



F2

ULTRASONIC QUALITY INSPECTION PLATFORM

F2 is an ultrasonic device designed for NDE and quality control for various applications, including resistance spot welds, and adhesive joints. Using the unique technology of multi-channel ultrasonic matrix arrays, this portable and simple-in-operation device is capable of producing internal ultrasonic C-scan images of defects and structures.

RSWA software: unique algorithms and multi-channel transducers provide information about internal nugget structure such as its size and indentation depth for proper weld quality evaluation.

ABIS software: viewable presence of adhesion facilitates determining defects of bonding and shows bead size.

Our software helps making decisions, guides through inspections routine with easy to understand graphics, allows saving completed inspections and transfers reports to PC based data bases.

Features

The F2 Platform is configurable as:

- Resistance Spot Weld Analyzer (RSWA)
- Adhesive Bonding Inspection System (ABIS)

The built-in electronics supports:

- Probes with built in identification system
- Three different type of multi-channel probes
- Replaceable probe cables
- Single-frame and continuous live data acquisition modes

The infrastructure solutions supplied with the platform include: planning and managing the routine inspections, data synchronization, reporting, and integration with existing customer systems

Applications

- *RSWA Mode:* 2T and 3T welded stacks
- *ABIS Mode:* Adhesion bonded stacks
- Steel and Aluminum
- 0.6 – 2.4 mm plate thicknesses
- Bare, coated, and painted

Specifications

Processor

- Apollo Lake Intel Pentium N4200 Quad Core, 1.1 GHz, up to 2.5 GHz

Display

- 10.1" IPS panel, 1920 × 1200
- Resistive touch screen
- Replaceable screen protector

Memory

- 4 GB DDR3L

Storage

- 256 GB SSD

Communications

- WLAN 802.11 a/b/g/n/ac
- Bluetooth®

External Ports

- 2 × USB 2.0 ■ HDMI ■ DC-In

Power

- 2 × Smart Li-ion batteries, 14.4 V, 49 Wh
- Average battery run time: 9–12 hours
- DC adapter: 100–240 V, 65 W

Transducers

- Channels: 52 or 120
- Matrix diameters: 10 or 15 mm
- Frequency: 15 MHz
- Matrix Pitch: 1.25 x 1.25 mm

Mechanical

- Weight with batteries: 2.3 kg (5 lb)
- Dimensions: 27.6×22×5.7 cm (10.9×8.6×2.3 in)
- Adjustable stand
- Machined aluminum enclosure



Tessonics Inc.
787 Ouellette Ave.,
Windsor, Ontario
N9A 4J4, Canada

Tessonics Corp.
2019 Hazel St.
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