999

POWERFUL AND RELIABLE

INPUT

Power supply	[50HzThree-phases+N+GND]	400V a.c.
Pneumatic power (min.)	[bar]	5
Max. power required (peak load)	[kW]	31
Power consumption	[kWh]	4

OUTPUT

Generator power	[kW]	30
Vibration frequency	[Hz]	100-120
Vibration amplitude	[mm]	up to 4
PP equivalent welding area[1]	[cm²]	750
Upper tool weight (max.)	[kg]	200
Mirror tool weight	[kg]	N.A.

CONTROL

PLC Control		ET 200 SP Open Controller
HMI		Touch panel 15”
Vibration frequency tuning[2]		Continuous REALTIME
Welding steps (pressure, amplitude)		8
Welding depth sensitivity	[mm]	0,05
Work settings memory		63 automatic equipment
Type of communication[3]		Profinet/Profibus

REFERENCES

Noise level[4]	[dBA EN ISO 11202]	≤ 80
Work outcome definition		Automatic (good/reject)
Work outcome printer		Custom Plus
Vacuum circuit		2 (opt. up to 3)
Pneumatic valves movements		5
Remote-assistance		Included

[1]Size of the area detected in the test environment.

[2]Thanks to our third-generation controller we have been able to eliminate the necessity of the auto-tuning cycle: the machine can adapt to the vibration frequency in real-time following the mechanical reactions of the vibrating system. Therefore, the outcome is a neater and more efficient vibration than the one obtained employing second-generation old systems.

[3]The digital generator ensures very short swing on/off vibration phases (50 ms).

[4]Peak values can be higher for short periods depending on the application.

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The machine can be customized with some standard options. Contact us for personalized offer.

Vibration welding melts thermoplastic surfaces through friction, creating strong bonds without external heat.

POWERFUL AND RELIABLE
This is the largest machine and can be used for large dashboards, pallets, outdoor furniture

MORE INFO

CEMAS elettra

YOUR PARTNER
IN PLASTIC JOINING

Vibration Welding Strong Points

Real-time tuning
Wide rear opening
Soundproof structure
Quick vibration stop
Compact and complete
Always available
63 tool memories

CEMAS Elettra is the only Italian company that design and build vibration welding machines.

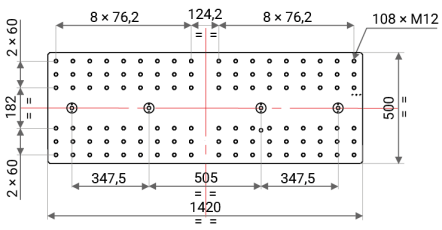
MORE INFO

YOUR PARTNER IN PLASTIC JOINING

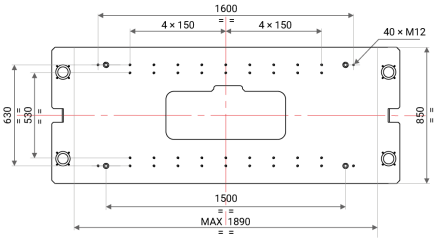
MECHANICAL DATA

Vibration plate dimensions	[mm]	1420x500
Lower plate max. dimensions	[mm]	1890x850
Lifting table stroke	[mm]	800
Lifting table maximum speed	[mm/s]	250
Clamp net force (gross)	[kN]	36 (43)
Lifting table dimensions	[mm]	2180x850
Lifting table height	[mm]	710
Front-door span	[mm]	1900x1160
Upper door threshold	[mm]	1900
Clearance between planes	[mm]	1100-1500 (adjustable)
Overall dimensions (WxDxH)	[mm]	3500x2000x2900
Total weight	[kg]	10000
Hydraulic oil	[kg]	200
Machine type		Hydraulic

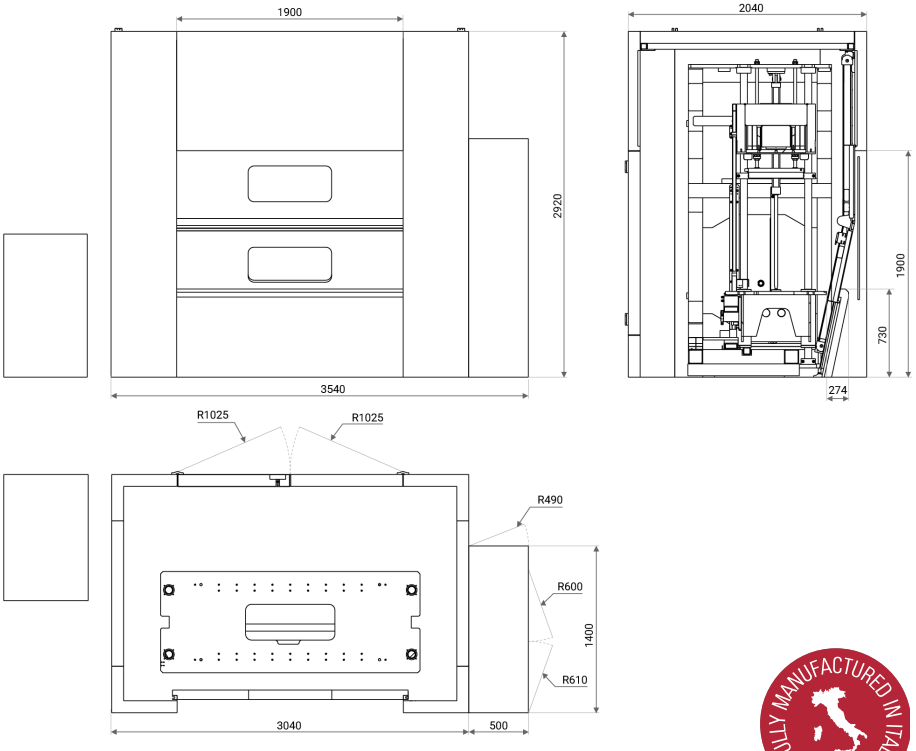
UPPER PLATE



LOWER PLATE



OVERALL DIMENSIONS



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