

# CNC MILLING MACHINE charlyPRO

## The economical solution for soft materials machining.

Benefit of a maximal profitability and an optimal quality result thanks to the wide range of charlyPRO format and its astonishing 3D milling capabilities.

## The strenghts :

- ▮ Rigid steel welded structure for intensive machining
- ▮ Feed rate up to 12m/min (servo-brushless version).
- ▮ A wide and versatil range of 8 different sizes
- ▮ Z 350 option for 3D jobs
- ▮ Very rapid return on investment
- ▮ Quality and performances adapted to serial production
- ▮ Ease of use, like all Charlyrobot's machines.
- ▮ Compliant with EC rules and safety directives

THE CHARLYPRO RANGE OFFERS 8 DIFFERENTS MACHINE SIZES WITH A LARGE CHOICE OF HIGH FREQUENCY SPINDLES. ALL MODELS ARE AVAILABLE WITH SERVO-BRUSHLESS MOTORISATION AND CAN BE EQUIPED WITH MANY PROFESSIONAL OPTIONS LIKE VACUUM TABLE OR AUTOMATIC PNEUMATIC CHIP SUCTION SYSTEM. THE CHARLYPRO GIVES YOU THE BEST VALUE FOR MONEY IN ITS MARKET SEGMENT. IT ALLOWS YOU TO START WITH CNC MACHINING WITH THE SAFETY, EFFICIENCY AND QUALITY OF A SERIAL PRODUCTION EQUIPMENT.

CHARLYPRO BECOMES THE REFERENCE EQUIPMENT FOR SOFT MATERIALS AND SOFT METALS APPLICATIONS SUCH AS ENGRAVING, SIGN AND DISPLAY MAKING, MODELING AND CUTTING WORKS.



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## Technical characteristics

### Electronic :

- ▮ charlyrobot CNR3 numerical control. 3 (up to 4) interpolated axes.
- ▮ Architecture : mother board + CPU board + driver + extension board.
- ▮ Logical testing and FPGA and DSP automatic control at 150 Mhz.
- ▮ Communication : RS232C.
- ▮ Power supply : 230 V single phase + earth or 380 V three phase + earth + neutral depending on spindle and options.
- ▮ Power installed : 5 to 10 kW depending on spindle and options.
- ▮ Pneumatic : 6 bars supply depending on spindle and options.

### FEATURES

### CPR1015

Stroke in X	1020
Stroke in Y	1520
Stroke in Z	200
Table size(without automatic tool changer)	1080 x 1775mm
Architecture	Portique mobile
Structure (lower frame)	acier mécano-soudé
Passage between column	1190 mm
Passage under gantry / without vacuum table.	220 mm
Passage under spindle nose / without vacuum table.	210 mm
Max. speed	12 m/min (200 mm/s)
Max. feed rate	12 m/min (200 mm/s)
Standard motorisation	servo-motor "Brushless"
Resolution	0,0015 mm
Repeatability (at 20° +/- 2° C)	+/- 0,05 mm
Length	2610 mm
Depth	1410 mm
Height (Z 200mm version)	2020 mm
Weight in kg	~1300 Kg



### Drive :

- ▮ Servo-brushless motors on all axes.
- ▮ Ball screw diam- 25 mm with a thread of 10 mm on X.
- ▮ Ball screw diam 32 mm with a thread of 20 mm on Y (central screw).
- ▮ Ball screw diam 16 mm with a thread of 5 mm on Z.
- ▮ Guide by prismatic rails with ball recirculation shoes on each of the axes.
- ▮ Protection of axes by bellows on X and Z.
- ▮ Greaser on guide shoe and drive ball screw bushing.

### Options :

- ▮ Vacuum table.
- ▮ Integral cover safety.
- ▮ Chip suction device with pneumatic control for 2D application only.
- ▮ High frequency spindle 1,1 kW with "overdrive" control by knob on the front panel. Speed rotation 6 000 to 24 000 RPM, ER 20 collet, with maximum diameter of 13 mm.
- ▮ High frequency spindle 2,2 kW with "overdrive" control by knob on the front panel. Speed rotation 6.000 to 24.000 RPM, ER 25, collet with maximum diameter of 16 mm.
- ▮ High frequency spindle 1,5 kW with automatic tool changer 5 positions. 24 000 RPM.
- ▮ Microlubrication.
- ▮ 4th rotary axis. Max. part diameter 200 mm.

### Safety :

- ▮ Compliant with the European Directive "machine n° 98/37/EC" with chip suction system or integral safety cover.
- ▮ Emergency stop button "Punch type".

	CPR 0705	CPR 0710	CPR 1007	CPR 1015	CPR 1030	CPR 1515	CPR 1530	CPR 2030
Stroke X (mm)	760	760	1020	1020	1020	1520	1520	2020
Stroke Y (mm)	520	1020	760	1520	3050	1520	3050	3050