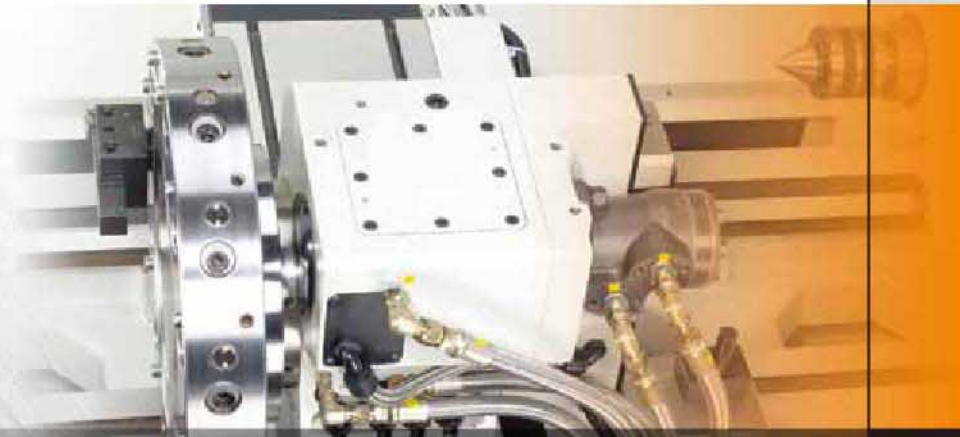




FLAT BED CNC LATHE



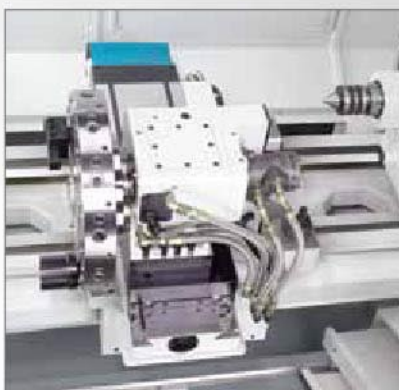
*The Most Economical, User Friendly,
Yet Highly Capable CNC Lathe Available!*



Safe, Easy Operation And High Performance Are The Result Of Ingenuity And Quality Workmanship



- The extended movement of the ruggedly constructed right hand side and left hand side sliding doors facility for easy loading & unloading of long, heavy workpiece.
- Fluorescent tube provides superior lighting.
- Removable and large rear inspection panel for easy maintenance and cleaning.
- 2-range / 3-range / 4-range auto gear shifting headstock ensures exceptional cutting capability.
- Big horse power spindle motor delivers maximum torque at all speeds, smoothly transmitted via V belts.
- Auto detection ensures the correct speed range is selected.



- The extremely wide X, Z axes slide ways, full length supported carriage construction and the wide, strong & rigid bed ways assure the excellent cutting capability and accuracy.
- The swivelable operation panel cabinet at the right hand side door is not only handy, user friendly operation but also wide field of vision.
- The arrangement of clear and wide cutting chip drain space enables cutting chips easily dropping down and handy clearance.

CNC MACHINE SERIES

FL-3510CNC ▶



FL-5120CNC ▶



FL-6120CNC ▶

■ w / Optional 'Independent and Movable' 2-handwheel operation panel cabinet



CNC MACHINE SERIES



▲
FL-6615CNC



▲
FL-7610CNC
■ w / Optional C axis and "Diplomatic" driven tools servo turret w / hydraulic unit, steel belt chip conveyer.

CNC MACHINE SERIES



▲ **FL-8040CNC**
■ w / Optional full enclosure guard



▲ **FL-12010CNC**

OPTIONAL ACCESSORIES / EQUIPMENTS



- 'Independent and movable' 2-handwheel operation panel cabinet (opt.)



- Hydraulic self-centering steady rest (opt.)



- Hydraulic tailstock(opt.)



- Double-chuck equipment (opt.)



- 2-way quick change tool post w/4 tool holders (opt.)



- Electrodynamic fourway tool turret (opt.)



- Hydraulic tool turret (opt.)



- Hydraulic tool turret w / VDI disc (opt.)



- "Duplomatic" driven tools servo turret (opt.)



- Hydraulic hollow power chuck (opt.)



- Steel belt chip conveyer (opt.)

SPECIFICATIONS

MODEL	FL-3510CNC	FL-4410 / 4415CNC	FL-5110 / 5115 / 5120 / 5130CNC	FL-5610 / 5615 / 5620 / 5630CNC
WORKING CAPACITY				
Swing over bed	356mm (14")	440mm (17-5/16")	510mm (20")	560mm (22")
Center height	178mm (7")	220mm (8-5/8")	255mm (10")	280mm (11")
Swing over cross slide	170mm (6-11/16")	240mm (9-7/16")	290mm (11-3/8")	340mm (13-3/8")
Distance between centers	945mm (37-3/16")	900mm (35-7/16") (FL-4410CNC) 1400mm (55-1/8") (FL-4415CNC)	840mm (33") (FL-5110/5610CNC) 1340mm(52-3/4") (FL-5115/5615CNC) 1890mm(74-7/16") (FL-5120/5620CNC) 2890mm(74-7/16") (FL-5130/5630CNC)	
Width of bed		206mm (8-1/2")	300mm (11-13/16")	350mm (13-3/4")
Max. cutting diameter over bed	356mm (14")	440mm (17-5/16")	510mm (20")	560mm (22")
Max. cutting diameter over cross slide	170mm (6-11/16")	240mm (9-7/16")	290mm (11-3/8")	340mm (13-3/8")
HEADSTOCK				
Spindle speeds	50~3500 r.p.m. 3 ranges, infinitely variable	50~3000 r.p.m. 2 ranges, infinitely variable	30~2000 r.p.m. 3 ranges, infinitely variable	
Spindle nose	D1-4	D1-6	A1-8 or D1-8	
Spindle nose taper	MT NO.5	MT NO.6	1/19.231 (same taper as MT NO.7)	
Spindle bore	Ø 38mm (1-1/2")	Ø 55mm (2-3/16")	Ø 85mm (3-3/8")	
SADDLE				
Longitudinal travel (Z axis)	810 mm (31-7/8")	900mm (35-7/16") (FL-4410CNC) 1400mm (55-1/8") (FL-4415CNC)	800mm(31-1/2") (FL-5110/5610CNC) 1300mm(51-3/16") (FL-5115/5615CNC) 1800mm(70-7/8") (FL-5120/5620CNC) 2800mm(110-1/4") (FL-5130/5630CNC) (*about 70mm shorter w/ VDI 30 turret)	
Cross slide travel (X axis)		200mm (7-7/8")	250mm (9-7/8")	290mm (11-3/8")
TAILSTOCK				
Quill diameter	45mm (1-3/4")	52mm (2-1/16")	75mm (3")	
Quill travel	120mm (4-3/4")	150mm (5-7/8")	160mm (6-5/16")	
Quill taper	M.T. NO.3	MT NO.4	MT NO.5	
MOTOR				
Spindle motor	AC 5HP	AC 7 1/2HP	AC 10HP or AC 15HP(opt.)	
X/Z axis motor	X/Z axis : AC servo 1KW, 2000 r.p.m.	X/Z axis : AC servo 1KW, 2000 r.p.m.	X/Z axis : AC servo 1KW, 2000 r.p.m.	
Coolant pump motor	1/8 HP	1/8 HP	1/6 HP	
X,Z DRIVES				
Cutting feed rate	X/Z axis: 3 m/min(max.)	X/Z axis: 3 m/min(max.)	X/Z axis: 3 m/min(max.)	
Rapid traverse	X/Z axis: 7.5 m/min(max.)	X/Z axis: 7.5 m/min(max.)	X/Z axis: 7.5 m/min(max.)	
Machine weight (approx.)	950 kgs	1400 / 1700 kgs	3000 / 3300 / 3600 / 3900 kgs	3300 / 3600 / 3900 / 4200 kgs

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STANDARD ACCESSORIES

- Full enclosure guard (For FL-44/51/56 series : FL-61/66/71/76 series w/D.B.C. 0.9/1.4/1.9/2.9m, FL-80/100/120 series w/D.B.C. 1.1/2.1m and FL-125/150/175/200 series w/D.B.C. 2.0 m)
- Splash guard featuring w/inspection window + two sliding doors (For FL-76 series w/D.B.C. 3.9m, FL-80/100/120 series w/D.B.C. 3.1/3.9/4.9m and FL-125/150/175/200 series w/D.B.C. 3.0/4.0/5.0/6.0m)
- Economical semi-enclosed guarding including : Rear splash guard + chuck guard + tool post guard (for FL-3510CNC)
- One-piece iron casting base (FL-51/56/61/66/71/76/80/100/120 series)
- Floor type, one-piece iron casting base w/ bed (FL-125/150/175/200 series)
- Auto gear shifting for 2-range / 3-range / 4-range of spindle speed (for FL all series except FL-3510CNC)
- Manual gear shifting for 3 range of spindle speed (for FL-3510CNC)
- Work light
- Coolant pump device
- Automatic lubrication system
- RS-232 port
- Tool box w/tools
- Power transformer w/cabinet (except OEM)

***The lathes could be supplied without controller and servo motor/drives as OEM FRAME.**

SPECIFICATIONS

MODEL	FL-6110 / 6115 / 6120 / 6130CNC	FL-6610 / 6615 / 6620 / 6630CNC	FL-7110 / 7115 / 7120 / 7130CNC	FL-7610 / 7615 / 7620 / 7630 / 7640CNC
WORKING CAPACITY				
Swing over bed	610mm (24")	660mm (26")	710mm (28")	760mm (30")
Center height	305mm (12")	330mm (13")	355mm (14")	380mm (15")
Swing over cross slide	380mm (15")	430mm (16-15/16")	480mm (18-7/8")	530mm (20-7/8")
Distance between centers	900mm(35-7/16") (FL-6110/6610/7110/7610CNC) 1400mm(55-1/8") (FL-6115/6615/7115/7615CNC) 1900mm(74-13/16") (FL-6120/6620/7120/7620CNC) 2900mm(114-1/8") (FL-6130/6630/7130/7630CNC) 3900mm(153-1/2") (FL-7640CNC)			
Width of bed	450mm (17-11/16")			
Max. cutting diameter over bed	610mm (24")	660mm (26")	710mm (28")	760mm (30")
Max. cutting diameter over cross slide	380mm (15")	430mm (16-15/16")	480mm (18-7/8")	530mm (20-7/8")
HEADSTOCK				
Spindle speeds	30~2000r.p.m. (Ø85mm bore) 3 ranges, infinitely variable			
Spindle nose	A1-8 or D1-8 (Ø85mm bore) or A2-11 (Ø105mm / Ø155mm bore), (opt.)			
Spindle nose taper	1/19.231 (same taper as MT No.7)			
Spindle bore	Ø85mm (3-3/8") or Ø105mm (4-1/8"), (opt.) or Ø155mm (6-1/8"), (opt.) (FL-66/76 CNC)			
SADDLE				
Longitudinal travel (Z axis)	900mm(35-7/16") (FL-6110/6610/7110/7610CNC) 1400mm(55-1/8") (FL-6115/6615/7115/7615CNC) 1900mm(74-13/16") (FL-6120/6620/7120/7620CNC) 2900mm (114-1/8") (FL-6130/6630/7130/7630CNC) 3900mm(153-1/2") (FL-7640CNC) (*about 90mm shorter w/ VDI 40 turret)			
Cross slide travel (X axis)	340mm (13-3/8")	365mm (14-3/8")	390mm (14")	415mm (16-3/8")
TAILSTOCK				
Quill diameter	105mm (4-1/8")			
Quill travel	225mm (9")			
Quill taper	MT NO.5			
MOTOR				
Spindle motor	AC 15HP or AC 20HP (opt.)			AC 15HP or AC 20HP/ AC 30HP (opt.)
X/Z axis motor	X axis : AC servo 1KW, 2000 r.p.m. Z axis : AC servo 2KW, 2000 r.p.m.			X axis: AC servo 1KW, 2000 r.p.m. Z axis: AC servo 2KW,2000 r.p.m. (FL-7610/15/20/30 CNC) AC servo 3.5KW,2000 r.p.m. (FL-7640 CNC)
Coolant pump motor	1/6 HP			
X,Z DRIVES				
Cutting feed rate	X/Z axis: 3 m/min(max.)			
Rapid traverse	X/Z axis: 7.5 m/min(max.)			
Machine weight (approx.)	3600 / 4100 / 4600 / 5600 kgs	3700 / 4200 / 4700 / 5700 kgs	3800 / 4300 / 4800 / 5800 kgs	3900 / 4400 / 4900 / 5900 / 6900 kgs

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FLAT BED CNC LATHE



SPECIFICATIONS

MODEL	FL-8010 / 8020 /8030 / 8040 / 8050CNC	FL-10010 / 10020 / 10030 / 10040 / 10050CNC	FL-12010 / 12020 / 12030 / 12040 / 12050CNC
WORKING CAPACITY			
Swing over bed	800mm (31-1/2")	1000mm (39-3/8")	1200mm (47-1/4")
Center height	400mm (15-3/4")	500mm (19-11/16")	600mm (23-5/8")
Swing over cross slide	510mm (20")	710mm (27-15/16")	910mm (35-13/16")
Distance between centers	1100mm(43-5/16") (FL-8010/10010/12010 CNC) 2100mm(82-5/8") (FL-8020/10020/12020CNC) 3100mm(122") (FL-8030/10030/12030CNC) 3900mm(153-1/2") (FL-8040/10040/12040CNC) 4900mm(192-7/8") (FL-8050/10050/12050CNC)		
Width of bed	550mm (21-5/8")		
Max. cutting diameter over bed	800mm (31-1/2")	1000mm (39-3/8")	1000mm (39-3/8")
Max. cutting diameter over cross slide	510mm (20")	710mm (27-15/16")	910mm (35-13/16")
HEADSTOCK			
Spindle speeds	5~800 r.p.m. (Ø155mm bore) 4 ranges, infinitely variable		
Spindle nose	A2-11(Ø155mm bore) or A2-15 (Ø250mm bore) / A2-20 (Ø305/380mm bore), (opt.)		
Spindle nose taper	1/19.231 (same taper as MT No.7) (Ø155mm bore)		
Spindle bore	Ø 155mm (6-1/8") or Ø250mm(9-13/16")/Ø305mm(12")/Ø380mm(15"), (opt.)		
SADDLE			
Longitudinal travel (Z axis)	1000mm(39-3/8") (FL-8010/10010/12010CNC) 2000mm(78-3/4") (FL-8020/10020/12020CNC) 3000mm(118-1/8") (FL-8030/10030/12030CNC) 3800mm(149-9/16") (FL-8040/10040/12040CNC) 4800mm(188-15/16") (FL-8050/10050/12050CNC) (*about 90mm shorter w/ VDI 40 turret)		
Cross slide travel (X axis)	450mm (17-3/4")	550mm (21-5/8")	550mm (21-5/8")
TAILSTOCK			
Quill diameter	125mm (4-15/16")		
Quill travel	275mm (10-13/16")		
Quill taper	MT NO.6		
MOTOR			
Spindle motor	AC 30HP or AC 40HP (opt.)		
X/Z axis motor	X axis : AC servo 2KW,2000 r.p.m. Z axis : AC servo 3KW,2000 r.p.m. (FL-8010/8020 , 10010/10020 & 12010/12020 CNC) AC servo 4KW,2000 r.p.m. (FL-8030/8040 , 10030/10040 & 12030/12040CNC) AC servo 5KW,2000 r.p.m. (FL-8050 , 10050 & 12050CNC)		
Coolant pump motor	1/4HP		
X,Z DRIVES			
Cutting feed rate	X/Z axis: 3 m/min(max.)		
Rapid traverse	X/Z axis: 7.5 m/min(max.)		
Machine weight (approx.)	5000 / 5800 / 6600 / 7500 / 9200 kgs	5300 / 6100 / 6900 / 7800 / 9500 kgs	5600 / 6400 / 7200 / 8100 / 9800 kgs

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OPTIONAL ACCESSORIES / EQUIPMENTS

- Steady rest
 - Follow rest
 - 3-jaw chuck
 - 4-jaw chuck
 - Face plate
 - Double-chuck equipment
 - Hydraulic hollow power chuck
 - 2-way / 3-way quick change tool post w/4 tool holders
- Electrodynamic fourway tool turret
 - Hydraulic tool turret
 - C axis and driven tools servo turret
 - Hydraulic tailstock
 - Hydraulic self-centering steady rest
 - Live center (for high speed)
 - Steel belt chip conveyer
 - 'Independent and movable' 2-handwheel operation panel cabinet

***The lathes could be supplied without controller and servo motor/drives as OEM FRAME.**

SPECIFICATIONS

MODEL	FL-12520 / 12530 / 12540 / 12550 / 12560CNC	FL-15020 / 15030 / 15040 / 15050 / 15060CNC	FL-17520 / 17530 / 17540 / 17550 / 17560CNC	FL-20020 / 20030 / 20040 / 20050 / 20060CNC
WORKING CAPACITY				
Swing over bed	1250mm (49-1/4")	1500mm (59")	1750mm (68-7/8")	2000mm (78-3/4")
Center height	625mm (24-5/8")	750mm (29-1/2")	875mm (34-7/16")	1000mm (39-3/8")
Swing over cross slide	890mm (35")	1140mm (44-7/8")	1390mm (54-3/4")	1640mm (64-9/16")
Distance between centers	2000mm(78-3/4") (FL-12520/15020/17520/20020CNC) 3000mm(118-1/8") (FL-12530/15030/17530/20030CNC) 4000mm(157-1/2") (FL-12540/15040/17540/20040CNC) 5000mm(196-7/8") (FL-12550/15050/17550/20050CNC) 6000mm(236-1/4") (FL-12560/15060/17560/20060CNC)			
Width of bed	820mm (32-1/4")			
Max. cutting diameter over bed	1250mm (49-1/4")	1500mm (59")	1600mm (63")	1600mm (63")
Max. cutting diameter over cross slide	890mm (35")	1140mm (44-7/8")	1390mm (54-3/4")	1600mm (63")
HEADSTOCK				
Spindle speeds	4 ~ 600 r.p.m. (Ø155mm bore) 4 ranges, infinitely variable			
Spindle nose	A2-11 (Ø155mm bore) or A2-15 (Ø250mm bore) / A2-20 (Ø305/380mm bore) / A2-28 (Ø534mm bore) (opt.)			
Spindle nose taper	—			
Spindle bore	Ø155mm (6-1/8") or Ø250mm (9-7/8") / Ø305mm (12") / Ø380mm (14-15/16") / Ø534mm (21") (opt.)			
SADDLE				
Longitudinal travel (Z axis)	2000mm(78-3/4") (FL-12520/15020/17520/20020CNC) 3000mm(118-1/8") (FL-12530/15030/17530/20030CNC) 4000mm(157-1/2") (FL-12540/15040/17540/20040CNC) 5000mm(196-7/8") (FL-12550/15050/17550/20050CNC) 6000mm(236-1/4") (FL-12560/15060/17560/20060CNC)			
Cross slide travel (X axis)	675mm (26-9/16")	800mm (31-1/2")	850mm (33-1/2")	850mm (33-1/2")
TAILSTOCK				
Quill diameter	200mm (7-7/8") or rotation 295mm(11-5/8) (opt.)			
Quill travel	300mm (11-13/16")			
Quill taper	MT NO.6			
MOTOR				
Spindle motor	AC 40HP or AC 50HP (opt.)			
X/Z axis motor	X axis : AC Servo 3KW Z axis : AC Servo 4KW (FL-12520/15020/17520/20020CNC) 5KW (FL-12530/12540, 15030/15040, 17530/17540 & 20030/20040CNC) 7KW (FL-12550/12560, 15050/15060, 17550/17560 & 20050/20060CNC)			
Coolant pump motor	1/2 HP			
X,Z DRIVES				
Cutting feed rate	X/Z axis : 3 m/min. (max.)			
Rapid traverse	X/Z axis : 7.5 m/min.(max.)			
Machine weight (approx.)	10000 / 11000 / 12000 / 13000 / 14000 kgs	11000 / 12000 / 13000 / 14000 / 15000 kgs	12000 / 13000 / 14000 / 15000 / 16000 kgs	13000 / 14000 / 15000 / 16000 / 17000 kgs

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Manufacturer, Exporter & Importer

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