximum tool weight	kg	25
Tool change time	s	5
Shank specifications		BT50
Control system		
CNC		HNC system
Machine dimension(LxWxH)		
Machine Weight	kg	16000
Overall dimensions (LxWxH)	mm	7000x4000x3600

TK65 SERIES

CNC Planer-Type Milling and Boring Machine

Technical parameters

Specification		Unit	TK6513
Machining range			
table		mm	1400×1600
Table loading ability		kg	10000
X/Y/Z axis travel		mm	2000/1600/1600
W axis travel		mm	800
table B axis		°	360
Distance between spindle center and table surface		mm	100-1700
Distance between spindle nose and table center		mm	850（spindle at 0 point）
Spindle			
Diameter of boring spindle		mm	Φ130
(7:24) Taper			JT 50
spindle speed(stepless)		r/min	10 ～ 2000
Max output torque		N·m	2500/3000 con./30min
Main motor power		kW	25/30 con./30min
Maximum feed resistance of boring spindle		N	20000
Feed			
Cutting feed range	X、Y、Z	mm/min	1-6000
	W	mm/min	1-3000
	B	r/min	0-1
Rapid traverse	X、Y、Z	m/min	9
	W	m/min	3
	B	r/min	1
Accuracy			
Positioning accuracy (Execution standards JB/T4373.1-2019)	X/Y/Z	mm	0.02/0.02/0.02 (0.016/0.015/0.015 optional scale)
	W	mm	0.020
	B at any angle	"	10" (with standard scale)
	B（4×90°）	"	6" or 0.015/500mm(with standard scale)
Repeatability accuracy (Execution standards JB/T4373.1-2019)	X/Y/Z	mm	0.013/0.013/0.013
	W	mm	0.018
	B at any angle	"	6" (with standard scale)
Electrical			
Total electric capacity		KVA	85
CNC system			Siemens 828D
Others			
Weight of Machine		T	37
Overall dimension		mm	6680×7030×4400

Standard configurations

- Imported spindle bearing& table rotary bearing
- X/Z axis imported linear guideway, Y axis steel guideway
- Domestic X/Y/Z/W screw
- Y-axis armor protection
- Spindle oil cooler

Optional

- Fixed facing plate (φ730mm/φ800mm)
- OKADA 40/60 tool magazine
- Spindle internal cooling (10/20/30bar)
- Larger main motor (41/49kW)
- Spindle speed is 3000 RPM
- Manual right Angle head (L=510/732/832mm)
- Manual universal head (L=512/648mm)

EBC SERIES

CNC Planer-Type Milling and Boring Machine

Technical parameters

Machine model		Unit	EBC130B
Spindle head			
Boring spindle diameter		mm	130
Milling spindle diameter		mm	221.44
Taper		--	ISO 50
Shank specification		--	BT50
Pull stud		--	P50T-1
Spindle speed range		r/min	7～2000
Main motor power		kW	25
Spindle max torque		Nm	2300
Spindle max thrust		N	20000
Machine travel			
Table cross travel（X）		mm	3000
Spindle head travel（Y）		mm	2000
Column longitudinal travel（Z）		mm	1600
Spindle axcial travel（W）		mm	900
Table rotation（B）		°	360（any）
Machine placement			
Min. distance between spindle center to table		mm	0
The table higher than the ground level		mm	500
Rotary table			
Table size		mm	1600×1800
Max. Load of table		kg	10000
T slot		mm	28
Feed range			
Cutting feed range	X、Y、Z axis	mm/min	1～8000
	W axis	mm/min	1～6000
	B axis	r/min	0.003～1
Rapid	X、Y、Z axis	mm/min	8000
	W axis	mm/min	6000
	B axis	r/min	1.5
Positioning accuracy			
X、Y、Z axis		mm	0.015
W axis		mm	0.020
B axis		″	7
Repeatability			
X、Y、Z axis		mm	0.010
W axis		mm	0.015
B axis		″	5
Electrical			
Overall power		kVA	100
CNC Controller			SIEMENS 828D
Others			
Overall dimension L×W×H		mm	9200×7200×5100
Machine weight		kg	37000

Standard configurations(EBC 130B)

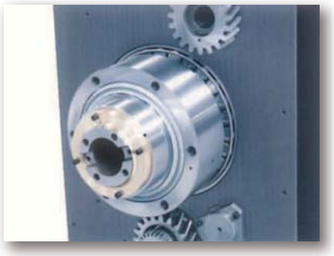
- SIEMENS 828D SYSTEM
- Imported spindle bearing (NSK/FAG/SKF)
- Imported ball screw (THK/Korta/KSK/Blis)
- XYZ compound guideway
- Y axis telescopic cover
- Spindle external coolant with nozzle
- Chain plate chip conveyor
- Spindle head rear cover
- X/Y/Z HEIDENHAIN adopt linear grating scale, full closed-loop control.
- B axis adopts HEIDENHAIN circular grating scale, full closed-loop control
- Domestic famous brand lubrication oil chiller
- Rotary table area coolant recycle tray.
- Pneumatic system SMC
- Domestic famous brand centralized lubrication pump

Optional(EBC 130B)

- Coolant through spindle 2Mpa
- Automatic tool changer 40 tool capacity
- Table are semi protection
- Spindle support sleeve (L=300mim)

KIMI SERIES

CNC Horizontal Milling and Boring Machine



Technical parameters

Model	Units	KiMi A-4P
Spindle head		
Boring spindle diameter	mm	110
Spindle taper	-	7:24 ISO 50
Tool shak	-	BT50
Pull stud	-	P50T-I
Spindle speed	r/min	10-1500
Main motor power	kW	15
Spindle max torque	Nm	1029
Min distance from spindle center to table surface	mm	0
Spindle max drilling hole diameter	mm	65
Spindle max boring hole diameter	mm	300
Facing head		
Facing head diameter	mm	670
Facing head rotation speed	r/min	7-165
Max boring hole diameter of facing head	mm	700
Table		
Table dimension	mm	1250×1400
Max loading capacity	kg	5000
Machine travel		
Table cross travel X	mm	1800
Spindle head vertical travel Y	mm	1600
Table longitude travel Z	mm	1400
Spindle axial travel W	mm	600
Facing head slide travel U	mm	200
Feed speed range		
X/Y/Z axis	mm/min	2.5-5000
W axis	mm/min	2.5-3000
U axis	mm/min	1-500
B axis	r/min	0.003-1
Rapid		
X/Y/Z axis	mm/min	5000
W/Uaxis	mm/min	3000/1000
B axis	r/min	2
Positioning accuracy		
X/Y/Z axis	mm	0.018
W/U axis	mm	0.025
B axis	"	7
Repeatability		
X/Y/Z axis	mm	0.012
W/U axis	mm	0.020
B axis	"	5
Electrical		
Overall power	kVA	65
CNC Controller		FANUC 0i
Others		
Machine dimension (L×W×H)	mm	6530x4800x4400
Machine weight (Net weight)	kg	21000

Standard configurations(KIMI B-4P)

- FANUC 0i CNC system
- Imported spindle bearing (NSK)
- Imported leading screw bearing (NSK)
- Imported guideway roller unit
- Imported pneumatic system SMC
- Domestic famous brand X/Y/Z/W ball screw
- Cable cover X/Y/Z/W
- Domestic famous brand hydraulic and lubrication system
- B axis adopts HEIDENHAIN angle encoder
- X/Y/Z adopt HEIDENHAIN linear grating scale
- With table area coolant recycle tray, column and spindle head protection cover.
- Transverse screw chip conveyor
- Domestic famous brand lubrication oil chiller

Optional(KIMI B-4P)

- Coolant through spindle 2Mpa
- Automatic tool changer 40 capacity
- Table area semi protection
- Rotary table 1400×1600mm (Z=1300)
- Spindle support sleeve (L=300mim)
- Chip conveyor and external coolant with nozzle

TK69 SERIES

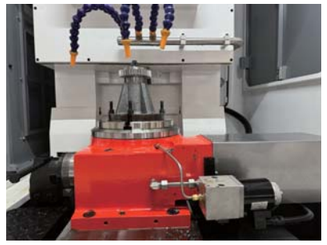
CNC Floor-Type Milling and Boring Machine

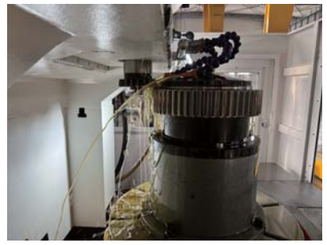
Technical parameters

Specification	Unit	TK6916B	TK6920
Specifications of Ram and Boring Spindle			
Boring Spindle Diameter	mm	160	200
Boring Spindle Taper		ISO50	ISO 50/60
Ram Section	mm	440×480	480×520
Max. Torque of Milling Spindle	Nm	7000	12000
Max. Torque of Boring Spindle	Nm	5000	10000
Spindle Speed Range	rpm	2-1500 III-Shifts, Infinitely	2-1200 III-Shifts, Infinitely
Travel Specifications of Ram and Boring Spindle			
Boring Spindle Travel	mm	1000(Axis W)	1200(Axis W)
Ram Travel	mm	1000(Axis Z)	1200(Axis Z)
Total Travel of Boring Spindle and Ram	mm	2000(Z+W)	2400(Z+W)
Boring Spindle Feed Speed	mm/min	1-4000(Infinitely)	1-6000(Infinitely)
Ram Feed Speed	mm/min	1-4000(Infinitely)	1-6000(Infinitely)
Rapid Speed of Boring Spindle and Ram	mm/min	4000(Infinitely)	8000(Infinitely)
Travel Specifications of Headstock			
Headstock Travel	mm	3000(Axis Y)	4000(Axis Y)
Headstock Feed Speed	mm/min	1-6000(Infinitely)	1-8000(Infinitely)
Headstock Rapid Speed	mm/min	8000(Infinitely)	10000(Infinitely)
Travel Specifications of Column			
Column Travel	mm	6000(Axis X)	8000(Axis X)
Column Feed Speed	mm/min	1-6000(Infinitely)	1-8000(Infinitely)
Column Rapid Speed	mm/min	8000(Infinitely)	10000(Infinitely)
Other Specifications			
Spindle Motor	kw	58	81
Machine Capacity	kVA	150	180(Approx.)
Overall Dimension(L×W×H)	mm	12200×3915×7490(Approx.)	14550×4818×8900 (Approx.)
Total Weight of the Machine (Not including accessories weight)	t	73(Approx.)	120(approx.)
Distance Between Spindle Center and Platform Surface (The machine tool layout confirmed by the user shall prevail.)	mm	500-3500	500-4500

YK51 SERIES

CNC Gear Shaping Machine





Technical parameters

Model		YK5115A	YK5132C	YK5150B	Unit
Max. diameter of work	Extemal	150	320	500	mm
	Internal	60+ diameter of cutter	220+ diameter of cutter	625 Φ100 cutter	
Max. module of work		4	8	10	mm
Max. face width		40	90	130	mm
Max. Stroke length ot cutter		50	110	150	mm
Number of strokes for cutter spindle		300 ～ 1000 (1500)	120 ～ 1000 (1350)	80 ～ 500 (800)	Str/min
Diameter of cutter spindle		90	90	90	mm
Diameter of cutter spindle jounal		31.743	31.743	31.743	mm
Travelling position adjustment of cutter spindle		15	20	20	mm
Distance between bearing surface of cutter and surface of worktable		150 ～ 200	252 ～ 382	330 ～ 500	mm
Distance between cutter spindle axis and axis of work spindle		-30 ～ 190	-115 ～ 290	0 ～ 380	mm
Cutter relieving amount		⩾ 0.5	⩾ 0.5	⩾ 0.5 Bi-directional	mm
Amount of angular cutter relieving		±20	±20	±30	mm
Diameter of workable		Φ260	Φ340	Φ625	mm
Diameter of workable hole		Φ100	Φ120（Φ130）	Φ120（Φ150）	mm
Number of T-slots		4	6	8	
Radial feed of column		0.005 ～ 0.2	0.01 ～ 0.25	0.01 ～ 0.25	min/str
Rotary feed of cutter		0.015 ～ 2	0.01 ～ 2.5	0.01 ～ 2.5	min/str
Rapid radial feed of column		2	1.5	1	m/min
Power of main motor		7.5	7.5	11	kW
Total capacity		20	23	28（32）	kVA
Machine weight		6.5	11	13	t
Overall dimensions（L×W×H）		2200×1425×2440	2730×1635×2300	2850×1790×2870	mm

Standard configurations

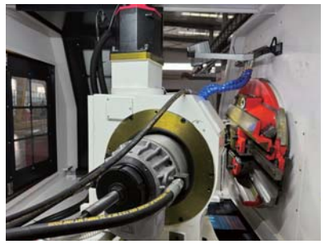
- SIEMENS 828D CNC System
- Hydraulic Station
- Cooling Tank and Chip Conveyor
- Semi-Protection
- Machine Tool Lighting

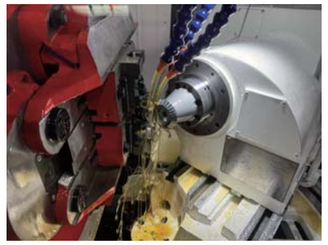
Optional

- Full-enclosure
- Riser of different height（Max. 500mm）
- Tilt work table（Tilt angle ±12°）
- Hydrostatic saddle（See number of strokes in the brackets）
- Helical guide（max.helical angle 30°）
- Tail center equipment
- Different cutter adaptors
- Automatic loading and unloading
- Automatic safety door
- Fixtures
- Oil mist exhausting device
- Deburring device
- Software for cutting non-circular gears
- Slide-type saddle

YKM SERIES

CNC Straight Bevel Gear Planing Machine





Technical parameters

Model		YK2312	YKM2350	Unit
Dimensions of Work				
Max. module of work		2.5	10	mm
Max. length of pitch element		60	250	mm
Max. pitch diameter（Ratio 10 : 1）		120	500	mm
Root angle	Max.	90°	80°	
	Min.	4°	8°	
Extreme ratio（At 90° shaft angle）		10 ： 1	8 ： 1	
Max. tooth depth		5.5	20	mm
Max. face width		20	85	mm
Number of teeth		5 ～ 150	10 ～ 200	
Work Spindle				
Diameter of taper hole at large end		Φ31.267	100	mm
Taper		Morse No.4	1 ： 20	
Taper length		80	160	mm
Diameter of through hole		Φ20H11	78	mm
Distance from face of spindle to machine center		30 ～ 190	70 ～ 380	mm
Cutter Head				
Adjusting angle		360°	120°	
Max. cradle roll		80°	60°	
Max. positioning angle of tool holder		8°	8°	
Max. travel of cutter		28	95	mm
Over run of cutter	At inner end	3	3	mm
	At outer end	5	5	
Cutter				
Type GR83-60I straight bevel gear cutter		I	III	
Cutter strokes per minute		250 ～ 700	98 ～ 500	Stroke/ min
Voltage		380	380	v
Machine weight		1.8	8	t
Overall dimensions（L×W×H）		1700×1650×1700	2400×1800×1800	mm

Standard configurations

- SIEMENS 828D CNC System
- Hydraulic Station
- Cooling Tank and Chip Conveyor
- Full-enclosure
- Machine Tool Lighting

Optional

- FANUC 0i-MF-PLUS CNC System
- Oil Mist Separator
- Oil Chiller
- Pneumatic Door
- Safety Door Lock
- Fixtures
- Cutters

Econ30 SERIES

Gear Measuring Center

Technical parameters

Specifications	Econ30
Module	0.5 - 15mm
Max.workpiece diameter	300mm
Distance between centers	15 - 500mm
Distance from stylus to the lower centre	-5 - 390mm
Helix angle	0 - 90°
Max.permissible test gear weight	150kg
Net weight of machine	1700kg
Gross weight of machine	2000kg
Over dimensions of basic unite（L×W×H）	1200mm×1000mm×1900mm

Standard configurations

- Basic machine
- Microcomputer
- Printer
- Work driver
- Testing arbor
- Styli （Φ0.4,Φ0.6,Φ0.8,Φ1,Φ1.5,Φ2）

Optional

- Involute and helix master
- Expanding mandrel
- Voltage regulator
- Stanard gear

L30A SERIES

Gear Measuring Center

Technical parameters

Specifications	L30A
Module range	0.5 - 15mm
Max. Outside diameter of gear	300mm
Distance between centers	40 - 700mm
Vertical stylus setting range	0 - 390mm
Helix angle	0 - 90°
Permissible test gear weigh	300kg
Packing Dimension（L×W×H）	1100mm×1500mm×2157mm

Standard configurations

- Basic machine
- Machine mounting foot
- PC
- Laser printer/Printing paper
- Renishaw 3D probe
- Machine operation manual/Packing list/Quality qualified certificate
- Software operation manual
- Software dongle key

Optional

- Stylus
- Rotate joint
- Measure rod
- Three-jaw chuck
- Maste
- UPS
- Extension
- Cube
- Probe holder SH80
- Gear master
- Expanding Mandrel

Kenova Setline V SERIES

Tool Presetter

Technical parameters

Specifications	V345C
Maximum Height	Z axis=500mm
Maximum Diamteter	D=400mm
Presetter spindle	axis=360° rotation
Maximum Weight of maesured tool	⩽ 80kg
Spindle concentricity	⩽ 0.002mm
Minimum resolution	0.001mm
Display precision	0.001mm
Z and X axis repeated measuring precision	⩽ ±0.002mm
The weight of basic machine	100KG
L*W*H	1180*830*1260（mm）

KELCH

Universal Bevel Protractors

UNIVERSAL BEVEL PROTRACTORS 613

Height Gauges

HEIGHT VERNIER GAUGES 609

DIAL HEIGHT GAUGES 617

ELECTRONIC DIGITAL HEIGHT GAUGES 611

Tool Presetter

MICROMETERS

OUTSIDE MICROMETER 701

OUTSIDE MICROMETER 703B

THREAD MICROMETER 711

DIGITAL DISPLAY THREAD MICROMETER 711A

POINT MICROMETER 728 728B

DIGITAL DISPLAY POINTED MICROMETER 728A

BLADE MICROMETER 734

DIGITAL BLADE MICROMETER 734A

INDICATORS

DIAL INDICATORS 801

DIAL TEST INDICATORS 804

ELECTRONIC DIGITAL INDICATORS TYPE 806(IV)

0.001MM COMPARATORS 816

DOUBLE-SIDED 0.01MM DIAL INDICATORS 818

DEPTH DIAL INDICATORS 819

GAUGE BLOCKS

SPECIAL GAUGE BLOCKS FOR TESTING MICROMETERS 903

SPECIAL GAUGE BLOCKS FOR TESTING VERNIER CALIPERS 904

GAUGES

COMMON THREAD GAUGES 923 924

MORSE TAPER GAUGES 927 928

THREAD GAUGES FOR OIL SUCKING PUMPS 935 936

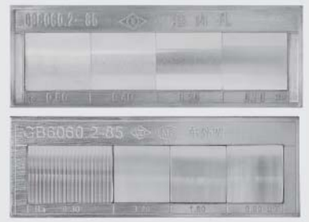
NON-SEALING PIPE THREADS WITH 55 DEGREE THREAD ANGLE 937 938

SPECIAL THREAD GAUGE FOR GAS CYLINDERS 947 948

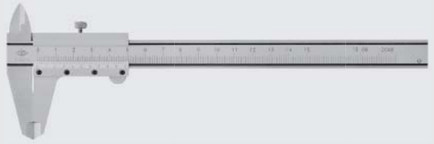
US-SYSTEM DRY SEAL PIPE THREAD GAUGE 949 950

MULTI-PATTERN SURFACE ROUGHNESS COMPARISON SPECIMENS 951

SINGLE-PATTERN SURFACE ROUGHNESS COMPARISON SPECIMENS 952

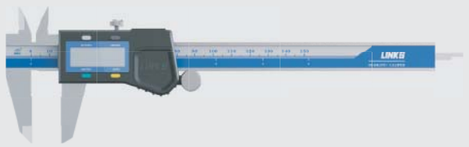


CALIPERS



ABSOLUTE ORIGIN CALIPER 605D

WIRELESS DIGITAL CALIPERS 605C



ELECTRONIC DIGITAL DEPTH GAUGES 615