

- This series lathe bed is the one-piece type box-shaped structure, adopts high standard cast iron (HT300) one molding casting, after the second aging treatment, it has the feature of stable performance; guide way width (755mm), good rigidity, anti-vibration ability; spindle bore is 130mm, strong rigidity of headstock, adapting to heavy cutting.
- Automatic shift exchange is controlled by the M code, stepless speed change within shift is controlled by the S code, achieving stepless speed and constant linear cutting (optional: spindle speed changed by manual, can be 21 speeds).
The X-direction and Z-direction use the precision grinding grade ball screw, ensured a high processing accuracy, positioning accuracy and repositioning accuracy.
- Longitudinal (Z) Feeding: for 1000mm-5000mm, AC servo motor that installed on the left side of the feeding box drives the ball screw via high precision planetary reducer, for longer than 6000mm, it is the rack and pinion structure.
- Equipped with 4-station vertical electric turret, but also according to their customers' needs 6-station horizontal electric turret and 8-position horizontal electric turret can be chosen.
- Tailstock structure is strong, which can perform heavy cutting, it can also be chosen electric tailstock to achieve automatic rapid movement and improve efficiency.
- Spindle is driven by AC servo motor or AC variable frequency motor with frequency converter, ensure large output torque and wide spindle speed. Equipped with $\Phi 1000$ mm standard manual four-jaw chuck.
- Equipped with emergency stop safety button, when the lathe machine suddenly encountered a sudden power failure or other failures, due to the special design of the control circuit, it can be self-protection to ensure that the lathe machine and staff safety.
- Before delivery all lathe machines should be tested by British RENISHAW laser detector for dynamic accuracy detection and compensation, so the lathe machine has a high positioning accuracy and repeat positioning accuracy.
- CNC system uses the most well-known international FANUC or SIEMENS control system (also available matching other systems according to users' requirements). Programs and parameters can be transferred through USB interface. X-axis and Z-axis can realize linkage, so it has straight line, arc and thread interpolation and a variety of other fixed cycle and other functions, the minimum resolution is 0.001mm.

STANDARD ACCESSORIES:

FANUC/GSK/SIEMENS CNC system, 4-jaw chuck, 4-station electric tool-post, Work lamp, Cooling system, Manual pulse generator (MPG), Dead centers, Oil gun, Pilot lamp, Automatic lubrication pump, Manual moving tailstock, Tools & tool-box, Leveling wedge & bolts, Operation manual (English).

OPTIONAL ACCESSORIES:

6/8-station tool-post, Steady rest, Follow rest, Semi-closed guard, Live centers, Air conditioner, Chip conveyor.

SPECIFICATION	UNIT	AK-1000B	AK-1250B	AK-1400B	AK-1600B
Max. swing over bed	mm	1000	1250	1400	1640
Max. swing over cross slide	mm	630	880	1030	1250
Distance between centers	mm	1000/1500/2000/3000/4000/5000/6000/8000/10000/12000/-			
Max. turning length	mm	730/1300/1800/2800/3800/4800/5800/7800/9800/11800/-			
Bed width	mm	755	755	755	755
Loading capacity	kg	6000 (opt:8000)	6000 (opt:8000)	6000 (opt:8000)	6000 (opt:8000)
Spindle nose	mm	A2-15	A2-15	A2-15	A2-15
Spindle bore	mm	130	130	130	130
Spindle taper	-	Metric 140	Metric 140	Metric 140	Metric 140
Spindle speed (Hydraulic 4steps, stepless)	rpm	5-320	5-320	5-320	5-320
Center height	mm	500	625	700	820
Chuck size (4-jaw)	mm	1000	1000	1000	1000
X/Z-axis min. feed unit	mm	0.001/0.001	0.001/0.001	0.001/0.001	0.001/0.001
X/Z-axis rapid feed speed	mm/min	3000/5000	3000/5000	3000/5000	3000/5000
Cross travel (X)	mm	570	570	690	630
Tool post type	-	V4/V6/V8	V4/V6/V8	V4/V6/V8	V4/V6/V8
Tool change time	s	2.6	2.6	2.6	2.6
Turret repeat positioning accuracy	mm	0.01	0.01	0.01	0.01
Tool section size	mm	40x40	40x40	40x40	40x40
Tailstock quill diameter	mm	160	160	160	160
Tailstock quill travel	mm	300	300	300	300
Tailstock quill taper	-	MT6	MT6	MT6	MT6
CNC system	-	FANUC/GSK/SIEMENS	FANUC/GSK/SIEMENS	FANUC/GSK/SIEMENS	FANUC/GSK/SIEMENS
Working accuracy	-	IT6-IT7	IT6-IT7	IT6-IT7	IT6-IT7
Surface roughness	μm	Ra1.6	Ra1.6	Ra1.6	Ra1.6
Main motor power	kw	30	30	30	30
Machine weight	kg	9800/10200/10600/11800/13000/14800/16600/20600/24600/28600/-			
Machine length	mm	4300/4800/5300/6300/7300/8300/9300/11300/13300/15300/-			
Machine width	mm	2530	2530	2780	2780
Machine height	mm	2150	2150	2600	2600



SPECIFICATION	UNIT	CM-400	CM-400V
Max. swing over bed	mm	410	410
Max. swing over cross slide	mm	255	255
Max. swing over gap	mm	580	580
Center height	mm	205	205
Distance between centers	mm	1000/ 1500	1000/ 1500
Bed width	mm	250	250
Tool section size	mm	20x20	20x20
Cross slide travel	mm	210	210
Top slide travel	mm	140	140
Spindle bore	mm	52	52
Spindle taper	-	D1-6	D1-6
Leadscrew	TPI	4	4
Spindle speed range (steps)	rpm	45-1800 (16)	30-550 or 550-3000 (stepless)
Metric threads range (kinds)	mm	0.1-14 (39)	0.1-14 (39)
Inch threads range (kinds)	TPI	2-72 (45)	2-72 (45)
Module threads range (kinds)	MP	0.3-3.5 (18)	0.3-3.5 (18)
Diametrical threads range (kinds)	DP	8-44 (21)	8-44 (21)
Longitudinal feed range	mm/rev	0.05-1.7	0.05-1.7
Cross feed range	mm/rev	0.025-0.85	0.025-0.85
Tailstock quill diameter	mm	50	50
Tailstock quill travel	mm	120	120
Tailstock quill taper	-	MT4	MT4
Main motor power	kw	3.3/2.2	3.3/2.2
Coolant pump power	w	90	90
Packing size (LxWxH)	mm	2060/2560x900x1640	2060/2560x900x1640
Net weight	kg	1300/1550	1350/1600
Gross weight	kg	1500/1750	1555/1755

STANDARD ACCESSORIES:

- 3-jaw chuck
- 4-jaw chuck
- Face plate
- Dead center
- Thread chasing dial
- Splash guard
- Oil gun
- Work lamp
- Cooling system
- Steady rest
- Follow rest
- Change gears
- Reducing sleeve
- Foot brake
- Leveling wedge
- Tool-box & tools
- Operation manual

OPTIONAL ACCESSORIES:

- Quick change tool post
- 2/3-axis digital readout
- Living center
- Taper turning attachment
- Chuck guard
- Leadscrew guard
- Tool post guard

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- Leadscrew guard
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SPECIFICATION	UNIT	CL-410	CL-460
Max. swing over bed	mm	410	460
Max. swing over cross slide	mm	220	270
Max. swing over gap	mm	640	690
Distance between centers	mm	1000/1500/ 2000	1000/1500/ 2000
Gap length	mm	165	165
Bed width	mm	300	300
Spindle nose	-	D1-6	D1-6
Spindle bore	mm	58	58
Spindle taper	-	MT6	MT6
Spindle speed range (steps)	rpm	25-2000 (12)	25-2000 (12)
Top slide travel	mm	128	128
Cross slide travel	mm	285	285
Tool section size	mm	25x25	25x25
Leadscrew	-	40x4T.P.I or pitch 6mm	40x4T.P.I or pitch 6mm
Longitudinal feed range	mm/rev	0.031-1.7 (42)	0.031-1.7 (42)
Cross feed range	mm/rev	0.014-0.784 (42)	0.014-0.784 (42)
Metric threads range (kinds)	mm	0.1-14 (41)	0.1-14 (41)
Inch threads range (kinds)	TPI	2-112 (60)	2-112 (60)
Diametrical threads range (kinds)	DP	4-112 (50)	4-112 (50)
Module threads range (kinds)	MP	0.1-7 (34)	0.1-7 (34)
Tailstock quill diameter	mm	60	60
Tailstock quill travel	mm	130	130
Tailstock quill taper	-	MT4	MT4
Main motor power	kw	5.5	5.5
Coolant pump power	kw	0.1	0.1
Machine dimensions (LxWxH)	cm	220/275/325x108x134	220/275/325x108x137
Packing size (LxWxH)	cm	225/280/330x112x162	225/280/330x112x162
Net weight	kg	1580/1745/1900	1645/1810/1965
Gross weight	kg	1844/2049/2229	1910/2115/2295



- This machine adopts 45° inclined layout, and the bed is tubular hollow structure, which greatly improves the bending and torsional rigidity of the machine during work. At the same time, after two aging treatments, the stability of the machine is improved, and the rigidity is high. The high stability of the bed provides a powerful guarantee for the high precision of the whole machine.
- The spindle of the machine is an independent spindle unit. It is equipped with high-precision spindle special bearings. The lubrication uses imported special bearing grease (KLUBER). The whole spindle unit has small thermal deformation, good thermal stability, good precision retention and maintenance-free. The high-precision, high-rigidity, high-speed, high-efficiency of the spindle unit enables the whole machine to finish rough and finish machining.
- The feed system is driven by the servo motor directly, with good rigidity and dynamic characteristics. The entire sliding surface is plasticized or lined to eliminate creep, greatly improve the working precision, complete precise movement and positioning, and increase wear resistance of the moving parts of the machine, and enhance the impact resistance, so that the performance of the whole machine can maintain the accuracy of the guide rail for a long time and improve the service life of the machine.
- This machine is equipped with perfect rotary cylinder and three-jaw power chuck. The hydraulic system, hydraulic pump and various hydraulic valves are all famous brand products with high reliability.
- This machine adopts high-quality and reliable domestic or world-renowned numerical control system, advanced full-interchange digital servo, advanced electrical control system design, reasonable application of electrical components, and the failure rate is minimized in similar products.
- This machine adopts a fully enclosed protective cover. The design of the protective cover is firm and reliable, and everything is safe and convenient for users.
- The tailstock sleeve is hydraulically driven, saving time and effort, and has a moving and positioning inter-turning device to prevent misoperation, providing users with safety guarantee during operation and use.
- This full-function CNC lathe is suitable for the processing of various shaft and disc parts with high precision requirements, high processing difficulty, many processes and mass production. At present, this machine has been widely used in motorcycle industry and the automobile manufacturing industry.



3-jaw Hydraulic Chuck



4-jaw Hydraulic Chuck



Hydraulic Turret



Hydraulic tailstock

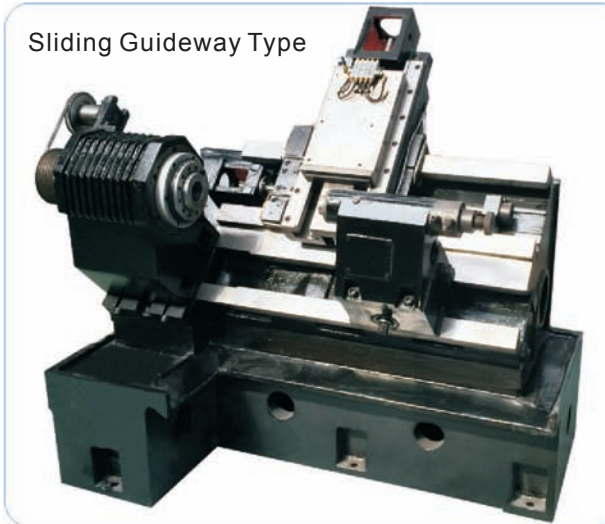


Electric Cabinet

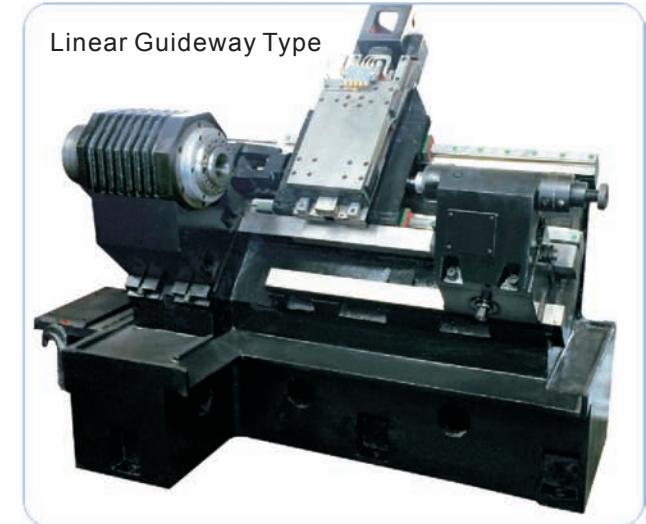


Hydraulic Rest

Sliding Guideway Type



Linear Guideway Type



STANDARD ACCESSORIES:

FANUC CNC system, 8-station hydraulic tool post, Hydraulic chuck, Electronic handwheel, Lubrication system, Cooling system, Work lamp, Pilot lamp, Full protection guard, Heat exchanger, Leveling blocks & bolts, Tools & tool-box, Operation manuals.

OPTIONAL ACCESSORIES:

GSK, SIEMENS CNC system, Air conditioner, Hydraulic hollow chuck, Tool setter, Bar feeder, Hydraulic tailstock, Chain type chip conveyor.

SPECIFICATION	UNIT	CK-32	CK-36	CK-45
Max. swing over bed	mm	420	550	500
Max. swing over cross slide	mm	220	220	220
Standard turning diameter	mm	210	210	210
Max. turning diameter	mm	320	360	360
Max. turning length	mm	350	500	750
Spindle speed	rpm	3500	3000	2500
Spindle nose	-	A2-5	A2-6	A2-6
Spindle bore	mm	56	62	66
Hydraulic chuck size	mm	160	200	200
Cross travel (X)	mm	210	230	220
Longitudinal travel (Z)	mm	450	600	850
X/Z-axis rapid feed speed	m/min	20/12	24/24	20/20
Hydraulic cool post type	-	80-8T	80-8T	80-8T
Tool section size	mm	25x25/φ32	25x25/φ32	25x25/φ32
Tailstock quill diameter	mm	52	110	110
Tailstock quill travel	mm	60	100	100
Tailstock quill taper	-	MT4	MT5	MT4
Bed structure	-	45° Integral bed	45° Integral bed	45° Integral bed
Guideway type	-	Linear/Sliding	Linear/Sliding	Linear/Sliding
Main motor power	kw	7.5	11	7.5
Power supply	kva	30	25	30
Machine dimensions (LxWxH)	mm	2600x1800x1600	2900x1800x1750	2900x1800x1600
Machine weight	kg	2700	3200	3200

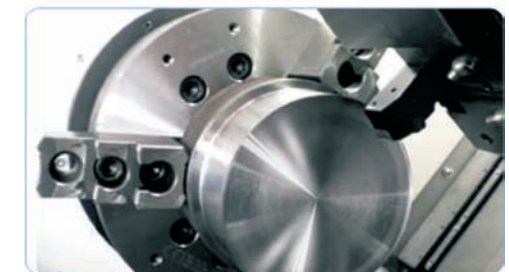


STANDARD ACCESSORIES:

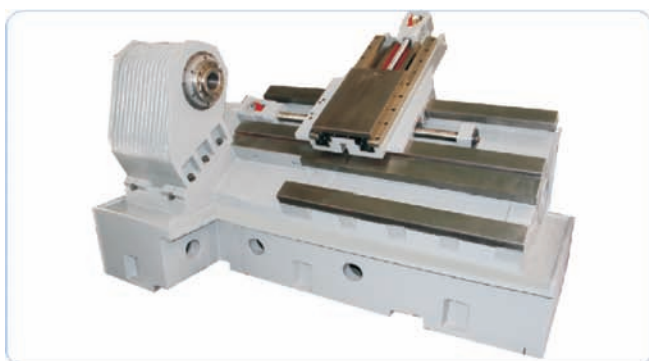
FANUC CNC system, Hydraulic chuck, 8/12-station tool turret, Hydraulic tool post, Electronic handwheel, Lubrication system, Cooling system, Work lamp, Pilot lamp, Protection guard, Heat exchanger, Leveling blocks & bolts, Tools & tool-box, Operation manuals.

OPTIONAL ACCESSORIES:

GSK, SIEMENS CNC system, Air conditioner, Tool setter, Chain type chip conveyor.



- This type slant bed CNC lathe is semi-closed loop CNC machine, which is suitable to turn various complicated shaft, sleeve and disk-like work-pieces, such as turning of internal and external cylindrical, conical and other circumgyration surface as well as various metric, inch, modular and diametric pitch threads;
- They can also be used for oil grooves and keyways broaching, end-facing, grooving and chamfering, etc;
- The unique construction developed using FEA techniques to provide maximum stiffness under the heaviest cutting conditions;
- It is especially suitable for the machining of high precision work-pieces, and also widely used to machining parts in batches in the fields of automobile, motorcycle, engineer industry, aero-craft, home-appliance, bearing, hardware, etc.
- One-piece casting iron bed with 30° (CK-50 is 45°) slant bed. Spindle can realize stepless speed change by servo main motor drive belt transmitting torque to spindle. Spindle box without gears can reduce noise and vibration.
- Equipped standard with SIEMENS/FANUC CNC system, servo feed motors are installed on X/Z-axis for providing power.
- Precision linear guideways on X/Z-axis for high rapid feed speeds and high positioning accuracy.
- Direct drive and torsion-free, large pre-loaded ball screws with dual-preloaded spindle nuts ensure long-term accuracy.



Integral Bed With Sliding Guideway



Integral Bed With Linear Guideway

SPECIFICATION	UNIT	CK-50	CK-63	CK-80
Max. swing over bed	mm	570	660	800
Max. swing over cross slide	mm	320	500	640
Standard turning diameter	mm	250	380	460
Max. turning diameter	mm	360	550	660
Max. turning length	mm	450/750/1350/2000/3000	750/1500/3000	750/1500/3000
Max. diameter of bar	mm	74	90	90
Spindle speed	rpm	2000	1500	1500
Spindle nose	-	A2-8	A2-11	A2-11
Spindle bore	mm	86	112	112
Chuck size	mm	250	380	380
Cross travel (X)	mm	250	400	400
Longitudinal travel (Z)	mm	600/1000/1500/2150/3150	860/1640/3200	860/1640/3200
X/Z-axis rapid feed speed	m/min	20/16	16/16 (sliding: 12/12)	12/16 (sliding: 12/12)
Hydraulic tool post type	-	100-8T	125-12T	125-12T
Tool section size	mm	25x25/Φ40	25x25/Φ40	25x25/Φ40
Tailstock quill diameter	mm	75/110	150	150
Tailstock quill travel	mm	100	150	150
Tailstock quill taper	-	MT4/MT5	MT5, rotary	MT5, rotary
Bed structure	-	45° Integral bed	30° Integral bed	30° Integral bed
Guideway type	-	Linear/Sliding	Linear/Sliding	Linear/Sliding
Working accuracy	mm	IT6	IT6	IT6
X-axis repositioning accuracy	mm	0.006	0.008	0.008
Z-axis repositioning accuracy	mm	0.008/0.01/0.013/0.017/0.021	0.01/0.013	0.01/0.013
Roughness	um	Ra1.6	Ra1.6	Ra1.6
Main motor power	kw	11 /15	22	22
Power supply	kva	35	50	50
Machine dimensions (LxWxH)	mm	2900/3100/4300/4950/5600x1800x1800	3700/4400/5900x2200x2200	3800/4400/5900x2200x2200
Machine weight	kg	3100/3600/4600/5300/6900	5500/6000/7300	5800/6500/7800

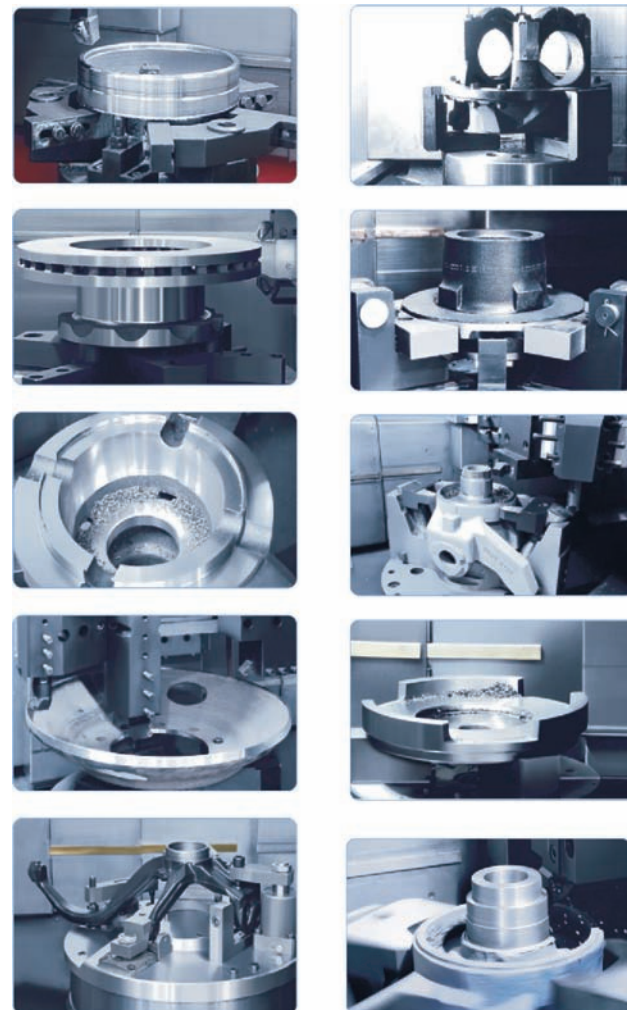
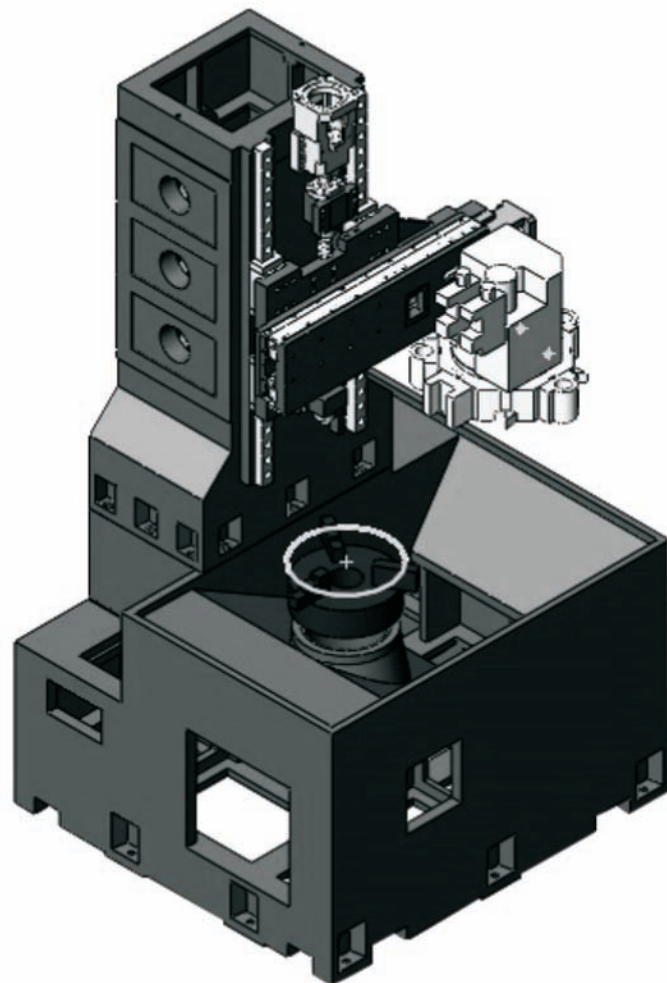
- VTC series CNC vertical lathe is an automatic CNC machining machine for machining the inner and outer cylindrical surface, cone surface, end surface, groove and chamfer of the parts. The machine is especially suitable for processing of plate type workpiece like the vehicle brake hub, wheel drums, clutch platens, flywheel casings, etc.
- Single-column vertical guide rail structure, vertical column, base and sliding seat are all made of high-grade gray cast iron. Column and slide rail are both high-frequency quenching, and the moving surface of the guide rail is plasticized to ensure long-term use, stability and accuracy retention.
- The machine spindle adopts a large torque spindle servo motor, which is suitable for strong cutting; it is also suitable for semi-finishing and finishing of parts. The spindle adopt imported NSK bearings with high rotation precision, low heat generation and low noise.
- The X/Z axis feed is automatically fed by the servo motor. The Z-axis is nitrogen balanced, and the structure is simple and reliable, and the failure rate is low.
- The X/Z axis adopts precision ball screw and imported screw special bearings to meet the requirements of high precision and high rigidity cutting.
- The spindle bearing of the machine is lubricated by thin oil, and the guide rail is lubricated by electric lubricating oil pump.
- The machine tool post adopts the electric tool post or gang type tool plate, with high accuracy and efficiency.
- Special tooling, hydraulic chuck, cooling pump, chip conveyor and chip flushing device can be configured according to user requirements.

STANDARD ACCESSORIES:

GSK CNC system, Hydraulic chuck, Electric tools turret, Electronic handwheel, Lubrication system, Cooling system, Nitrogen balancer, Work lamp, Pilot lamp, Protection guard, Heat exchanger, Leveling blocks & bolts, Tools & tool-box, Operation manuals.

OPTIONAL ACCESSORIES:

FANUC CNC system, SIEMENS CNC system, Air conditioner, Chain type chip conveyor.



SPECIFICATION	UNIT	VTC400	VTC500	VTC630	VTC800
Max. turning diameter	mm	400	500	630	800
Max. swing diameter	mm	630	630	700	900
Chuck size	mm	400	400	400/600	600
Spindle speed	rpm	50-2000	50-2000	10-1000	100-1000
Tool post cross travel (X)	mm	410	400	630	630
Tool post vertical travel (Z)	mm	500	600	600	700
X/Z-axis feed speed	mm/min	0.1-1000	0.1-1000	0.1-1000	0.1-1000
X/Z-axis rapid feed speed	m/min	10/15	16/12	10/15	4/6
Tool post type	-	V6	H8	Gang-type/V4	Gang-type/V4
Tool section size	mm	32x32	32x32	32x32	32x32
X/Z-axis positioning accuracy	mm	0.018	0.006	0.01	0.02
X/Z-axis repositioning accuracy	mm	0.006	0.008	0.008	0.012
Main motor power	kw	22	18.5/22	15/18.5	18.5/22
X-axis feed motor power	kw	2.5	2	2.3	2.3
Z-axis feed motor power	kw	2.5	3	2.3 (brake)	2.3 (brake)
X/Z-axis feed motor torque	NM	15	10	15	15
Machine weight	kg	4700	5000	5500	6000