

THE ULTIMATE RANGE IN VIBRATION TECHNOLOGY

USER FRIENDLY - PRECISE - RELIABLE



YOUR PARTNER
IN PLASTIC JOINING

Cutting edge technology and full equipment as a standard

NO COMPROMISE FOR QUALITY

All components used by CEMAS are from world leading suppliers and never sub-brands.

Safety is our ultimate goal, as well as a prompt availability of spares worldwide.



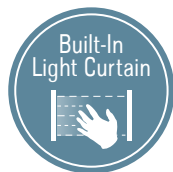
ERGONOMIC LOADING STATION

Special care was devoted to the manual loading steps of the process, both for small and large machines: to minimize effort on the backbone, the loading/unloading area was kept as close as possible to operator. There are no machines of the same class available on the market where this distance is so small.



SAFE

Light curtains are fitted as a standard to ensure maximum operator safety, further to decreasing the total cycle time of each welding. Light curtains are integrated to protect them against collisions and as a result of an extremely accurate and well defined design.



WIDE REAR OPENING

Since the very beginning, all our vibration range was conceived to get tool change from the back of the machine, as maintenance door opening size always exceeds the width of the press bed.



COMPACT BUT COMPLETE

CEMAS machines are the most compact machines available on the market, keeping engineering and vibration features unchanged, thus favoring ergonomics.



HIGHLY CUSTOMIZABLE

Many standard features included in our machines are optional for competitors and, should this not be enough, just turn the page to discover a full range of over 60 optionals for your tailor-made machines.



EASY MAINTENANCE

The use of the latest-generation electronic components has resulted in a remarkably smaller control panel, and in positioning the hydraulic unit below the control panel for the 240 Hz machines. This change has totally cleared an inner compartment and has made tooling maintenance and set up operations easier.



CLEAN AND QUIET

Hydraulic power-plant outside the working area.





INNOVATIVE OPERATOR INTERFACE SYSTEM

Accurate does not mean complicated: no other machine on the market is so "user friendly".

We have made a big effort in designing our video graphic to simplify any operation. Actually, there would be no need for operator's training.

- Switching to your language is as simple as pressing a key
- Parameters can be set to include up to 8 different welding steps
- Tool movement graphic programming: no need to call us for a new tool!
- Monitoring of the "just in time" process by displaying welding diagrams
- Constantly linked to CEMAS through the Teleservice system for diagnostics and customer's service on line



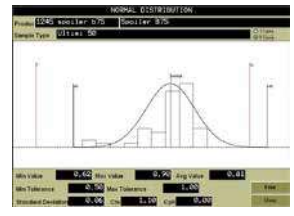
Graph screen



Tool programming



Production screen



Statistical analysis

63 TOOL MEMORIES

The machine can store up to 63 different equipment parameters, of which 31 are automatically acknowledged. Data can be easily copied to other machines if needed.



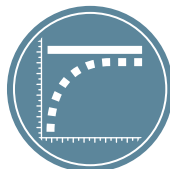
ALWAYS AVAILABLE

Our standard machines are always available and can be rent to face even the most stringent production requirement in case of sudden demand increase.



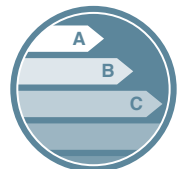
REALTIME TUNING

Our innovative generator is able to adjust the vibration frequency with no autotuning procedure. Internal values are checked and updated every 5ms to constantly ensure a perfect match of the equipment with the machine.



ENERGY SAVING TECHNOLOGY

Big welding area and low power required: this is energetic efficiency!



QUICK VIBRATION STOP

This cutting edge feature can zero the vibration in less than 50 ms, for a more homogeneous and resistant joint.



Top quality and cost-effectiveness

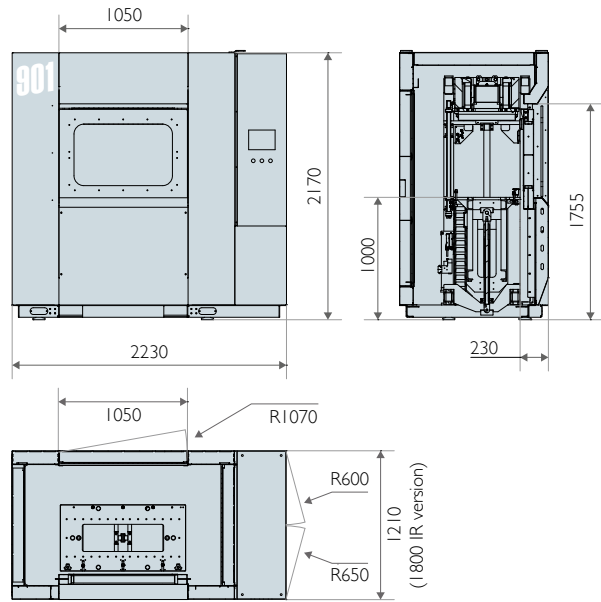
240-Hz

901

SMALL AND EFFICIENT

The smallest of its range. This machine is designed to weld tiny components by applying even a slight pressure, as well as more challenging parts. Ideal for welding small-to-medium size taillights, intake manifolds, glove boxes, and spray-arms.

Available in 4 models, to include either an infra-red pre-heating or a hot plate type, it can be enriched with many optionals to ensure ultimate customizing. As all the other CEMAS vibration machines, it is extremely compact in size when compared to the inner working area available.



		ST	HL	SC	IR
UPPER TOOLING WEIGHT	(up to Kg)	35	50	50	50
WELDING CAPACITY *	(cm² PP)	300	400	300	300
CLAMP FORCE **	(KN)	15 (19)	15 (19)	18,8 (23)	17,5 (23)
LIFT TABLE SPEED	(mm/sec)	250	250	500	250
WORKING CLEARANCE	(mm)	200/700	200/700	200/700	200/700
VIBRATING HEAD	(mm)	880×520	880×520	880×520	880×520
LIFT TABLE	(mm)	1020×540	1020×540	1020×540	1020×700

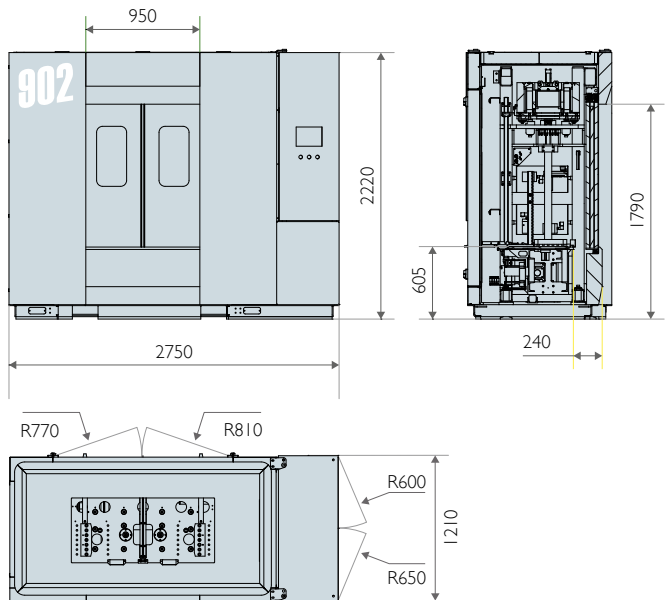
240-Hz

902

FOR FREQUENT TOOL CHANGE

Same performances as the 901HL model, with a very wide press opening and preset for quick tool change from rear. It comes in one version, only the High Level type, without any compromise.

This machine can be used for particularly high components and very quick and frequent tool change.



		HL
UPPER TOOLING WEIGHT	(up to Kg)	50
WELDING CAPACITY *	(cm² PP)	400
CLAMP FORCE **	(KN)	15 (19)
LIFT TABLE SPEED	(mm/sec)	300
WORKING CLEARANCE	(mm)	270/1070
VIBRATING HEAD	(mm)	880×520
LIFT TABLE	(mm)	1200×540

240Hz

911

COMPACT
AND FLEXIBLE

The most popular machine of its range.

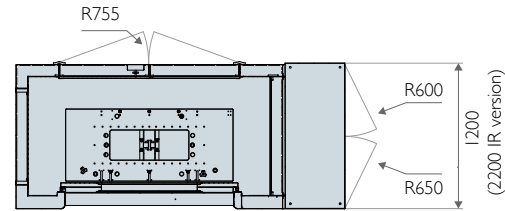
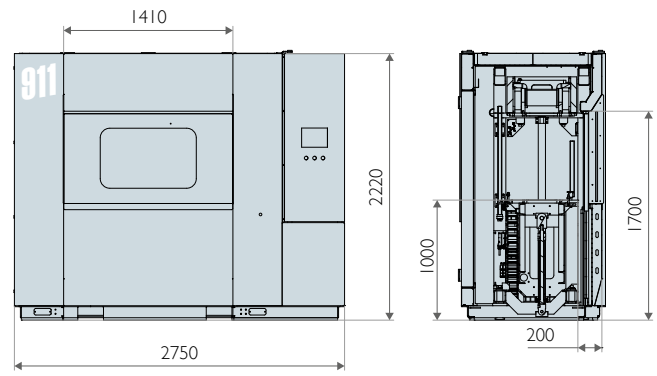
Ideal for welding large taillights and intake manifolds, spoilers, etc.

The most versatile of its range, the machine comes in 4 versions and can be customized with 50 different accessories to meet the most stringent requirements for full customer's satisfaction.

One of the strengths of this welding machine is the capability of handling highly sophisticated operating cycles while still being extremely user's friendly.

Such features, common to all the other CEMAS vibration machines, are acknowledged and valued by all our customers worldwide.

For its unrivalled speed performances, the SC (Servo Controlled) model is the best choice for heavy production volumes.



		ST	HL	SC	IR
UPPER TOOLING WEIGHT	(up to Kg)	75	90	75	75
WELDING CAPACITY *	(cm² PP)	400	500	400	400
CLAMP FORCE **	(KN)	18 (23,5)	18 (23,5)	21 (26,5)	20 (26,5)
LIFT TABLE SPEED	(mm/sec)	250	250	500	250
WORKING CLEARANCE	(mm)	200/700	200/700	200/700	200/700
VIBRATING HEAD	(mm)	945×540	945×540	945×540	945×540
LIFT TABLE	(mm)	1400×600	1400×600	1400×600	1400×800

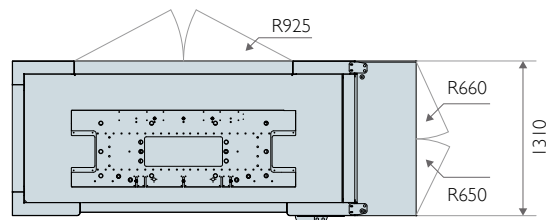
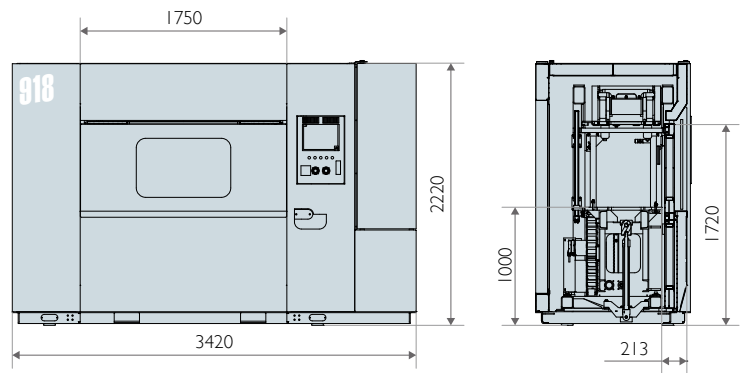
240Hz

918

BIG INSIDE

Stems from the need to weld those same products welded by 901 and 911 machines, but that, given their special features, require a strong welding force within an increased workspace: big components (spoilers), prestigious parts (PAB chutes), double figure (intake manifolds and rear lamps).

Therefore we have thought and designed a machine with the same technical characteristics of the 911 HL, with a broadened working surface; essentially, a larger and more capacious welding machine, that still works at 240Hz.



		ST	IR
UPPER TOOLING WEIGHT	(up to Kg)	90	90
WELDING CAPACITY *	(cm² PP)	500	500
CLAMP FORCE **	(KN)	17 (23,5)	20 (26,5)
LIFT TABLE SPEED	(mm/sec)	250	250
WORKING CLEARANCE	(mm)	200/850	200/850
VIBRATING HEAD	(mm)	945×540	945×540
LIFT TABLE	(mm)	1700×650	1700×650

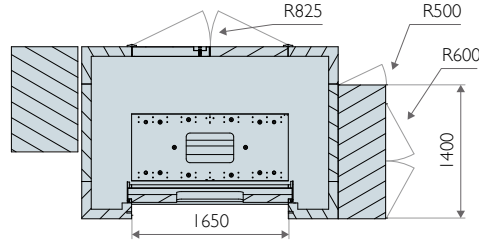
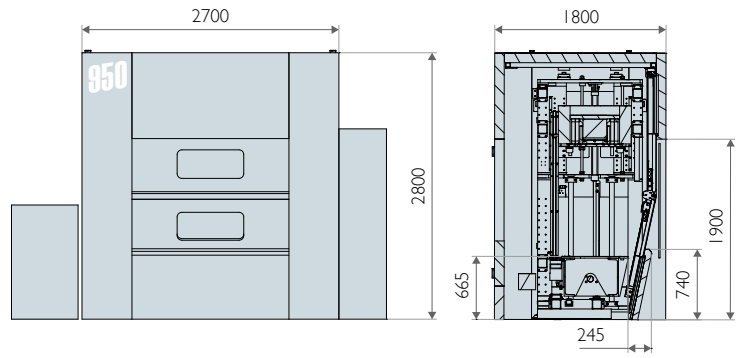
120Hz

950

**COST-EFFECTIVE
AND SOLID**

120 Hz machine, highly sturdy for welding large components. Ideal for a small-to-medium sized dashboards. It can also be used for welding washing machine drums.

The machine comes in two versions, Standard and High Level. Due to a thorough ergonomic study, CEMAS's machines are among the best currently available on the market. Since the very beginning, we have succeeded in offering to our customers machines having a load position as close as feasible to the work area. Our 950 is no exception to the rule



		ST	HL
UPPER TOOLING WEIGHT	(up to Kg)	150	180
WELDING CAPACITY *	(cm ² PP)	650	750
CLAMP FORCE **	(KN)	38 (43)	38 (43)
LIFT TABLE SPEED	(mm/sec)	250	250
WORKING CLEARANCE ***	(mm)	300-700/1100-1500	300-700/1100-1500
VIBRATING HEAD	(mm)	1100×580	1100×580
LIFT TABLE	(mm)	1600×700	1600×700

120Hz

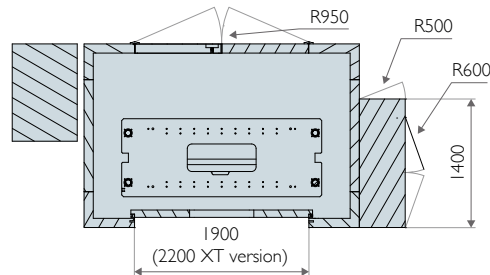
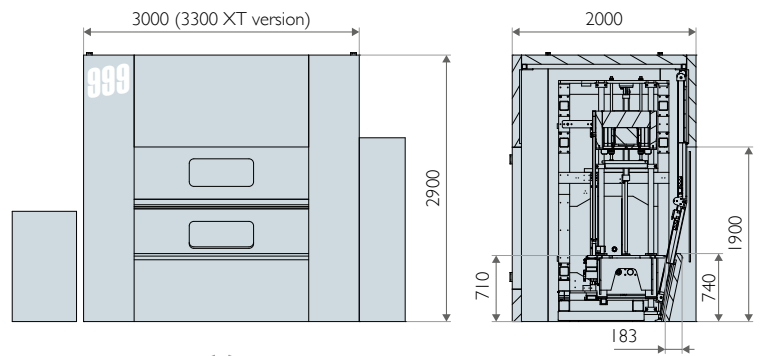
999

**POWERFUL
AND RELIABLE**

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

Equipped with an electrical transfer table as a standard series feature, it can clear every undercut and make loading/unloading operations easier.

The XT version (EXTENDED) is even bigger. It keeps the same standards of precision and power of the 999 HL machine, but within an increased body, designed for very special and oversized components.



		HL	XT
UPPER TOOLING WEIGHT	(up to Kg)	200	200
WELDING CAPACITY *	(cm ² PP)	750	750
CLAMP FORCE **	(KN)	36 (43)	35 (43)
LIFT TABLE SPEED	(mm/sec)	250	250
WORKING CLEARANCE ***	(mm)	300-700/1100-1500	300-700/1100-1500
VIBRATING HEAD	(mm)	1420×500	1420×500
LIFT TABLE	(mm)	1900×850	2200×850

240Hz

912^{IR}

BORN HYBRID

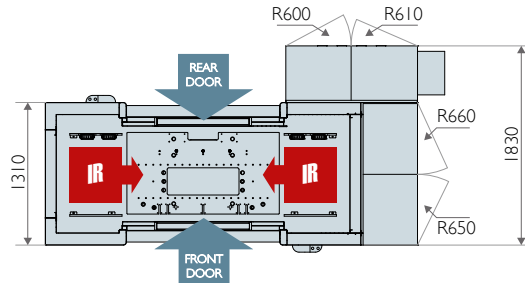
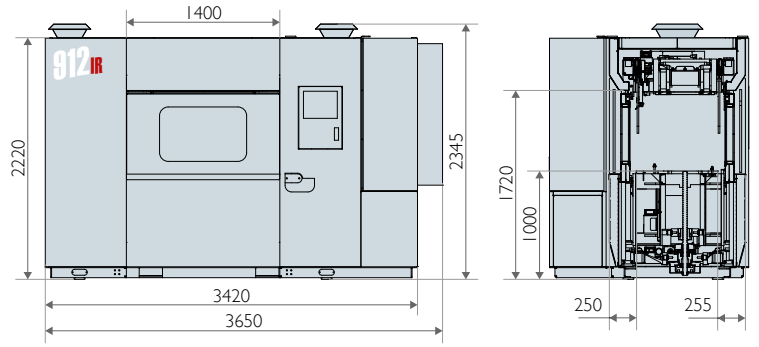
The most advanced in the range, it combines two of the most complex welding technologies, vibration/infrared, within a compact body.

It is equipped with infrared emitters, housed on the right and on left of the press; they leave the rear of the machine empty and customizable with a rear sliding door.

By interfacing with anthropomorphic robots, it can achieve significantly reduced cycle times.

All the movements are driven by electric, servo-controlled motors, and this allows the machine not only to meet the highest standards

of cleanliness, but also to achieve unmatched levels of speed and accuracy. Its hybrid nature, both extremely versatile very precise, makes this machine a one-of-a-kind.



		IR
UPPER TOOLING WEIGHT	(up to Kg)	75
WELDING CAPACITY *	(cm ² PP)	400
CLAMP FORCE **	(KN)	21 (26,5)
LIFT TABLE SPEED	(mm/sec)	500
WORKING CLEARANCE	(mm)	200/700
VIBRATING HEAD	(mm)	945×540
LIFT TABLE	(mm)	1400×600

Vibration Goes Hybrid!



Each medium wave emitter is operated by its own **IRM** controller



- ✓ Space saving solution
- ✓ Fully modular
- ✓ Smart design
- ✓ Easy maintenance

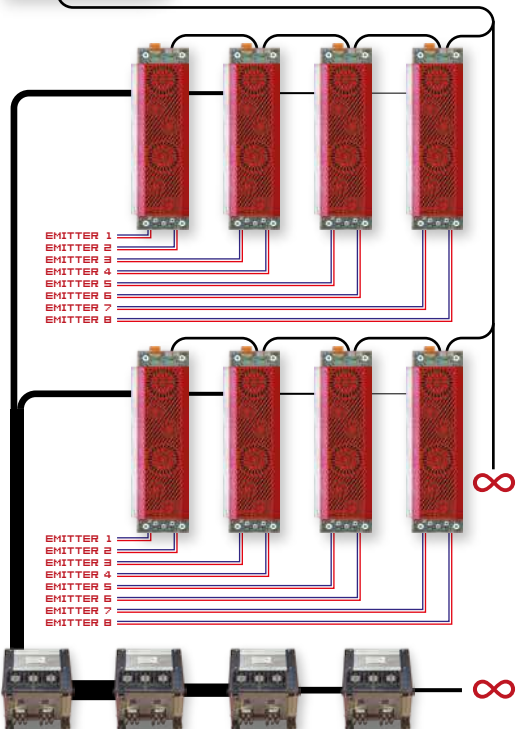
Proprietary technology that allows the **IRM** to retrofit existing third party machines via serial I/O sockets

The ultra fast protocol communication enables a FULLY DIGITAL MODULAR ARCHITECTURE

For unrivaled management, diagnostic and flexibility

Any application can be satisfied

The **IRM** control modules are powered by specifically designed power units



Even the electrical power system is COMPLETELY MODULAR and can be freely configured based on your specific power needs with VIRTUALLY NO LIMITS

* depending on geometry of the application and material ** net/gross *** in 120 Hz machines the vibrating head has a 400mm adjustable height

● PRODUCTION PLANTS



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