



Gantry Robot

3-4 axes system



Alutec Group offers customised machines tailored for the specific needs of customers, both in stand-alone version (also with automated loading and unloading systems) and configured to be installed on an automation line (even a pre-existing one).

Movements are performed by Cartesian axes systems with GANTRY structure and three and four interpolated axes (X-Y-Z-R). The machines are supplied complete with structure, wired electrical cabinet, safety guards and EC type-approvals. The work area can be customised from 500x500mm to 2000x2000mm, with the possibility to work on the specific work surface of the customer, on automation lines and on piece loading- unloading trolleys. The performances of the machines are modulated according to the specific application requirements of the customer; it is possible to handle up to 15 kg on the vertical axis, with high speeds, guaranteeing excellent precision and repeatability. The meticulous design ensures solutions that match the customers'

expectations. The custom machines of Alutec Group are controlled by the groundbreaking motion control system called ALPHA by Alutec Group, which, combined with the new proprieter software ALPHA, guarantees reference performances and new functions, for both stand-alone operation and for the communication of the robot with external systems (CANopen, serial RS232 or with 16 general purpose input/Output board, which are available even in the standard version). The robot is programmed via the PC and subsequently controlled via the master line or the operator panel ALPHA, which can manage up to 255 programs and 100.000 processing points; It is able to control external systems (e.g. loaders-unloaders) and a number of

applications. The user-friendly graphic interface, the possibility to import files in .dxf, Gerber or Excel format and the new SUB-PROGRAMS function allow you to fulfil extremely complex operations, very quickly. The custom machines of Alutec Group are the ideal solution for simple or complex dispensing, screwing, soldering or pick & place applications. Flexibility and design rapidity ensure the customer prompt responses. By supervising the whole design and mechanical, electronic and software realization, we are able to guarantee the quality and reliability of the solutions offered.

Applications
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X/Y/Z {R} Work Area (mm)	on request starting from 500 mm to 2000 mm
Worktable Load / Tool {R}	20-50 Kg 5 Kg (3 Kg) R
Max. Speed X,Y,Z	400 (mm/sec) MAX *
Repeatability	from ± 0.015 mm/axis a 0,2mm/axis *
Resolution	0.004 mm/axis
Data Memory	100.000 Points / 255 programs
Drive System	stepper motors / Brushless motors *
Interpolation	point to point & continuous path
Programming Method	remote mode (self-learning) through PC software
I/O Signals	16 input / 16 output
External Interface	USB / RS232 /Analogue output optional
Power Supply	100-240 VAC, 50/60 Hz 500 Watts
Dimensions (WxDxH) mm	800x800 -3000x3000 *
Weight	500 -1000 Kg *

* This value can change, depending on the required robot configuration

