

ALU
Ranger



CHAPTER 4
DESCRIPTION OF MACHINE

ALU Ranger



4.2.3 Numerical control with Industrial CNC Engineering PC

Operating windows system "XP Professional" embedded	
Interpolated axis	N.3
Coloured Screen	Type LCD TFT 17"
Integrated PLC	

4.2.4 Vacuum pump

Vacuum capacity (m ³ /h)	250
Motor power (kW)	5.5

4.2.5 Panel locking system and dust extraction

Table with threaded bushings divided in zones	
Positioning on lower disappearing stops	
Side stops	1 (LH SIDE)
Dust outlet	(mm) Diam. 200+ Diam.80

4.2.6 Protections (ONLY FOR 'GRC' MODELS):

Side protection metal barrier with polycarbonate panel including photocell protection to avoid accidental access.

4.2.7 Software

CAD-CAM ASPAN system with integrated macro parametric files for ACM (composite aluminium material) cassette processing.

Note: The performances described are guaranteed only by using the tools supplied by SAMEC spa, who will not respond to incorrect performances, damages or other things, due to use of tools or equipment from other companies.

ALU Ranger



4.2.8 COMPOSITION OF THE MACHINE

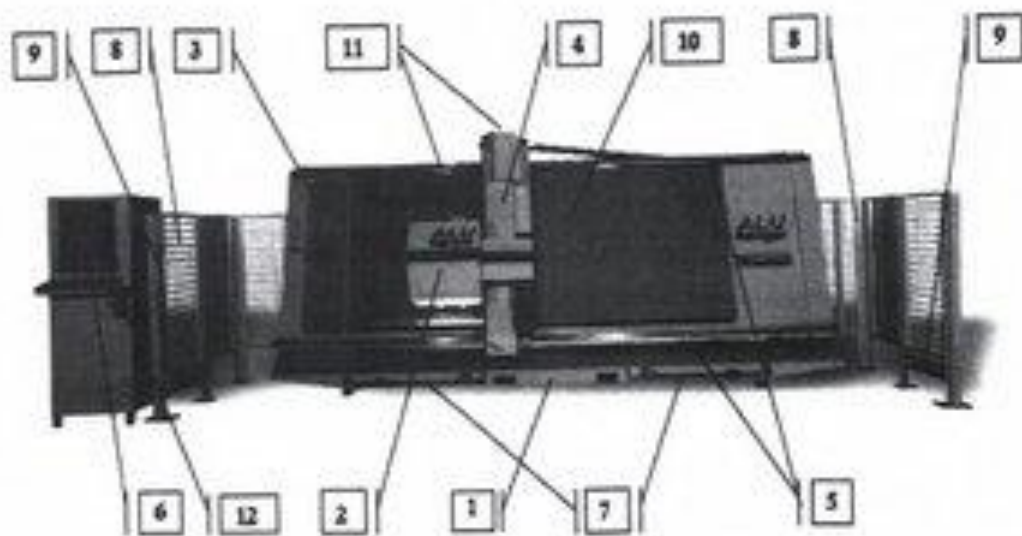


Fig. 4.2.8 a

Fig. 4.2.8 a

1. Machine frame
2. Operating head
3. 10 Positions tool magazine
4. Mobile beam axis Y
5. Sliding guides axis X
6. Main control panel
7. Vacuum foot pedal
8. Metal protection barriers ((Only 'GRC' models))
9. Intra-red photocell ((Only 'GRC' models))
10. Working table
11. Dust extraction outlets
12. Hand-held computer for remote control (Optional)

ALU Ranger



4.1 MAIN FUNCTIONS

The machine is a Vertical Operating CNC Machining Centre studied to execute operations of boring, milling, cutting and cornering, within the limits of technical data in this manual and on different type of panels: plastic material, PVC, ABS, methacrylate, polycarbonate, thermoplastic, composite aluminium panels.

The vertical working table allows loading and unloading working pieces easily and occupying a minimum space in regards to the maximum dimensions of the machine.

A powerful CN (numerical control) allows managing and recalling the working programmes when needed.

The changing of tools with a 10 position magazine on the side of the machine allows a wide range of different jobs to be done without having to take off panel from the working table.

The head with the operating units and the moving parts are protected against accidental contacts with a safety photocell barrier, just in case the operator should enter accidentally or voluntarily in the machine's working area.

4.2 TECHNICAL CHARACTERISTICS:

Working area:

MC 3416 (mm)	X = 3400	Y = 1600
MC 3416 (inches)	X = 133.8	Y = 63
MC 5016 (mm)	X = 5000	Y = 1600
MC 5016 (inches)	X = 196.8	Y = 63

4.2.1 Milling unit "V-GROOVE" (ONLY FOR 'GRC' MODELS):

Head positions "V-GROOVE" -90°
..... -0°
Special milling cutter (mm) Ø=175

4.2.2 Milling unit /router

Power electrospindle (kW) 5.5
Rotation speed (gir/min) 0-18000
Electrospindle cone fitting ISO30
Automatic magazine positions N.10