TECH-SONIC
ULTRASONIC METAL WELDING

US-3620WS2P

Wire Splicer

The US-3620WS2P is capable of welding a broad range of applications including copper splicing, aluminium splicing, and copper-to-aluminium splicing over a range of 0.26mm2 to 50mm2 of the total welded cross-section. Together with Closed Loop Control (CLC), the US-3620WS2P is a flexible, high-end solution for wire splicing.

High Efficiency

- Reduced operational costs
- Reduction in tooling consumption
- Less defects with superior quality welds
- Wide range of wire configurations

Superior Accuracy & Control

- Detects a single missing wire at $0.35mm^2$ or 3% total CSA
- Detects retracted wires from weld area, and added insulation into the weld area
- Consistent measurement and ultrasonic output produce high cPk values
- Multi-step welds with unique force and amplitude parameters

CLC Wire Splicer Technical Specifications

TECH-SONIC's CLC wire splicer WS2P is unique to the ultrasonic metal welding industry. It can weld applications from 0.26mm2 all the way up to 50mm2 using various materials and combinations, such as copper, aluminum, and copper to aluminum.

Powered by CLC, the WS2P is capable of detecting the smallest shift in height and width during a weld. The detection rate for added or missing material to the total cross-section is as low as 3%, compared to 5-7% using competitor machines. This allows for greater quality control and more freedom to design larger weld combinations using smaller wires.

With a dual servo motor design, the WS2P monitors the height and width of the weld during the entire cycle, ensuring the right geometry every time and alerting the user if the measurements are incorrect.

SPECIFICATIONS

Frequency	20 kHz nominal
Ultrasonic Power	3.6 kW max power supply
Applications	Wire Splicing (.26mm2-.50mm2)
Supply Power	230 V/1 phase (+10% and -5%) 20 Amp max, Nema 6-20r outlet
Pneumatic Pressure	5.0 bars / 72 psi; Air Filter builtin; requires 6mm OD Hose
WeldForce	~1,200 Newton maximum
Weldhead	23 kg / 20.3 x 18.6 x 20.0 cm 50 lb / 8.0 x 7.3 x 20.0 inches
Controller Cabinet	33 kg / 50.8 x 22.9 x 61.0 cm 71 lb / 20.0 x 9.0 x 24.0 inches
Software	Windows 10
Visual Display	20.0 inch touch screen display
Additional Options	Bad Wire Cutter Barcode Scanner

WELDING CAPABILITIES

Cross Section Area	0.26mm^2 to 42.00mm^2
Wire Type	Copper (Cu) Aluminum (Al)