

# WS

## MICRO WELDING MACHINE

WS 10000S

POWER - ACCURACY - SPEED - SAFETY - SIMPLICITY  
COMPACT - SETTINGS POSSIBLE - INTEGRAL COOLING

The WS welding machines revolutionise welding without heating applied to the repair of tools by surfacing. Through their unique medium frequency technology, they combine amazing ease of use, with excellent quality of result and yield.

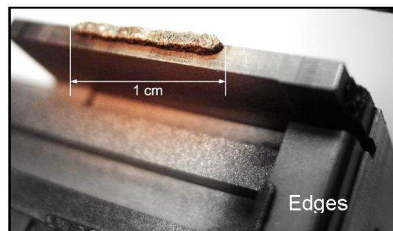
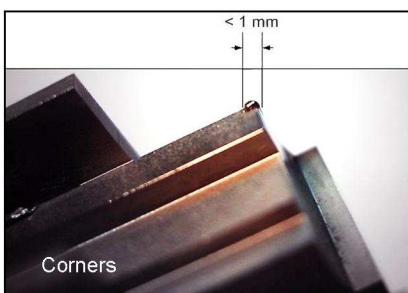
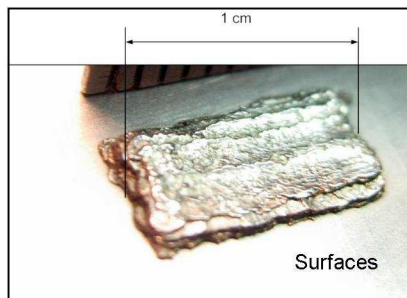
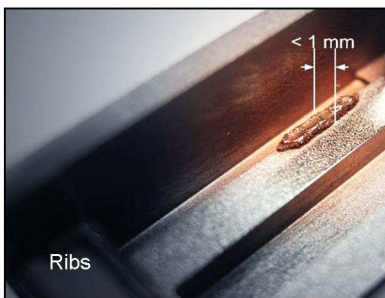


With a speed of 50 impulses a second, a very high maximum power, welding time of a few milliseconds and an extremely accurate current control, they enable you to obtain an optimal quality of welding, very near « laser » quality, as much for the look and the resistance, even under extreme stress (impacts, slipping, pressure, thermal shock, erosion, etc).

WS micro-welding appliances are the ideal solution, of high quality, speed, simplicity and long life, for surfacing tools for :

- Rubber injection
- Plastic injection
- Compression
- Aluminium smelting
- zamak smelting
- Extrusion
- Cutting
- Drawing

## TYPICAL APPLICATIONS



### MACROGRAPHIC EXAMINATION OF A WELD

Identification : Material 3144

- Piece en 3144
- Surfacing by welding of a sheet in 3144
- Macrographic attack : Nitral
- Magnification x 18

Done by an ECCI laboratory - Test mark 99.0117/2

#### RESULTS

- Detail of the structure in the link area :
- Satisfactory penetration of molten metal
- View of the assembly on polished metal :
- A few metal folds can be discerned

# CHARACTERISTICS

Model	10 000 S
Supply	1~220V/50Hz/60Hz
Type of converter	Medium frequency 5kHz
Maximum welding power (1)	14.4 kW
Maximum welding amperage (2)	10000 A
No load voltage U <sub>20</sub>	3.6 V
Type of control	Current regulation
Maximum welding time	250 ms
Minimum welding time	1 ms
Current accuracy	8 A
Cooling generator	Induced air
Cable cooling	Induced air
Dimensions	Length 420 mm x width 240 mm x height 280 mm
Weight	19 Kg
Programming	10 programmes integrating all the parameters separately
Adjustable parameters	<ul style="list-style-type: none"> <li>• Welding amperage in %</li> <li>• Welding time in ms</li> <li>• Single impulse / multi impulse welding cycle</li> <li>• Form of impulse (powder / wire - sheet)</li> </ul>
Maximum impulse speed	50
Maximum welding capacity (3)	1.2 / 0.4
Accessories and options	<ul style="list-style-type: none"> <li>• Rotating welding torch / cooling dia. 70 mm<sup>2</sup></li> <li>• Rotating welding torch / cooling dia. 35 mm<sup>2</sup></li> <li>• Cooled welding ground dia. 70 mm<sup>2</sup></li> <li>• Mini welding torch dia. 16 mm<sup>2</sup> / Electrode holder dia. 2 et 5 mm</li> </ul>

(1) Measurements made at the end of standard cables  
 (2) Measurements made with short circuit at the machine outputs  
 (3) Test carried out with accessories of the largest dimensions

## ADVANTAGES

- Very easy to use
- No heating
- No deformation, auroras, receding material, etc.
- Discretion of welds, even in visible areas
- For all ferrous materials
- Surfaces areas where access is difficult
- Perfectly even and resistant welds
- Very high accuracy
- Hardness of the welds : 36 to 62 HRC
- Easy and risk-free use - no projections
- No protection needed
- No emission of arcs or smoke
- Ideal for intervention on press (no emission of high-frequency current)

## ACCESSORIES



Welding torch  
dia. 70mm



Footswitch pedal



Mini welding torch  
Dia. 35 mm



Micro welding torch  
Dia. 16 mm and 2 and 5  
mm quick removal styluses

Materials

- Powders
- Laser wires
- Strips



Consumables

Electrodes

- Magnetic
- Silver / Copper

EXCLUSAMENTE EN MEXICO:  
 Expertos en Plásticos, S.A. de C.V.  
 México, Distrito Federal C.P. 01 050  
 Lusacell 044 55 19 52 21 56 y Nextel 01 [461] 21 23543 Id. 72 \* 12 \* 22278  
 mail: experplast@prodigy.net.mx — www.sstmicrowelding.com

