

WS

AIR-COOLED MICROWELDING

high speed spot welding

SST
MICROWELDING.COM



POWERFUL – ACCURACY – FAST – SAFE

WS welding stations are revolutionizing the air-cooled repair welding of **tooling**. Thanks to their unique medium frequency technology, they combine a disconcerting ease of use with excellent quality results and productivity.

With a rate of 50 pulses per second, a very high maximum power, millisecond-long welds and extremely precise current regulation, they enable you to obtain optimal weld quality, very close to laser quality, be it in terms of aspect or resistance, even to extreme stress (shock, shear, pressure, thermal shock, erosion, etc.).

As they do not deliver high-frequency current, they can be used on production machines (presses, machining centers, etc.).

TYPICAL APPLICATIONS



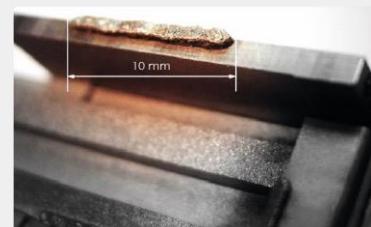
Mold Edges



Metal braiding



Filters



Repairs

Macro test of a welding repair

3144 part
Repair weld on a 3144 ribbon
Etch type : Nitral
Magnification : x 18



Results

Structural detail in the bonding area:
Satisfactory penetration of the molten metal
View of the assembly weld on polished metal: a few folds can be detected on the surface



TECHNICAL CHARACTERISTICS

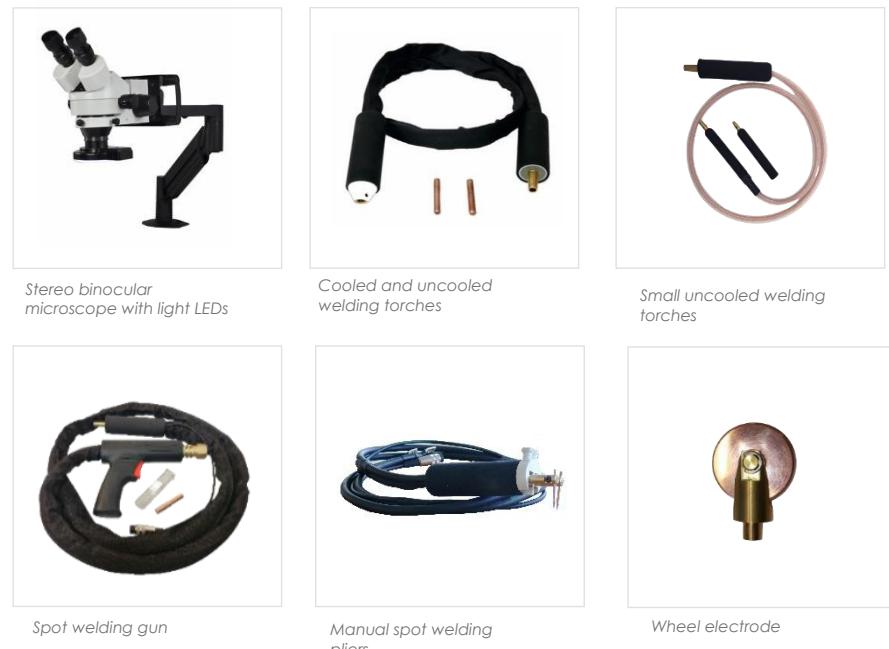
Model	WS 5100 S	WS 7000 S	WS 10000	WS 10000 S
Power supply			1~220V/50Hz/60Hz	
Converter type			5kHz medium frequency	
Maximum welding power	7.3 kW	10 kW		14.4 kW
Maximum welding current	2000 A	2800 A		4000 A
Open circuit voltage U20			3.6 V	
Control type			Current regulation	
Spot time			1 à 99 ms	
Minimum welding time / mode		Simple spot – multi spot / Short time spot – long time spot		
Current precision			8 A	
Generator cooling			Forced air	
Generator cooling			Forced air	
Size		L 420 mm x W 240 mm / H 280 mm		
Weight	18 kg			19 kg
Programming		9 adjustable programs		
Adjustable settings		Welding current in % Weld time in milliseconds Weld cycle : Single point / Multi point Spot shape and duration: Short (Powder application) - Long (Wire application)		
Pulse rate (Hz)	12	16	25	50
Maximum welding capacity (wire)	0.8* / 0.2**	1* / 0.3**		1.2* / 0.4**

* welding wire / **ribbon

ADVANTAGES

- › Simple set-up
- › No overheating
- › No heating or deformation of the material
- › Discreet welds even in visible areas
- › For use on ferrals material
- › **Perfectly uniform and resitants welds**
- › Great for hard access area
- › High precision welding
- › Weld hardness between 36 to 70 hardwell
- › Safe and easy to use- no projection
- › No protection required
- › No arc or smoke
- › Ideal for work on presses (no high-frequency current emission)
- › Mobile and compact

RECOMMENDED ACCESSORIES



Join us to stay informed about our latest innovations and events :



The complete range of consumables and accessories for WS machines :
Cables, welding materials, work piece holders, optics, electrode grinding machines, etc.)
is available on the website : www.sstmicrowelding.com