



ULTRASONICS

# RANGE ULTRASONICS



MECASONIC  
Plastic Welding Solutions

mecasonic.com



Offreurs  
de solutions  
Industrie du futur

## We are PWS+

Founded in 1969 for the manufacture of ultrasonic welding equipment, MECASONIC integrate the Crest Group in 2000 and become one of its technological center, developing six welding technologies: ultrasonics, spin, hot plate, vibration, laser and hot air.

Our leadership is motivated by our capacity to innovate and meet the expectations of our customers working in Food cutting, automotive, cosmetics, domestic appliances, electronics, leisure, medical, metal welding, packaging & textiles sectors, and many others.

As a member of the Alliance Industrie du Futur, and labelled as providers of industry 4.0 solutions, we are also involved in the 4th industrial revolution to come.

\* Plastic welding solutions

## Welding machines easy, intuitive, connected

Mecasonic ultrasonic welding Omega 4 range machines allow you to weld thermoplastic parts in a precise and modular way. The numerous inspections carried out during the welding process allow welded parts of high quality to be obtained.

The OMEGA 4 is a 10" touchscreen with a simple, multilingual HMI allowing welding settings to be programmed easily and rapidly, with offline help that helps you through each step, as well as multi-level password options to avoid any undesirable changes.



OMEGA 4.A+

OMEGA 4.S

OMEGA 4.X

To meet your requirements, Mecasonic provides you with three models of machines. Each one can be adapted to your specific needs with an interface system allowing you to manage: the soundproof cabin, rotating table, transfer, manipulator, robot, automatic production line, etc...

### The operator is at the heart

These machines have been developed with constant attention paid to providing the operator with **ease of use as well as ever greater safety**. A dedicated safety controller is built into the welding machine.

### Productive intelligence

Its starting self-control, its warnings if the machine is lacking air, its detection of the beginning of part movement, its production monitoring, specifying the state of the welded part, etc. are all elements that make the **Omega 4 an intelligent machine**.

### High connectivity

Its high connectivity (Ethernet, OPCUA server, remote VNC screen, USB port etc.) allow the **Omega 4 to be used in a highly-communicative environment**.

### Reactive Welding System

The Omega 4 provides several welding phases (2 for A and 12 for S and X), **up to 50 programs depending on model as well as 10 welding modes**, 3 of which are part of the Reactive Welding System (RWS), exclusive to Mecasonic. It is the reaction of the part that determines continuity of the weld.

### Full power

The Omega 4 X provides you with even more functions due to its proportional valve, among others, that allows you to **control the pressure for each program and provides the possibility of using two holding phases**.

Frequency	Available power			
20 kHz	1 000 W	1 500 W	2 000 W	3 000 W*
30 kHz	500 W	1 000 W		
40 kHz	400 W	800 W		

## Manual equipment

### Pulse touch



This boxed ultrasonic generator gives you a variety of welding settings such as **saving programs, welding modes, amplitude management, for a repeatable and quality result**. It also provides the possibility of connecting manual welding machines.

Frequency	Available power
30 kHz	500 W
	1 000 W

W 102,5 x H 4,58 x D 270 mm



### Pencil & gun

Manual welding equipment, to be connected directly to the generator, allow **precision, fineness as well as high operating speed**. Due to their ergonomics, they are frequently used to make spot welds in parts with areas that are difficult to access or even for small production runs. Their reduced weight allows them to be transported easily to our various assembly points and for them to be used easily.

### From our industrial site in Juvigny in France...

We manage our activities and international markets. The presence of our various partners on every continents allows us to extend our area of activity and provide an effective, local service to our customers anywhere in the world.



Germany  
Great Britain  
Argentina  
Belgium  
Brazil  
China  
South Korea  
Denmark

Spain  
Finland  
Indonesia  
Israel  
Japan  
Malaysia  
Morocco  
Mexico  
Netherlands  
Philippines  
Poland  
Portugal

Singapore  
Slovakia  
Slovenia  
Sweden  
Thailand  
Tunisia  
Turkey  
USA



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