

RSWA

RESISTANCE SPOT WELD ANALYZER

RSWA is an ultrasonic device designed for quality control and NDE of resistance spot welds. RSWA is a portable and simple-in-operation device capable of producing images of spot weld's internal structures. In addition to live on-screen image, this device performs estimation of the nugget diameter and compares it with predefined minimum nugget requirements.

Using the unique technology of multi-channel ultrasonic matrix transducer, RSWA collects data from the surface and from the internal structures of the nugget. Special algorithms use this data to reconstruct the image of the spot weld and estimate the average diameter of the nugget area in real time.

Features

- single-frame and continuous data acquisition modes
- automatic and manual nugget size estimation
- automatic detection of scanning depth inside the metal
- two levels of user interface complexity depending on operator skills
- built-in reporting system and file storage

Application

Metal stacks: 2T and 3T; 0.6 – 2.4 mm plate thicknesses

Types of materials: mild steel, high strength steel, dual phase ultra high strength steel

Coatings: bare, zinc coating (galvanized, galvaneal), e-coating, paint

Specifications

Processor

- Intel® Atom N270 1.6GHz

RAM

- 2 GB DDRII SODIMM

Hard Disk

- 2.5" 60 GB Solid State SATA

Display

- 10.2" TFT LCD display with LED backlight, Sunlight readable 500 nit
- Resolution 1024 × 600
- Resistive touch screen
- Replaceable screen protector

Communications

- Gigabit Ethernet 10/100/1000Mbps
- WLAN 802.11 b/g
- Bluetooth 2.0 EDR Class 1 Module (optional)

External Ports

- Two USB 2.0, one MiniUSB
- Audio in/out
- RJ45 Ethernet jack
- PCMCIA, CompactFlash slots
- 15 pin D-sub VGA port

Power

- Two 9-cell smart Li-ion batteries (7800 mAh)
- Average battery run time: 9 – 12 hours
- External power adapter: 100 – 240 V, 50 – 60 Hz, 65 W

Temperature Range

- 5° – 40° C (41° – 104° F)

Storage Temperature

- -20° – 60° C (-4° – 140° F)

Dimensions

- 27×26×11.5 cm
10.6×10.2×4.5 in

Weight with Batteries

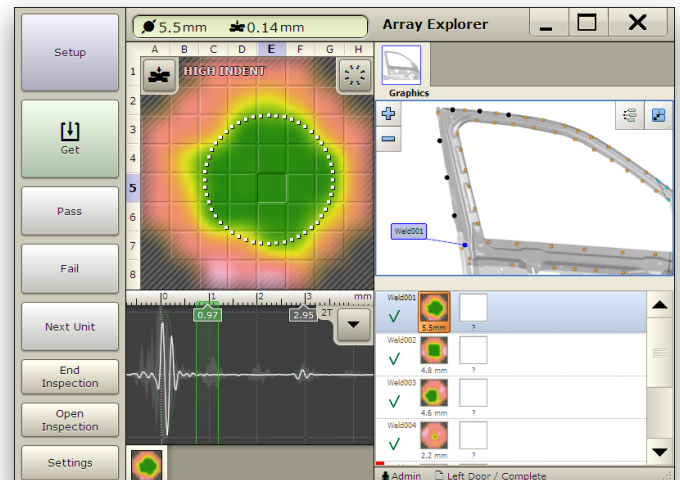
- 4.5 kg (10 lb)

Transducer

- 52 channels
- Matrix diameter: 10 mm
- Frequency: 15 MHz
- Stainless steel housing
- Rexolite hard delay line

Cable

- Length: 2 m
- 52 coaxial channels
- Fiberglass protective shell



Tessonics Inc.
1983 Ambassador Dr.
Windsor, Ontario
N9C 3R5 Canada

Tessonics Corp.
2019 Hazel Str.
Birmingham, Michigan
48009, U.S.A.

phone: 1-519-250-4455
toll free: 1-866-440-3313
fax: 1-519-250-5747

www.tessonics.com