ULTRASONS / ULTRASONICS

INTEGRATORS
RANGE

Offreurs de solutions
Industrie du futur

MECASONIC
Plastic Welding Solutions

mecasonic.com

MADE IN FRANCE

EN

Offreurs
de solutions
Industrie du futur
We are
PWS+
+ Plastic welding solutions
Founded in 1969 for the manufacture of ultrasonic welding equipment, MECASONIC joins the Crest Group in 2000 and becomes one of its technology centers by developing six welding technologies: ultrasonics, spin, hot plate, vibration, laser and hot air.
Our leadership is fueled by our ability to innovate and meet the expectations of our customers in sectors such as food, automotive, cosmetics, household appliances, electronics, recreation, medical, metals, food and beverage. packaging, textiles and many more.
Member of the French alliance industry of the future, and labelized as suppliers of 4.0 industry solutions, we are also a connected player of the 4th industrial revolution to become.

Generators

Our generators analyse the power requirements of an acoustic assembly, ensuring optimal welding.

Pulse One

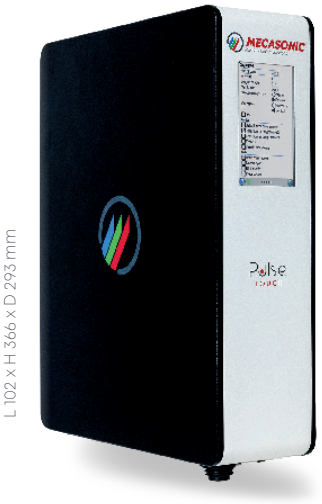
L 387.5 x H 105.5 x D 290.5 mm

Pulse ONE

- Small size
- Carterised generators can be controlled by PLC
- 7 Inputs/Outputs
- Can be switched via RS 485 interface
- Easy to fit
- Can be connected to Mecaview monitoring software
- Led indicator confirming «Mains on», «Ready», "OVL" and "US active"

Pulse touch

This carterised ultrasonic generator comes with a variety of welding settings including program memory, welding modes, amplitude control, which enable repeatable quality results. Manual welding devices can also be connected.



L 102 x H 366 x D 293 mm

Pulse TOUCH

L 102,5 x H 456 x D 270 mm

Frequency	Power range			
20 kHz	1 000 W	1500 W	2000 W	3000 W
30 kHz	500 W	1000 W		
40 kHz	400 W	800 W		

- Fitted with a high-resolution touch screen
- Simple, quick, intuitive programming
- 13 Inputs/Outputs
- Indication of power and frequency when idle
- Tracking of results with alarm signal
- Multi-program (x8)
- Programmable US start and stop ramps

Mecaséquence

Mecaséquence makes it possible to supply until 10 acoustic stacks using a single generator.

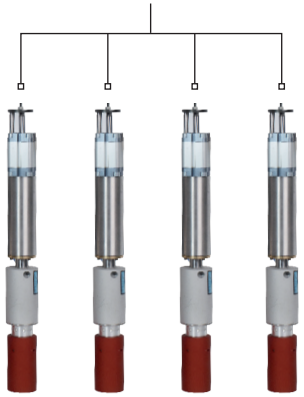
generator

Sub D 25 connexion

PLC provided by the client

mecaséquence

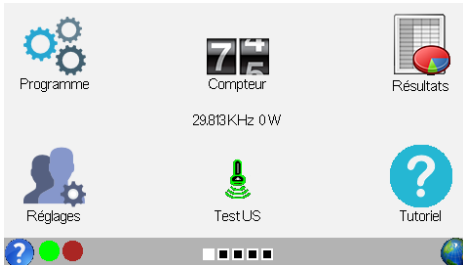
Frequency	Capacity
20 kHz	1 IN- 2 OUT
	1 IN - 4 OUT
	1 IN - 10 OUT
	2 IN - 4 OUT
30 kH	1 IN - 4 OUT
	1 IN - 8 OUT
	4 IN - 8 OUT
40 kHz	1 IN - 4 OUT
	1 IN - 8 OUT
	4 IN - 8 OUT



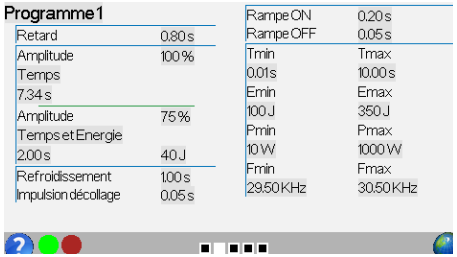
modules until 10 stacks

Pictures are not contractual

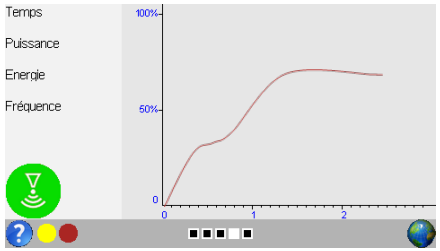
User interface with touch screen Pulse Touch



Icons to access programs and datas



Programmable welding parameters



Windows for welding charts

Pulse One and Pulse Touch generators can be networked by the RS422/485 interface.
The RS422/485 connections are found on the SubD25 connector, but also on the 12-points front connector.

Acoustic stack

For a high quality weld in all types of production lines. It is composed by an emiter, a booster, and a horn.

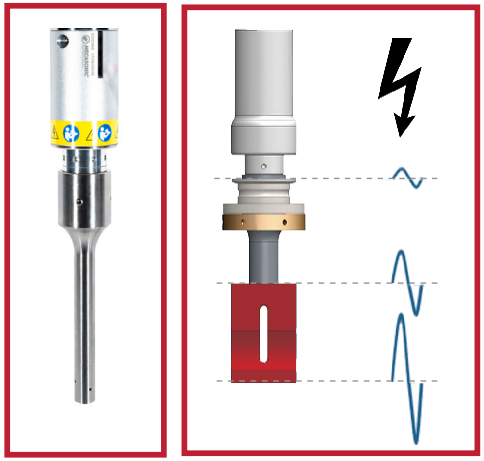
Convertors

Emiters (or convertors) are available in 20 KHz,30 KHz and 40 KHz, with optional housing. Lemo or AMP connexion.

Boosters

Boosters are available in 20KHz, 30 KHz and 40 KHz

Amplitude distribution in acoustic stack



1 Emiter
Converts electrical into mechanical energy.

2 Booster
Amplifies mechanical vibration.

3 Horn
Specific to each application, focussing the vibration onto the weld seam.

Horns

Pictures are not contractual

Modules

The Ultrasonic modules are compact units, easily incorporated into your production lines. They are intended for designers of special machines and integrators. The modular system is essentially made up of 3 items: **generator + acoustics + module**

The linear encoder (as an option depending on the module) enables optimal control and movement of the welding head, for quality results. Our engineers use computational methods to design sonotrodes to meet the requirements of all your welding applications.

Frequency	Diameter of cylinder	Designation	Encoder of the module operated by the PLC / Controller	Movement of the module operated by the PLC / Controller	Electrical stop in the module operated by Pulse Touch/ PLC	Ultrasonic function of the module operated by Pulse One / Pulse Touch	Stroke in mm	Dimensions with cable in mm (for information)		
								L	l	h
30 kHz	ø 40	ML	Option	X	X	x	100	472	78	193
	ø 25	Compact Unit		X	X*	X	25	140	40	60
	ø 25	Compact Unit		X	X*	X	50	180	40	60
	ø 32	ML	X	X	X	X	50	366,5	58	168
	ø 25	UBC		X	X	X	25	350	50	67
40 kHz	ø 40	ML	Option	X	X	X	100	472	78	193
	ø 25	Compact Unit			X*	X	25	140	40	60
	ø 25	Compact Unit			X*	X	50	180	40	60
	ø 32	ML	X	X	X	X	50	366,5	58	168
	ø 25	UBC		X	X	X	25	350	50	67

* or IO Link sensor allowing to access the parameters by PLC.

Compact Unit

ML 40

ML 32

UBC

Examples of applications

Automotive, cosmetics, medical etc.

Pictures are not contractual

From our industrial site in Juvigny, France...

We are steering operations linked to our local and international markets.
The support of our various partners across all five continents has helped us expand our field of activity and offer our clients personalised service effective throughout the world.

Argentina
Belgium
Brazil
China
Denmark
Finland
Germany
Indonesia
Israel
Italy
Japan
Malaysia
Morocco
Mexico
Netherlands
Philippines
Poland
Portugal
Singapore
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