

## CNC VERTICAL MACHINING CENTERS





## Mitsubishi – Fanuc – Falcon -Siemens – WindowsCNC Possibility to Optionally Select Control Units

### SOLID CONSTRUCTION

- It is ready for robot automation thanks to automatic opening/closing doors.
- It can work in environments without high voltage.
- The machine's motion axes are protected by telescopic bellows.
- It is suitable for working in educational institutions and garage workshops.
- Offering the ultimate in user-friendliness
- Specially designed spindle structure, tool use is facilitated.
- Control units can be optionally selected, providing a tailored touch to the automation process.
- High speed spindle in option (6000 TO 24.000RPM)
- Possibility to convert to 5 Axis machine with add-ons.



# ■ COMPACT. LIGHT. STABLE.



- Compact machine structure, it takes up 38% less space than conventional machines.
- High torque motors are used in 3 axes.
- Lightweight structure, it can be used in different environments.
- Bulletproof Security: Thanks to its solid polycarbonate panels, the machine is resistant to part fragments, providing safety against any potential flying debris.
- Ceramic hybrid spindle bearings with lifetime grease.

# POWERFUL ACCESSORIES ENHANCE THE MACHINE'S PERFORMANCE.



READY TO ADD MORE AXIS



24 VOLT WORK LAMP



GRUNDFOS PUMP



3 AXIS CABLE PROTECTION



F.R.L. SYSTEMS

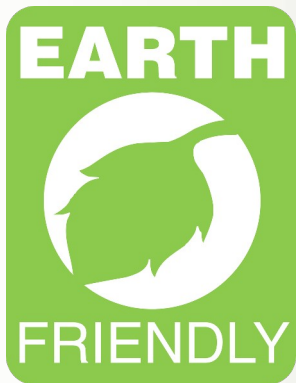


SIEMENS OR SCHNEIDER ELECTRICAL COMPONENTS



Cutting Shape	Metallic	CHAIN TYPE	SCREW TYPE
METAL		<input type="radio"/>	<input type="radio"/>
CASTING		<input type="checkbox"/>	<input type="radio"/>
ALUMINUM THICK		<input type="radio"/>	<input type="checkbox"/>
ALUMINUM		<input type="checkbox"/>	<input type="radio"/>
NON METAL		<input type="radio"/>	<input type="radio"/>





## STRIVING TO CREATE EARTH-FRIENDLY MACHINES

Our efforts to improve environmental performance and effects of high productivity greatly reduce power and air consumption, contributing to the carbon neutrality of plants.



## AUTOMATIC TOOL LENGTH MEASURING

All our machines are equipped with sensitive and automatic tool length measuring probes in order to provide more precise cutting and more efficiency from the workforce.

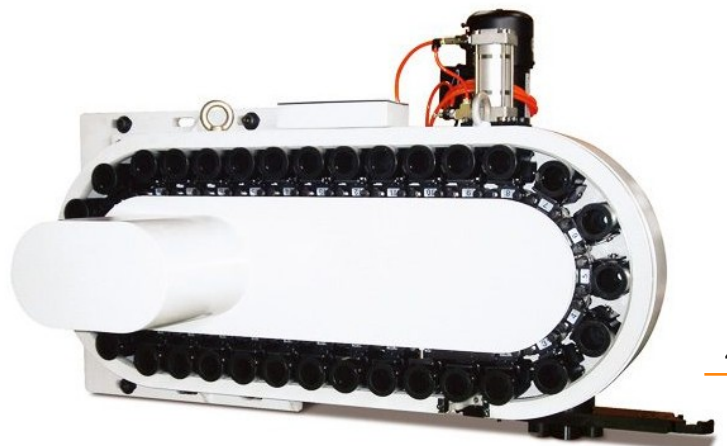


## AUTOMATIC LUBRICATION SYSTEM

To improve operational comfort and increase machine health active lubrication system.

## DIFFERENT TOOL CHANGE OPTIONS

Optional Drum-Type And Chain-Type ATC Tool Magazine.



# CL SERIES

## FEATURES

		CL-540	CL-740	CL-1166	CL-1270
<b>SPINDLE</b>					
SPINDLE SPEED	<i>r.p.m.</i>	10000(12000,15000, 20000,24000)	(BT30: 6000,8000,18000)		
<b>SPINDLE TYPE</b>		(DIRECT DRIVE-BUILT IN)	(DIRECT DRIVE-BUILT IN)		
SPINDLE	<i>kw</i>	5.5/7.5 (7.5/11)	7.5/11(11/15,15/18.5)		
<b>TABLE</b>					
TABLE SIZE	<i>mm</i>	540 x 350	760 x 530	1160 x 600	1350 x 600
T-SLOT	<i>mm</i>	More details on the next page.			
MAX. PART WEIGHT	<i>kgs</i>	200	500	700	1000
<b>AXIS MOVEMENTS</b>					
X AXIS	<i>mm</i>	540	740	1100	1250
Y AXIS	<i>mm</i>	500	520		700
Z AXIS	<i>mm</i>	500	500		
<b>FEED</b>					
CUTTING FEED (X/Y/Z)	<i>mm/min</i>	5000	5000		
RAPID TRAVERS(X/Y/Z)	<i>M/min</i>	36(48)	30/30/24(36/36/30,48/48/36)		24(30/30/24)
MIN. INPUT INCREMENT	<i>mm</i>	0.001			
<b>A.T.C.</b>					
TOOL HOLDER TYPE		BT30	BT30(BT40)		
NUMBER OF TOOL STATIONS	<i>tool</i>	21(30)	21(30,36) (BT40: 20, 24)		24(30,60) (BT50: 20,24)
MAX.TOOL DIAMETER EMPTY SIDES	<i>mm</i>	Ø75 / Ø100			
MAX.TOOL LENGTH	<i>mm</i>	200			
MAX.TOOL WEIGHT	<i>kgs</i>	3	7		
TOOL SELECTION		VIA THE SHORTEST ROUTE			
<b>MACHINE WEIGHT AND DIMENSIONS</b>					
MACHINE SEATING AREA	<i>mm</i>	1500x1500	2060x2040	3060x2030	3060x2060
NET WEIGHT	<i>kgs</i>	830	1100	2300	2700

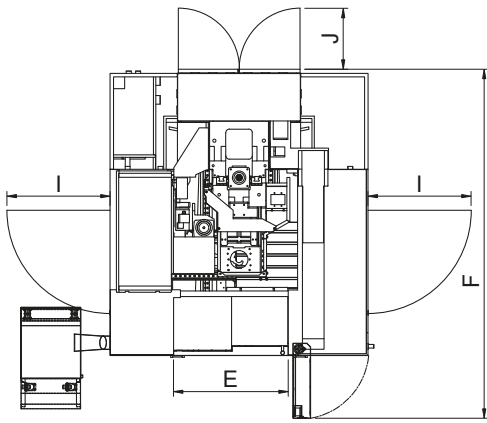
### STANDARD ACCESSORIES:

- TOOL CHANGER (DRUM TYPE)
- CLOSED CABIN
- WORK LAMP AND WARNING LAMP
- AUTOMATIC LUBRICATION SYSTEM
- COOLANT & AIR GUN
- LEVELING BOLTS & PADS
- TOOL SET
- HIGHLY EFFICIENT SPINDLE
- USER'S MANUAL
- AUTOMATIC TOOL LENGTH MEASURING PROBE
- SCREW TYPE CHIP CONVEYOR
- TRANSFORMER

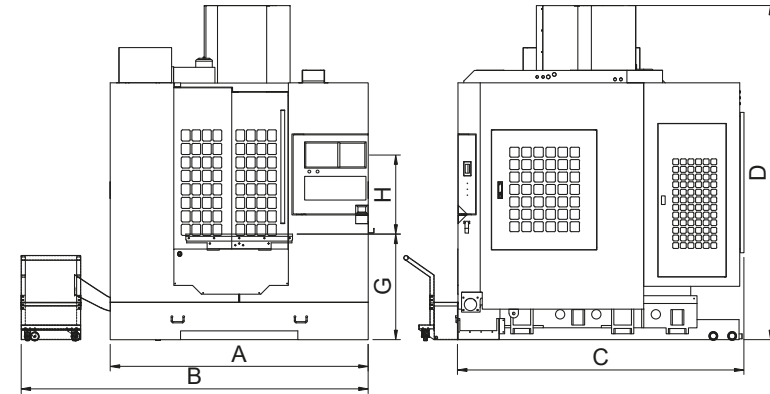
### OPTIONAL ACCESSORIES:

- AUTOMATIC OPENNING / CLOSING DOORS
- SCRAPER TYPE CHIP CONVEYOR
- ELECTRIC CABIN AIR CONDITIONER
- EXTRA AXIS SOCKETS
- PNEUMATIC/HYDRAULIC FIXTURE PREPARATION
- LINEAR RULER
- AUTOMATIC PART MEASURING SYSTEM

# MACHINE DIMENSIONS

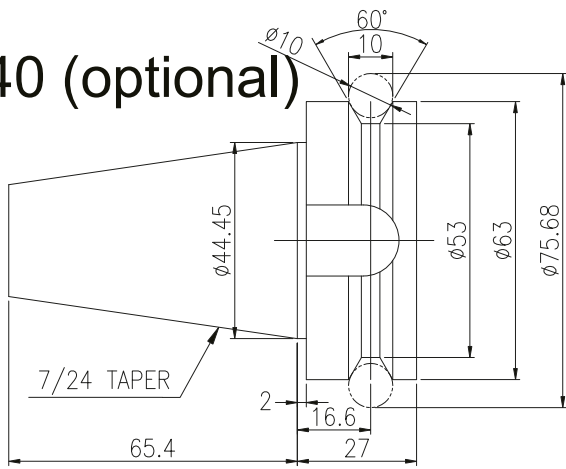


MODEL	A	B	C	D	E	F	G	H	I	J
540	1200	2000	1400	2100~2100	550	1500	780	675	650	530
740	1600	2400	1600	2000~2400	550	1870	780	675	960	530
1166	1900	2700	2230	2480~3080	800	2770	780	655	960	530
1270	2100	2900	2260	2480~3080	1300	2800	780	655	960	530

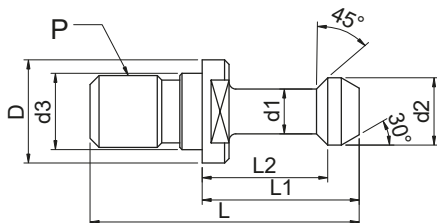
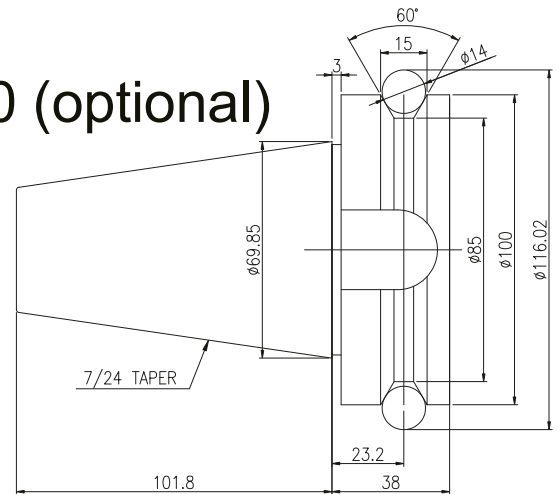


## PULL STUD & TOOL SHANK

BT40 (optional)

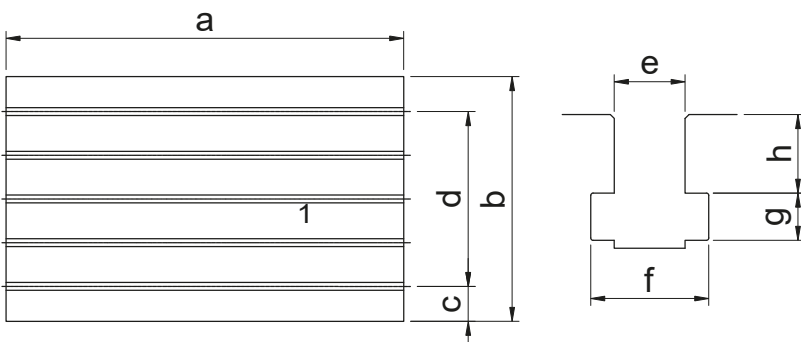


BT50 (optional)



MODEL	D	d1	d2	d3	L	L1	L2	P
BT40	23	10	15	17	60	35	28	M16*2.0
BT50	38	17	23	25	85	45	35	M24*3.0

## TABLE AND T-SLOT DIMENSIONS



MODEL	a	b	c	d	e	f	g	h
540	540	350	25	3*150	14	23	10	8
740	760	530	65	3*200	14	23	10	8
1166	1160	600	100	4*100	18	30	14	18
1270	1350	600	100	4*100	18	30	14	18
1370	1350	600	100	4*100	18	30	14	18
1470	1500	600	100	4*100	18	30	14	18
1570	1500	600	100	4*100	18	30	14	18
1670	1600	600	100	4*100	18	30	14	18
1618	1700	1000	125	6*125	18	30	12	20
1818	1900	1000	125	6*125	18	30	12	20
2018	2100	1000	125	6*125	18	30	12	20



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