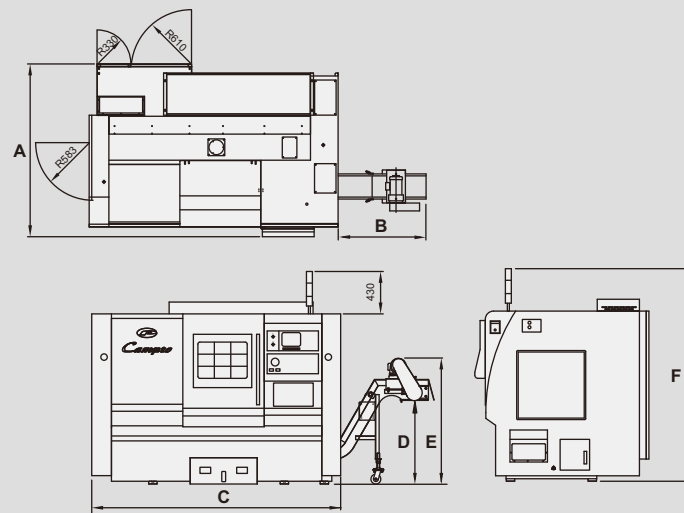
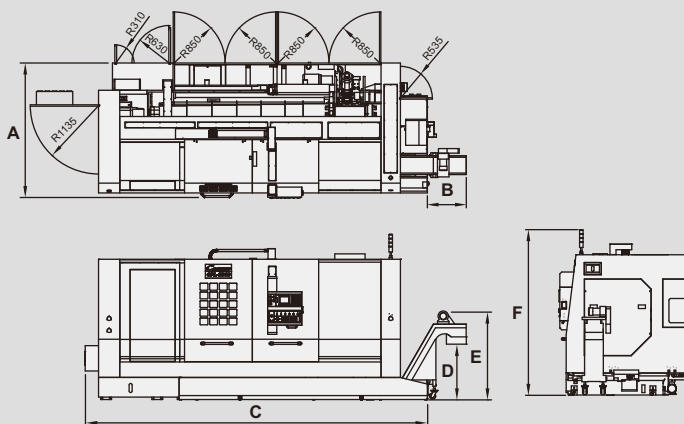


Machine Dimensions



Unit : mm

MODEL	A	B	C	D	E	F
CPL-10MC	1,625	810	2,152	770	1,210	2,115
CPL-20MC	1,785	820	2,635	810	1,255	2,235
CPL-30MC	1,785	780	3,095	810	1,255	2,235
CPL-3512MC	2,160	990	3,555	835	1,275	2,536
CPL-3010Y/SY	2,110	1,063	3,697	770	1,322	2,741



Unit : mm

MODEL	A	B	C	D	E	F
CPL-3518MC	2,250	1,100	4,563	920	1,360	2,735
CPL-3518MC (1,500 mm)	2,250	1,100	5,213	920	1,360	2,735
CPL-3520MC	2,250	1,100	4,683	920	1,360	2,735
CPL-3520MC (1,450 mm)	2,250	1,100	5,333	920	1,360	2,735



CPL-MC/Y/SY Series



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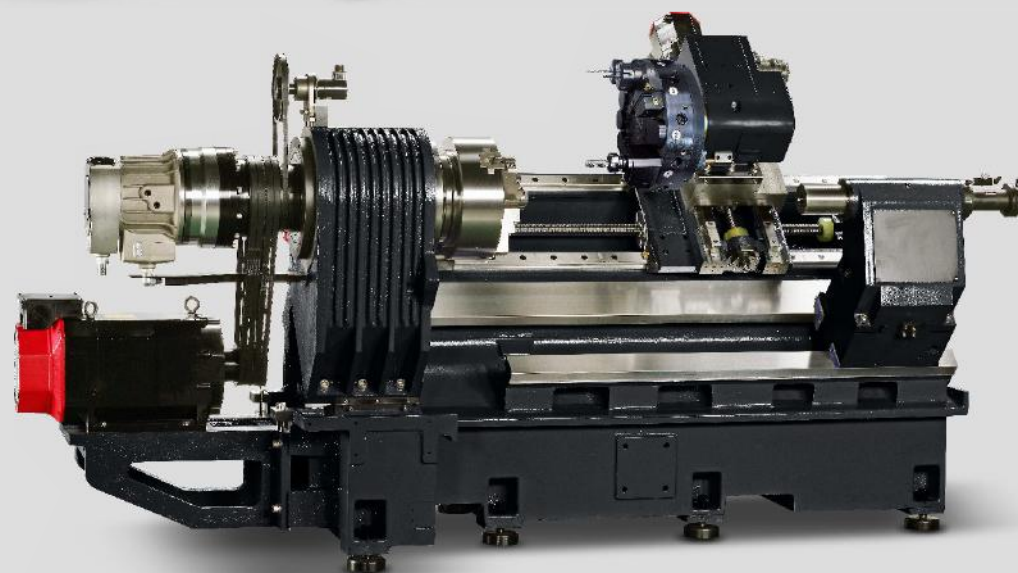


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2000-2013-06



Campro Precision Machinery Co., Ltd.
www.campro.com.tw



● CPL-10MC / 20MC / 30MC / 3512MC frame structure Linear guideways

● CPL-3518MC / 3520MC frame structure Box guideways

Headstock

Powerful AC spindle motor drive and finned headstock construction for excellent heat dissipation. High torque output combined with constant circumferential speed ensures optimal cutting performance, extra fine and accurate machined surface which greatly increase tool life.



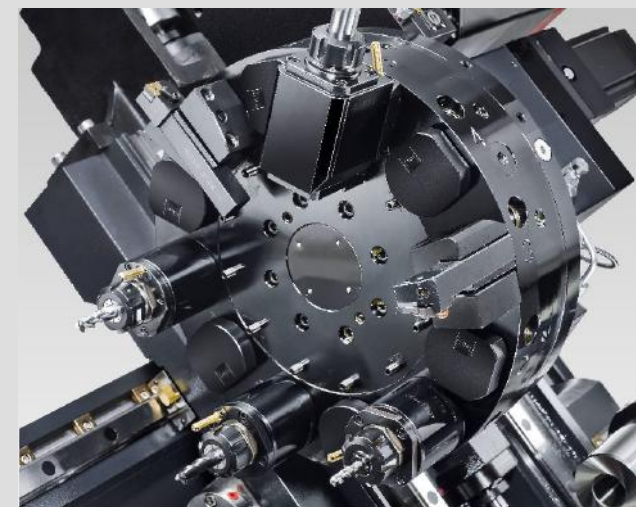
Coolant tank and chip conveyor

Big capacity of coolant tank combined with high pressure pump ensures superior cooling effect for both workpiece and tool. To meet various working area requirements, the customer may choose chip conveyor at side or rear of the machine. Also, various chip conveyors are provided to suit the different workpiece materials.



● Optional manual type steady rest

VDI Turret (CPL-10MC / 20MC / 30MC / 3512MC)



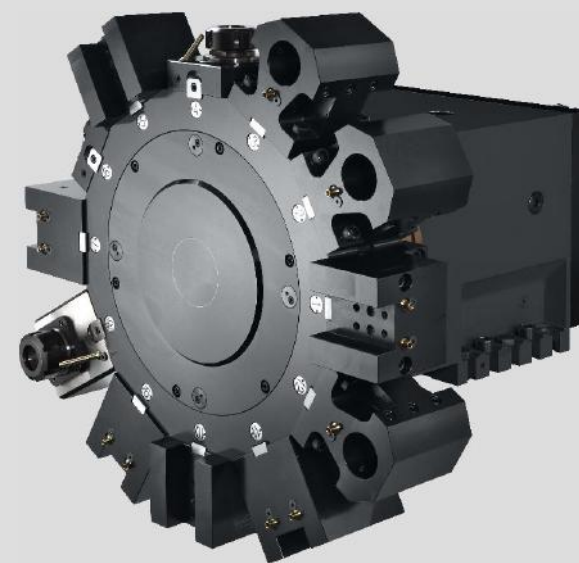
X-axis live tool holder



Z-axis live tool holder

Provide extremely accurate positioning and low noise.
Offer a quick change tooling solution and short cycle time.
Quick-change clamping method which performs within seconds.
High degree of stability due to high locking forces.
Connect with centralized lubrication system to ensure high service and usage life.

BMT Turret (CPL-3518MC / 3520MC)



X-axis live tool holder

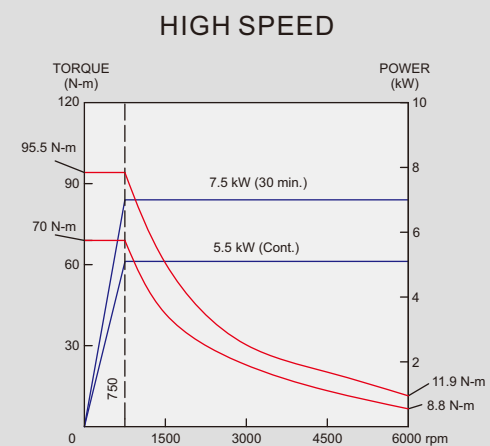
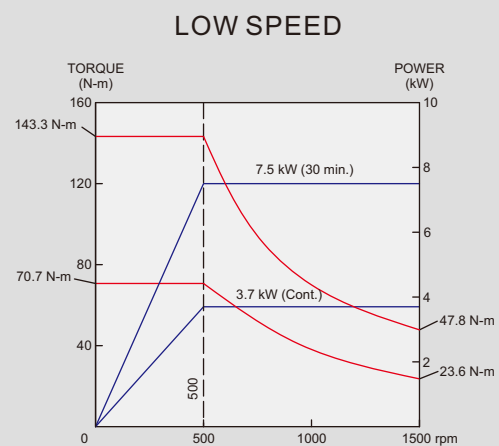


Z-axis live tool holder

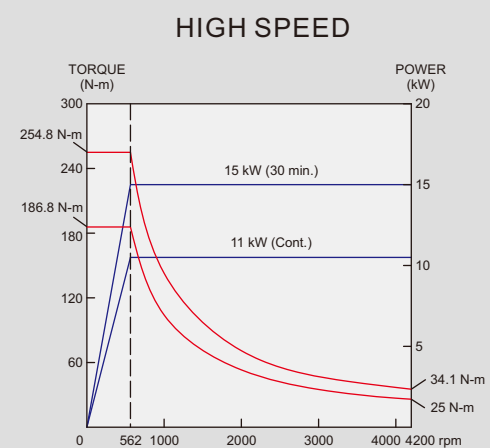
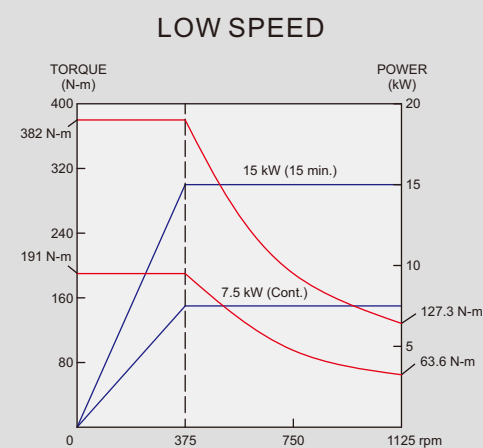
Provide superior rigidity for forward and reverse machining.
Drive with servo motor for very fast bidirectional swivel.
Heavy loads of stability due to high locking forces.
Hydraulic locking with special tripe generating crown gear.
Low kinetic energy of the indexing drive.
Fastening snap-ring groove for the tool disk.

Spindle Diagrams

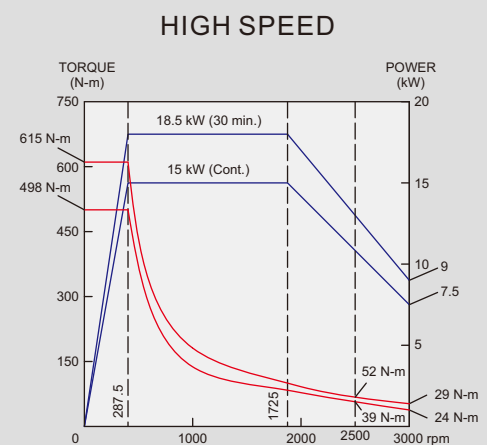
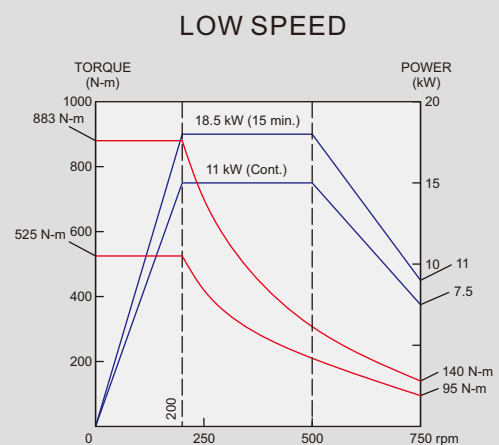
CPL-10MC



CPL-20MC

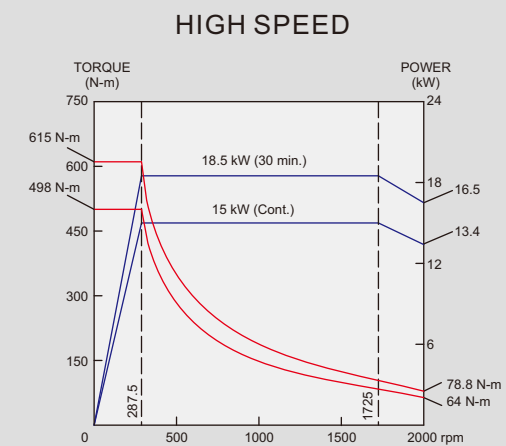
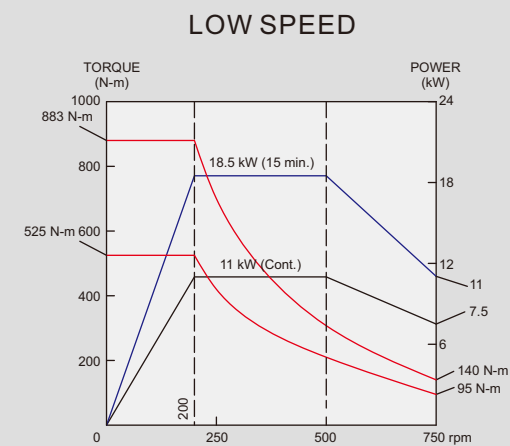


CPL-30MC

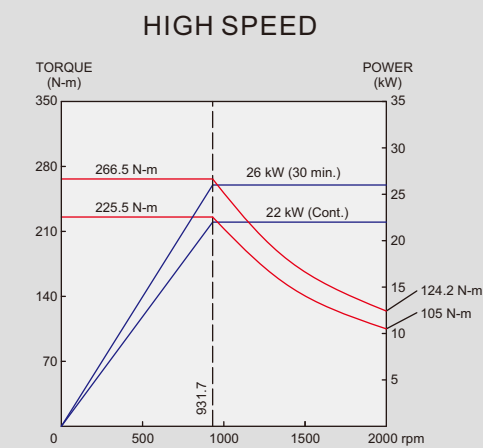
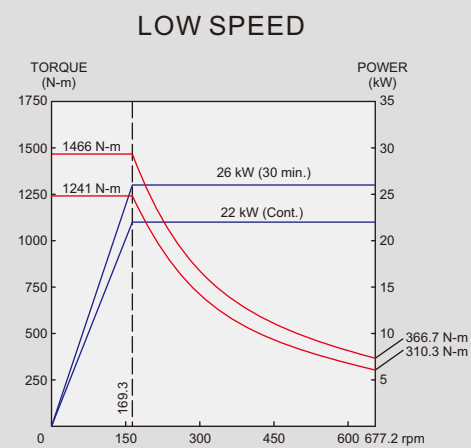


Spindle Diagrams

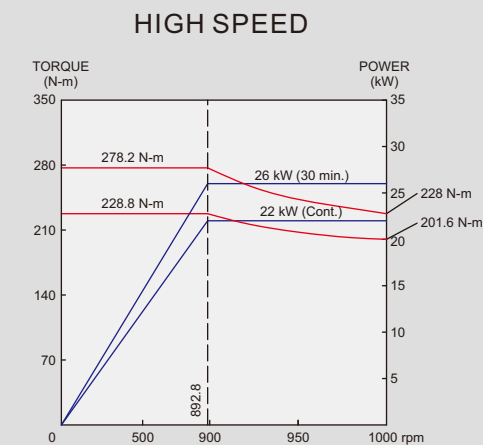
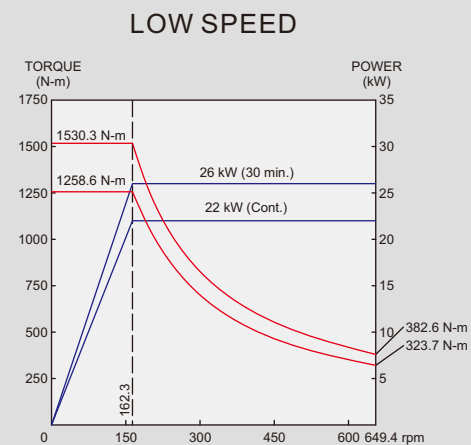
CPL-3512MC



CPL-3518MC

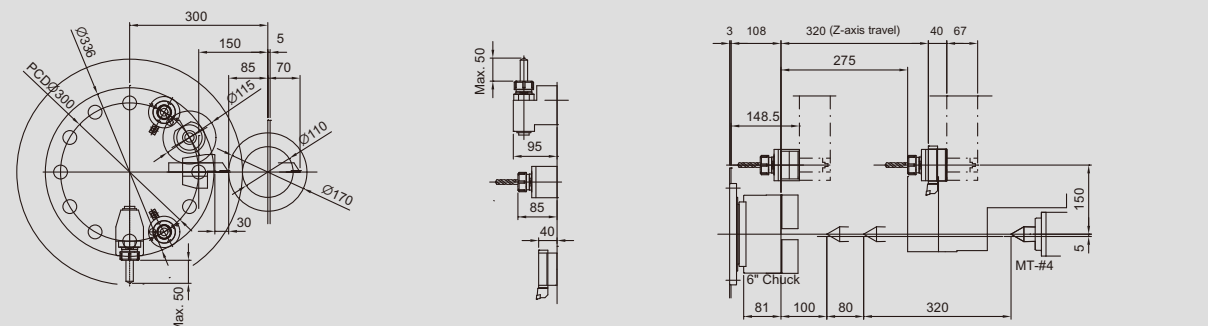


CPL-3520MC

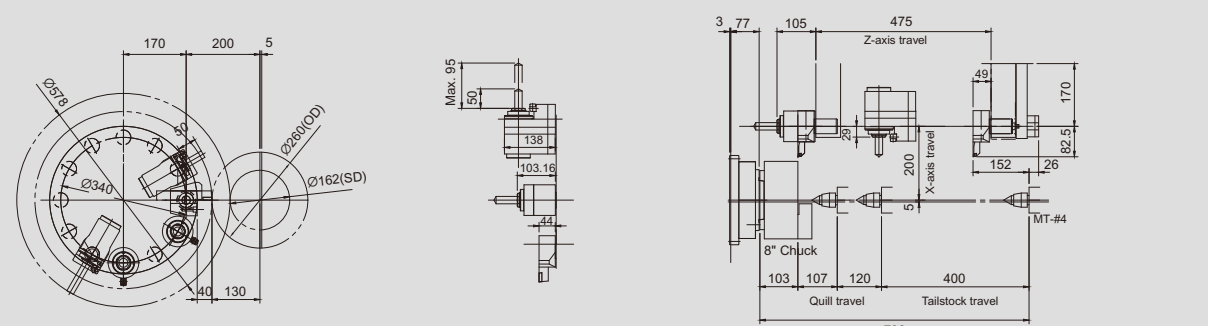


Working Capacity

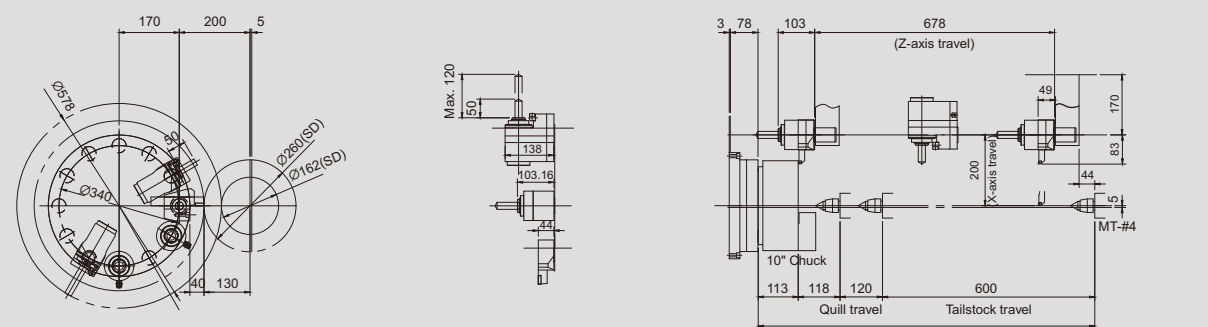
CPL-10MC



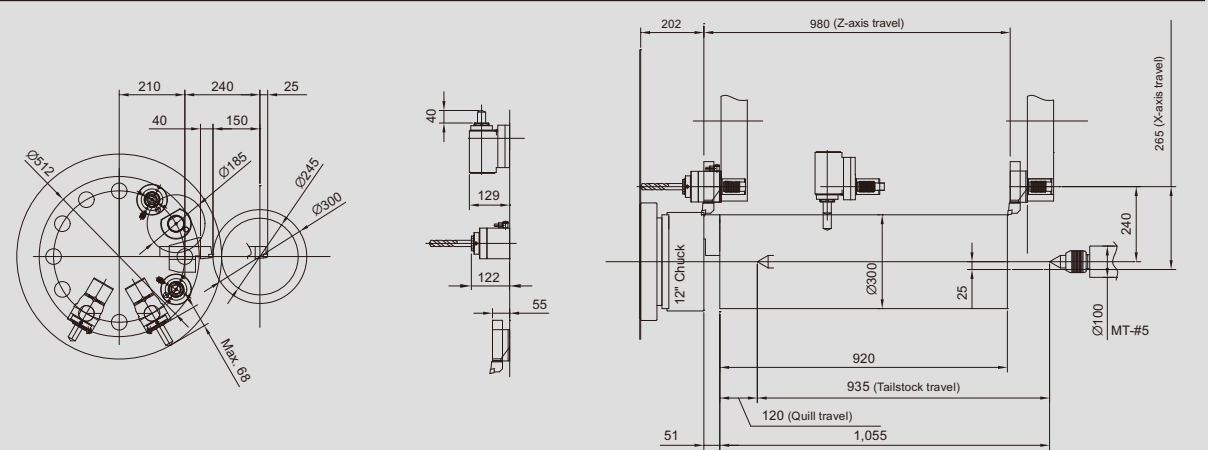
CPL-20MC



CPL-30MC

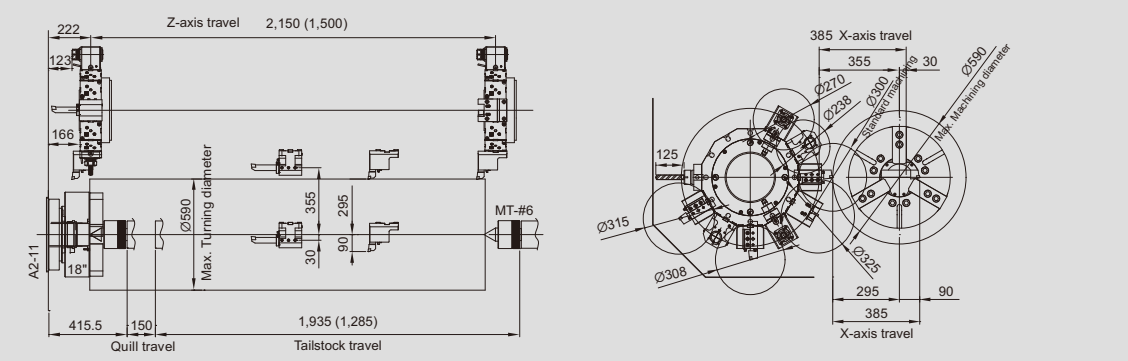


CPL-3512MC

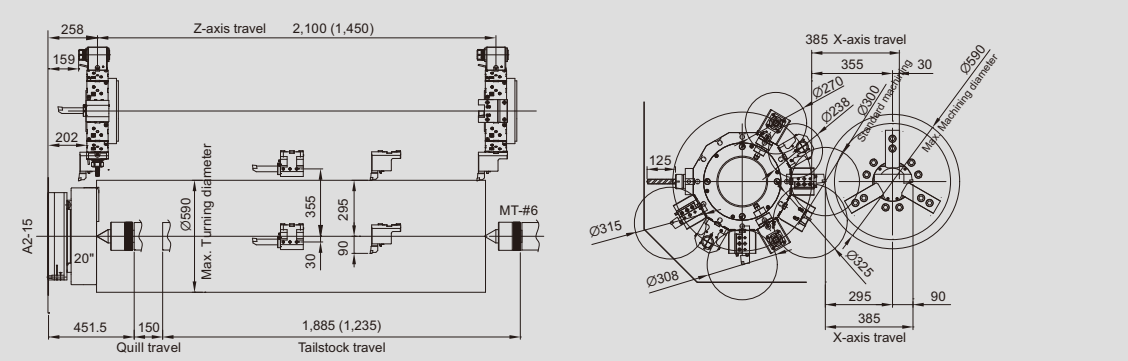


Working Capacity

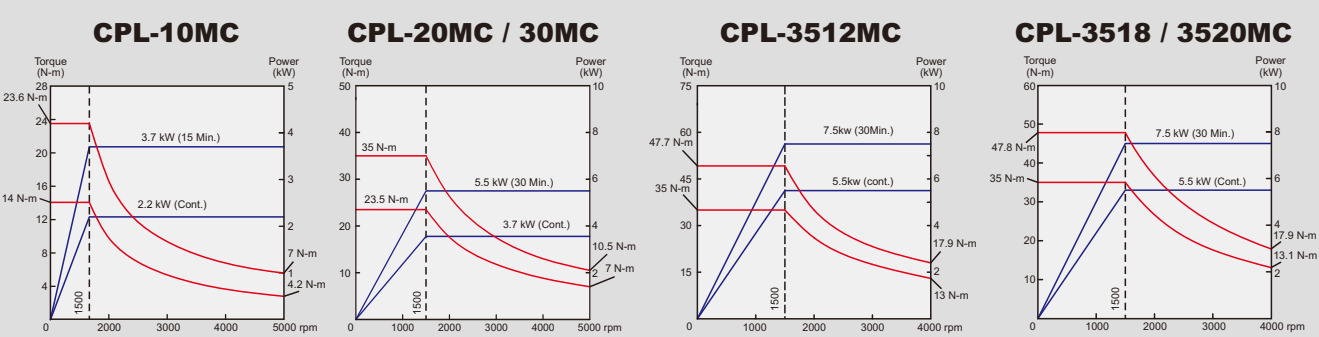
CPL-3518MC



CPL-3520MC



Torque diagrams of living turret



Cutting Capacity

	CPL-10MC	CPL-20MC	CPL-30MC	CPL-3512MC	CPL-3518MC	CPL-3520MC
	VDI-30	VDI-40	VDI-50	BMT-75		
Drilling (d x a) mm x mm / u	14 x 0.15	20 x 0.2	20 x 0.2	22 x 0.2	32 x 0.3	32 x 0.3
Tapping (d x p) mm x mm	M10 x 1.5	M24 x 1.5	M24 x 1.5	M27 x 1.5	M24 x 3	M24 x 3
Milling (d x p x a) mm x mm x mm / min	20 x 10 x 40	25 x 14 x 40	25 x 14 x 40	25 x 20 x 40	—	—
Milling (d x e x fz) mm x mm x mm / tooth	—	—	—	—	100 x 3 x 0.25	100 x 3 x 0.25

Machine Specifications

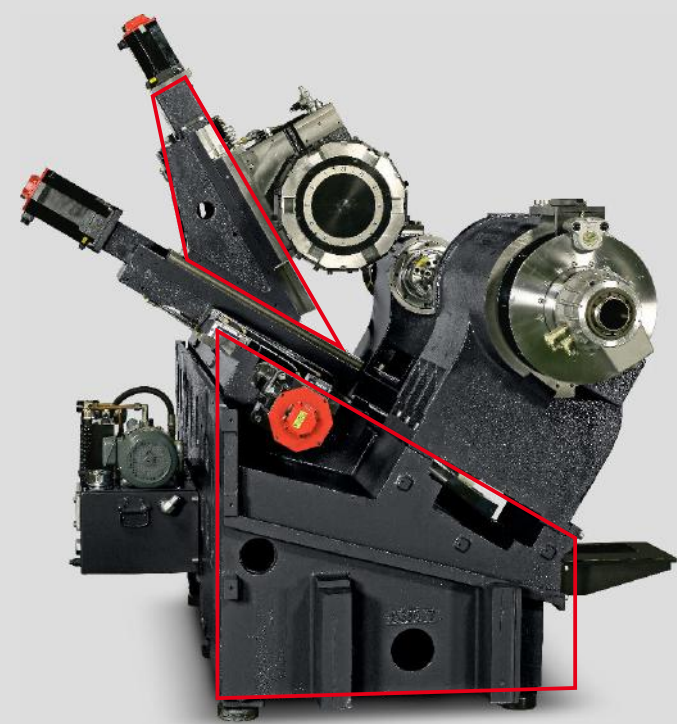
MODEL	UNIT	CPL-10MC	CPL-20MC	CPL-30MC	CPL-3512MC	CPL-3518MC	CPL-3520MC
CAPACITY							
Max. swing over bed	mm	450 (17.7")	540 (21.2")	570 (22.4")	700 (27.5")	900 (35.4")	
Max. swing over carriage	mm	258 (10.1")	300 (11.8")	335 (13.1")	500 (19.6")	700 (27.5")	
Distance between centers	mm	320 (12.6")	580 (22.8")	810 (31.8")	1,000 (39.9")	2,100 (1,450) 82.6" (57")	2,050 (1,400) 80.7" (55.1")
Max. turning length	mm	320 (12.6")	475 (18.7")	678 (26.6")	920 (36.2")	2,100 (1,450) 82.6" (57")	2,050 (1,400) 80.7" (55.1")
Standard turning diameter	mm	110 (4.3")	162 (6.3")	162 (6.3")	245 (9.6")	300 (11.8")	
Max. turning diameter	mm	170 (6.7")	260 (10.2")	260 (10.2")	300 (11.8")	590 (23.2")	
X-AXIS							
Travel	mm	150 + 5 (5.9" + 0.19")	200 + 5 (7.87" + 0.19")	200 + 5 (7.87" + 0.19")	240 + 25 (9.44" + 0.98")	350 + 35 (13.78" + 1.37")	
Rapid traverse	m/min.	24				20	
Z-AXIS							
Travel (Option)	mm	320 (12.6")	475 (18.7")	678 (26.6")	980 (38.58")	2,150 (1,500) 84.6" (59")	2,100 (1,450) 82.6" (57")
Rapid traverse	m/min.	24				20	
SPINDLE							
Spindle nose	type	A2-5	A2-6	A2-8	A2-11	A2-11	A2-15
Hydraulic chuck (Opt.)	inch	6" (8")	8" (10")	10" (12")	12" (15")	18" (20")	20" (24")
Hole through draw tube	mm	Ø45 (1.8")	Ø52 (2.04")	Ø75 (2.95")	Ø117.5 (4.62")	Ø117.5 (4.62")	Ø165 (6.49")
Spindle bearing diameter	mm	Ø90 (3.54")	Ø100 (3.93")	Ø130 (5.11")	Ø170 (6.69")	Ø170 (6.69")	Ø240 (9.44")
Spindle speed	rpm	6,000	4,200	3,000	2,000	2,000	1,000
Spindle motor	kW	5.5 / 7.5 (10HP)	11 / 15 (20HP)	15 / 18.5 (25HP)	15 / 18.5 (25HP)	22 / 26 (35HP)	22 / 26 (35HP)
Indexing of C-axis		0.001	0.001	0.001	0.001	0.001	0.001
TURRET							
Turret type	type	12-Servo	12-Servo		12-Servo	12-Servo	
Turret system	mm	VDI-30	VDI-40		VDI-50	BMT-75	
Tool change time	sec.				0.2		
Sevo motor	kW	2.2 / 3.7	3.7 / 5.5		5.5 / 7.5	5.5 / 7.5	
Max. tool speed	rpm	5,000	5,000		4,000	4,000	
TAILSTOCK							
Quill diameter	mm	Ø70 (2.75")	Ø80 (3.14")		Ø100 (3.93")	Ø150 (5.9")	
Quill travel	mm	80 (3.14")	120 (4.72")		120 (4.72")	150 (5.9")	
Quill taper	type	MT-#4			MT-#5	MT-#6	
OTHER							
Floor plan (with chip conveyor)	mm	2,962 x 1,625 (116.7" x 64")	3,455 x 1,785 (136.1" x 70.3")	3,875 x 1,785 (152.6" x 70.3")	4,545 x 2,160 (179" x 85.1")	6,313 x 2,250 (5,663 x 2,250) 248.6" x 88.6" (223" x 88.6")	6,433 x 2,250 (5,783 x 2,250) 253.3" x 88.6" (227.7" x 88.6")
Machine weight	kg	3,200 (7,055 lbs)	4,500 (9,921 lbs)	5,500 (12,125 lbs)	6,500 (14,330 lbs)	13,000 (11,500) 28,660 lbs (25,353 lbs)	13,100 (11,600) 28,880 lbs (25,573 lbs)
Coolant tank capacity	L	90 (23.7 gal.)	110 (28.6 gal.)	110 (28.6 gal.)	250 (65 gal.)	450 (117 gal.)	
Power capacity	KVA	15	25	30	30	40	

● Specification upgrading will not notify according to our ongoing innovation

Standard accessories			Optional accessories		
● 3-Jaw power chuck	● Coolant system	● 3-color signal light	● Collet chuck	● Oil mist collector	● CE modification
● Hard jaw: 1 set	● Coolant pump	● Working lamp	● Programmable tailstock	● Tool setter	● Transformer
● Soft jaw: 3 set	● Pretensioned ballscrews on 2 axes		● Special purposed chip conveyor	● Parts catcher	
● Hydraulic unit	● Hand wheel (MPG)		● Back side chip removing (CPL-10MC / 20MC / 30MC only)	● Automatic bar feeder	
● Manual tailstock	● Heat exchanger		● High pressure coolant pump	● Auto. door	
● Chain type chip conveyor	● Oil skimmer			● Air condition	

CPL-3010Y

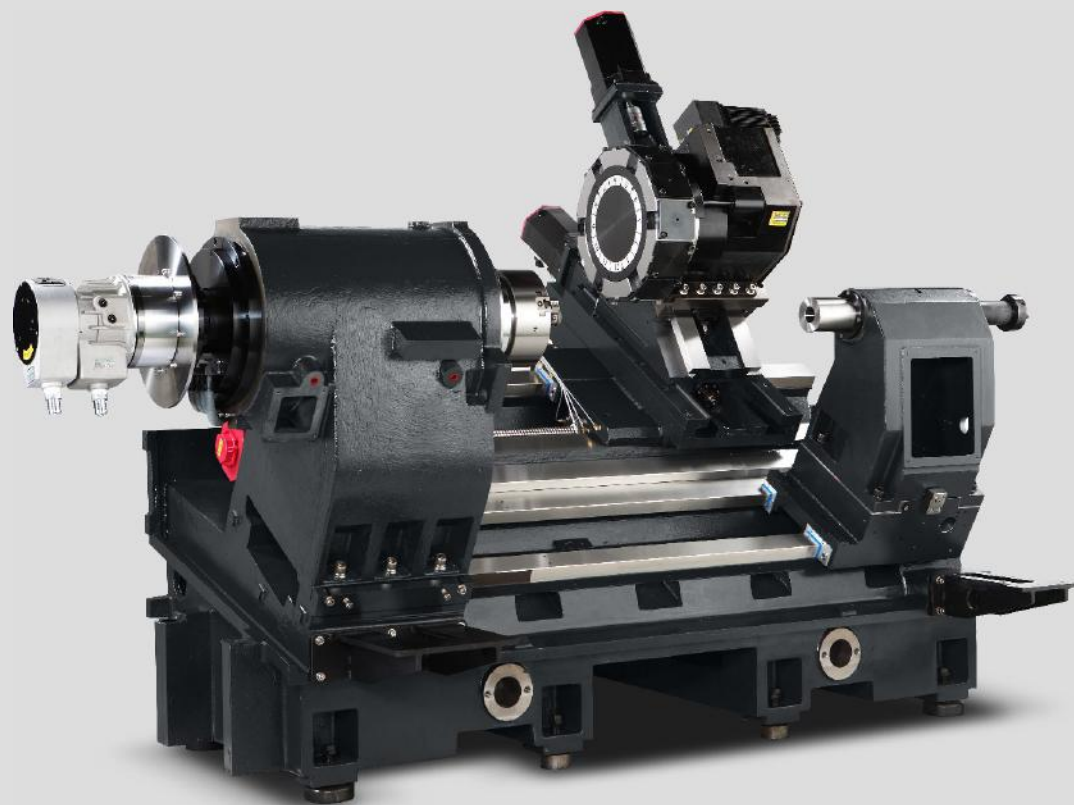
C / Y-axis with living turret



30 degree low profile machine structure design effectively increase machine stability which providing spindle head, servo turret and tailstock or sub-spindle for CPL-3010Y / 3010SY series a superior foundation.

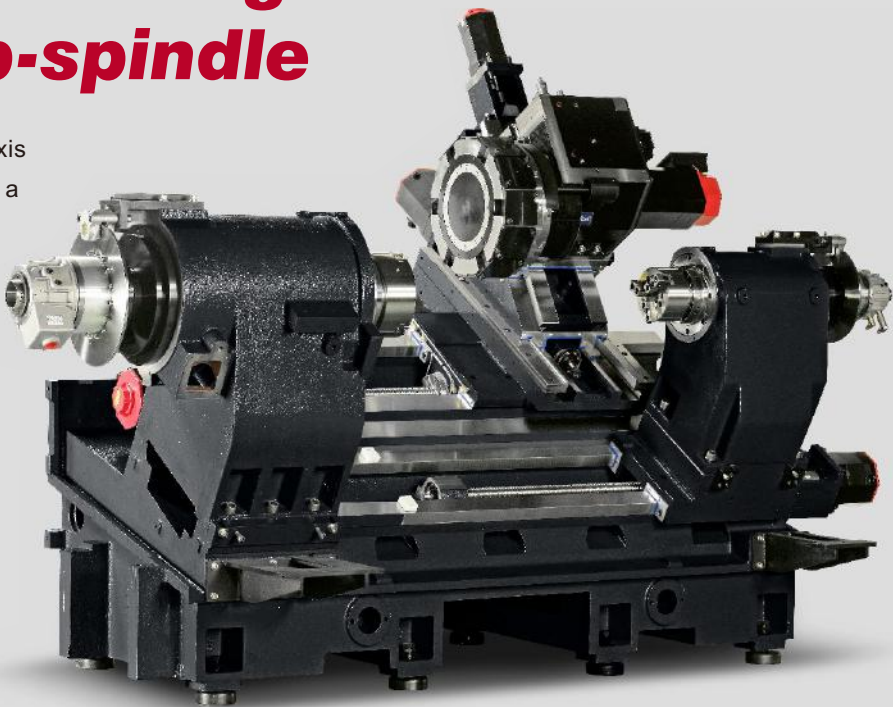
One piece slant bed with Meehanite casting relieves stress equally thru-out structure.

The CPL-3010Y / 3010SY series delivers superb, task-optimized performance for turning, boring or milling of chuck, bar and shaft workpieces.



CPL-3010SY

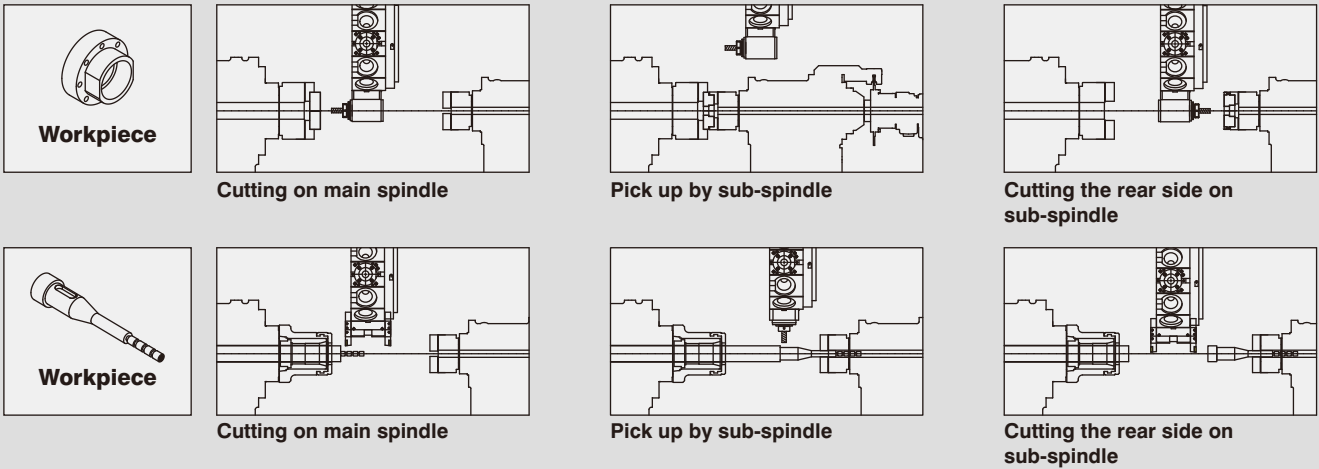
C / Y-axis with living turret & Sub-spindle



Servo turret with Y-axis and C1 / C2-axis increase performance feature such as a compound slide with a Y and B-axis, speed and angle synchronous workpiece hand-over and the highly precise milling / turning spindle.

Synchronous rotation between spindle and sub-spindle for automatic parts transfer give operators the assurance of having the right equipment for every machining task and workpiece size.

Combination of sub-spindle allows back side machining to be completed in a single set-up giving a real reduction in machine idle time. Highly precise complete machining of complex workpieces been as easy like with the newly design CPL-3010SY series.



	Speed	Spindle Nose	Hole Through Draw Tube	Spindle O.B.	Hole Through Spindle
Sub-Spindle	6,000 rpm	A2-5	32 mm	80 mm	41 mm
Main Spindle	4,000 rpm	A2-8	75 mm	140 mm	91 mm

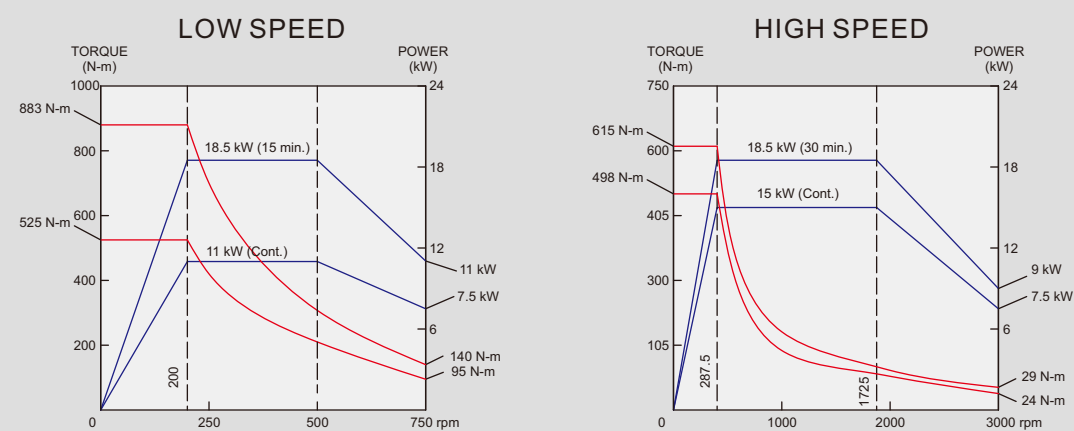
CPL-3010SY



Spindle Diagrams

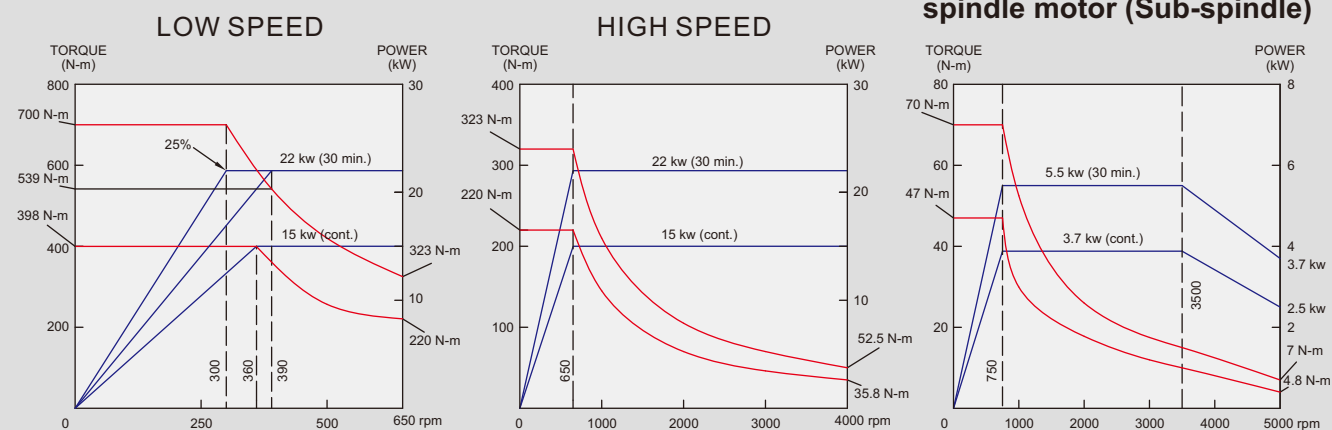
CPL-3010Y FANUC 25HP

Unit : mm



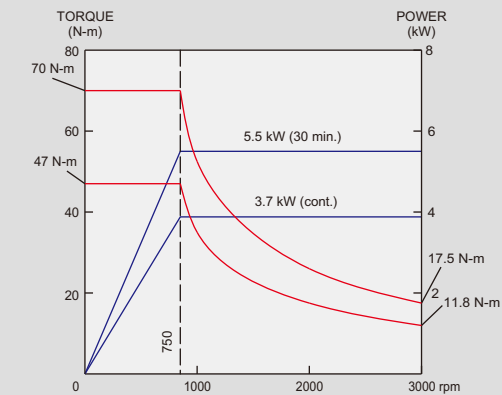
CPL-3010SY FANUC 30HP built-in spindle motor (Main-spindle)

FANUC 10HP built-in spindle motor (Sub-spindle)

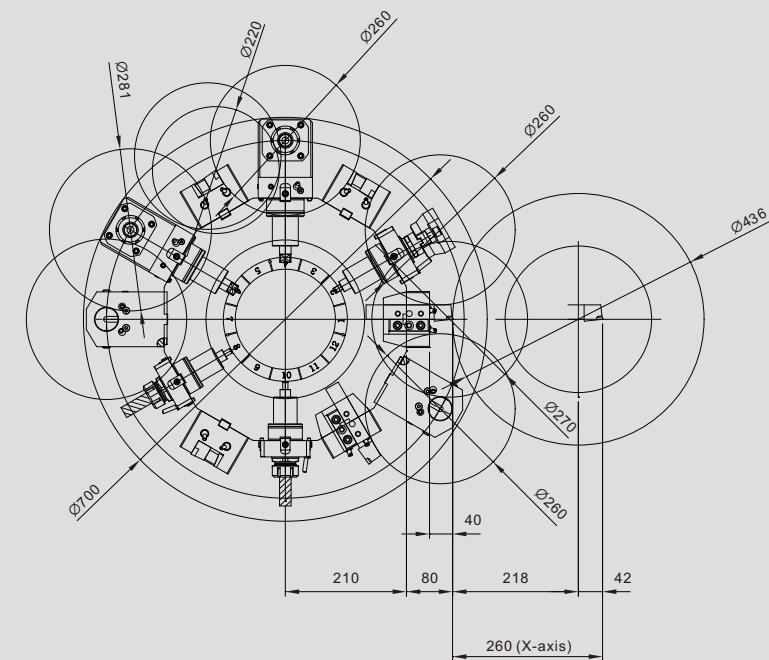


Torque Diagram of Living Turret

Unit : mm

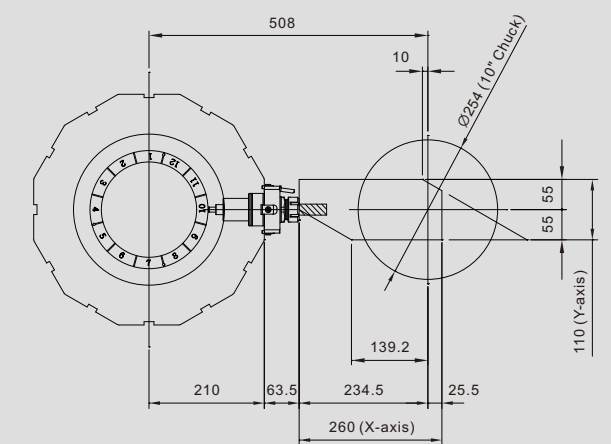
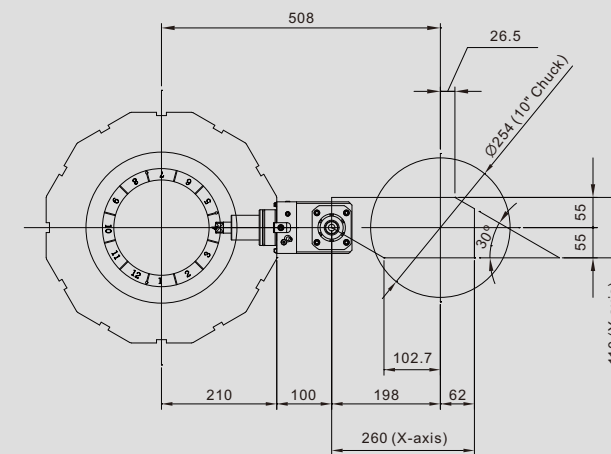


Working Capacity



Y-axis with radial living tool holder

Y-axis with axial living tool holder



Machine Specifications

MODEL	UNIT	CPL-3010Y	CPL-3010SY
CAPACITY			
Max. swing over bed	mm	750 (29.5")	
Max. swing over carriage	mm	650 (25.5")	
Max. turning length	mm	760 (1,260) 29.9" (49.6")	
Max. turning diameter	mm	400 (15.7")	
TRAVERSE			
Z-axis travel	mm	850 (1,350) 33.4" (53.1")	
X-axis travel	mm	260 (10.23")	
Y-axis travel	mm	110 (±55) 4.33" (±2.16")	
FEEDRATE			
Rapid traverse (X/Y/Z)	m/min.	20 / 10 / 20	
SPINDLE			
Spindle nose	type	A2-8 (BELT TYPE)	A2-8 (BUILT-IN)
Hydraulic chuck	inch	10"	
Hole through draw tibe	mm	Ø75 (2.95")	
Spindle bearing diameter	mm	Ø130 (5.11")	Ø140 (5.51")
Spindle speed	rpm	3,000	4,000
Spindle motor	kw	15 / 18.5 (25HP)	15 / 22 (30HP)
Indexing of C-axis		0.001	
SUB SPINDLE			
Spindle nose	type	--	A2-5 (BUILT-IN)
Hydraulic chuck	inch	--	6"
Hole through draw tube	mm	--	Ø32 (1.26")
Sub-spindle motor	kw	--	5.5 / 7.5
Sub-spindle speed	rpm	--	6,000
Indexing of C-axis		--	0.001
TURRET			
Turret type	type	12-station	
Turret system		BMT-65	
Tool change time	sec.	0.2	
Max. tool speed	rpm	4,000	
MACHINE DIMENSIONS			
Floor space	mm	4,760 x 2,110 x 2,740 (5,260 x 2,110 x 2,740) 187.4" x 83.1" x 107.9" (207.1" x 83.1" x 107.9")	
Machine weight	kg	6,500 (7,200) 14,330 lbs (15,873 lbs)	8,500 (9,200) 18,739 lbs (20,283 lbs)
Coolant tank capacity	L	250 (65 gal.)	
Power capacity	KVA	30	
Oil pressure source	kg / cm ²	35~40	
Air pressure source	kg / cm ²	6~8	

● Specification upgrading will not notify according to our ongoing innovation

Standard accessories		Optional accessories	
● 3-Jaw power chuck	● Coolant system	● 3-color signal light	● Tool setter
● Hard jaw: 1 set	● Hand wheel (MPG)	● Working lamp	● Parts catcher
● Soft jaw: 3 set	● Chain type chip conveyor	● Oil skimmer	● Automatic bar feeder
● Hydraulic unit	● High pressure coolant pump	● Collet chuck	● Auto. door
● Programmable tailstock (CPL-3010Y)	● Pretensioned ballscrews	● Special purposed chip conveyor	● Transformer
	● Air condition	● Oil mist collector	● CE modification

Control Specifications

● Standard Functions ○ Optional Functions

CONTROL	FANUC	
FUNCTIONS / CONTROL	0i-TD	31i
CPL-10MC/20MC/30MC/3512MC/3518MC/3520MC/3010Y	●	●
CPL-3010SY	X	●
8.4" colorful LCD monitor	●	—
10.4" colorful LCD monitor	○	●
Graphic function / tool path display	●	●
Dynamic graphic function	●	●
Program storage length	1280M	640M
128MB high memory capacity (Data Server)	○	○
256MB high memory capacity	○	○
Manual guide 0i	●	—
Manual guide i	○	●
Background editing	●	●
Expanded part program editing	●	●
Direct drawing dimension programming	●	●
Workpiece coordinate system (G52~G59)	●	●
Tool radius / Tool nose radius compensation	●	●
Tool offset	●	●
Tool life management	●	○
Tool geometry / wear compensation	●	●
Spindle orientation	●	●
Rigid tapping	●	●
Run hour and parts count display	●	●
Custom Macro B	●	●
G code system A / B / C	●	●
Inch / Metric conversion	●	●
Chamferring ON / OFF	●	●
Threading cutting	●	●
Multiple threading (G76)	●	●
Continuous threading (G32)	●	●
Variable lead thread cutting (G34)	●	●
Canned cycle (G90 G92 G94)	●	●
Multi repetitive cycle (G70~G76)	●	●
Multi repetitive cycle I	●	●
Polar coordinate interpolation	●	●