

SmartRobComau

Automated



Value Propositions

- ▶ Integration: Serial and parallel process.
- ▶ Scalability: Align capital investment to market demand.
- ▶ Fast retooling: Easy tool change for production flexibility.
- ▶ Up to 50% reduction in floor space needed.
- ▶ Ergonomics: Automated material handling, transport devices and easy to reach controls.
- ▶ Improved material logistics: Single point delivery of material.
- ▶ Lean manufacturing: Optimization of cost savings, reduction of waste and decreased work in progress.
- ▶ Up to 60% reduction in power and fluid consumption.
- ▶ Machine controls managed by save mode when system is idle.
- ▶ Floor space reduction.
- ▶ Powered components reduction.

SMARTROBCOMAU AUTOMATED	UNITS	1800 1 bench	1800 2 bench	1800 3 bench	2400 1 bench	2400 2 bench	2400 3 bench
Specifications							
Width	mm	1.800	1.800	1.800	2.400	2.400	2.400
Height	mm	2.500	2.500	2.500	2.500	2.500	2.500
Length	mm	2.150	3.500	4.850	2.150	3.500	4.850
Pallet length	mm	500-800	500-800	500-800	> 800	> 800	> 800

Load capacity							
X Axis	kN	10	10	10	10	10	10
Y Axis	kN	30	30	30	30	30	30
Z Axis	kN	60	60	60	60	60	60
Robotic payload size	kg	<100	<100	<100	>100	>100	>100

Velocity and Force							
X-Axis							
Acceleration	m/sec ²	2	2	2	2	2	2
Axis stroke	mm	1.500	1.500	1.500	2.200	2.200	2.200
Max speed	m/sec	1,5	1,5	1,5	1,5	1,5	1,5
X Axis/Rack & pinion driv.							
Max load	kg	600	600	600	600	600	600
Max pressure force	kg	1.000	1.000	1.000	1.000	1.000	1.000
Accuracy	micron	± 20	± 20	± 20	± 20	± 20	± 20
Y-Axis							
Acceleration	m/sec ²	2	2	2	2	2	2
Axis stroke	mm	1.200	2.200	3.200	1.200	2.200	3.200
Max speed	m/sec	1,5	1,5	1,5	1,5	1,5	1,5
Y Axis/Rack & pinion driv.							
Max load	kg	1.000	1.000	1.000	1.000	1.000	1.000
Accuracy	micron	± 20	± 20	± 20	± 20	± 20	± 20
Z-Axis							
Acceleration	m/sec ²	2	2	2	2	2	2
Axis stroke	mm	600	600	600	600	600	600
Max speed	m/sec	1	1	1	1	1	1
Z Axis/Ball screw driven							
Max load (tool weight)	kg	80	80	80	80	80	80
Max force	kg	6.000	6.000	6.000	6.000	6.000	6.000
Max load perp. to Axis	kg	10	10	10	10	10	10
Accuracy	micron	± 20	± 20	± 20	± 20	± 20	± 20

Functionality						
Alignment / Insertion	x	x	x	x	x	x
Assembly				x	x	x
Dispense / Apply sealant-oil-grease-fluid	x	x	x	x	x	x
IPV	x	x	x	x	x	x
Leak test	x	x	x	x	x	x
Marking / Engraving / Checking	x	x	x	x	x	x
Measuring	x	x	x	x	x	x
Press	x	x	x			
Rollover	x	x	x	x	x	x
Torque / Backout	x	x	x	x	x	x

SMARTROBCOMAU AUTOMATED	1800 1 bench	1800 2 bench	1800 3 bench	2400 1 bench	2400 2 bench	2400 3 bench
Controls						
Siemens Profibus/Pilz	x	x	x	x	x	x
Siemens Profisafe/Profinet	x	x	x	x	x	x
Bosch Profibus/Pilz	x	x	x	x	x	x
Mitsubishi Profibus/Pilz	x	x	x	x	x	x
Centralized (control zone)	x	x	x	x	x	x
Distributed (single PLC for each ST)	x	x	x	x	x	x
SMC	x	x	x	x	x	x
FESTO	x	x	x	x	x	x

Kiosk - Control Equipment						
Air conditioner	x	x	x	x	x	x
Heat exch. Air / Water	x	x	x	x	x	x
CC size WxHxD 1.400x1.800x500	x	x	x	x	x	x
CC size WxHxD 1.200x1.400x500	x	x	x	x	x	x
CC size WxHxD 1.200x1.800x500	x	x	x	x	x	x
PP size WxHxD 800x1.800x200	x	x	x	x	x	x

System Integration						
Serial process	x	x	x	x	x	x
Parallel process	x	x	x	x	x	x
Off Line	x	x	x	x	x	x
POS 1	x	x	x	x	x	x
POS 2	x	x	x	x	x	x

Safety Fences						
Frame						
Fixed panel	x	x	x	x	x	x
Door panel Dx	x	x	x	x	x	x
Door panel Sx	x	x	x	x	x	x
Dog house	x	x	x	x	x	x
Logistic door	x	x	x	x	x	x
Tool magazine door	x	x	x	x	x	x

Conveyor						
1/2"	x	x	x	x	x	x
T4	x	x	x	x	x	x

Pallet						
Flat	x	x	x	x	x	x
Pedestal	x	x	x	x	x	x

Handling						
Cartesian Z	x	x	x	x	x	x
Cartesian XZ	x	x	x	x	x	x
Cartesian Y	x	x	x	x	x	x
Cartesian YZ	x	x	x	x	x	x
Cartesian XYZ	x	x	x	x	x	x

COMAU S.p.A. Headquarters
Via Rivalta, 30 - 10095 Grugliasco (TO) - Italy
Tel. +39 011 00 49 111
www.comau.com

COMAU S.p.A.
Production Systems - Powertrain Machining and Assembly
Via Rivalta, 49 - 10095 Grugliasco - TO (Italy)
Tel. +39 011 00 49 111
Fax +39 011 00 49 688

The information contained in this brochure is supplied for information only. Comau S.p.A. reserves the right to alter specifications at any time without notice for technical and commercial reasons. The illustration does not necessarily show the products in their standard version.