# Next5pot 600

# **Spot Weld Ultrasonic Flaw Detector**



- Real-time Detect and Visual Feedback
- Multi-Channel Phased Array System
- 10.4" Touchscreen XGA Wide-Angle View
- NextSoft Studio Cloud Data Management



## NextSpot 600

# Portable Ultrasonic Flaw Detector for Spot Weld NDT

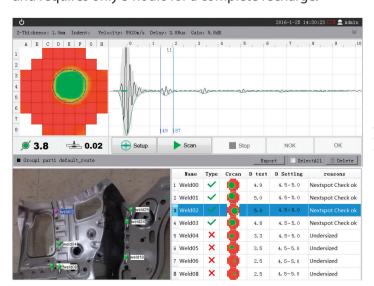
NextSpot 600 ultrasonic flaw detector will handle all your spots weld NDT needs, whether it is in production lines or in field environments. The unit is constructed with an one piece all aluminum housing, that is both rugged and lightweight, with a weather protected rubber coating on the outside. Using patented technologies, backed by years of R&D in the NDT industry, NextSpot 600 can produce real-time imaging with auto-detection on spot weld flaws both quickly and accurately. In today's ever increasing competitiveness in the automotive manufacturing segment, NextSpot 600 with its easy-to-use and its powerful feature interface can save valuable time and increase productivity.

### **Rugged and Portable - All Aluminum Alloy**

NextSpot 600 is constructed with an all aluminum alloy shell with 360° shielding. It adopts a one-piece aluminum alloy with rubber coating that makes it rugged, lightweight, and compact. The unit is also weather protected and stress tested so that It can operate from -10°C ~ 50°C. Weighing at only 3 kg, NextSpot 600 is both portable and reliable, especially for conducting field testing.

### **Long Battery Life - ARM Technology**

NextSpot 600 uses the ARM processor, which know for energy efficient, and along with a fanless design, a fully charged unit can perform 8 hours of normal operation, and requires only 3 hours for a complete recharge.



**NextSpot User Interface** 







### Powerful, Flexible, yet Easy-To-Use Software

At the heart of the device is our NextSoft Analyser user interface that we build from the ground up. Built on top of the Linux OS platform, it provides a safe, reliable and stable platform for our software system. Boasting a 10 seconds startup time, it can be quickly and easily setup to perform real-time image scanning on spot welds.

# Exceptional Visual Interface - 10.4 inches Full Touch Screen with XGA Wide-angle View

Testing in the field are often conducted in harsh environments where visibility may be poor and requires having to wear gloves. The NextSpot 600's 10.4 inch full touchscreen with XGA wide-angle viewing help address these common issues all while giving you the most accurate visual results and feedbacks.



**Ultrasonic Transducer** 

### Accurate Measurement - 64 Channels, 1MHz-25MHz Bandwidth, 400 Mhz/12 bits DSP

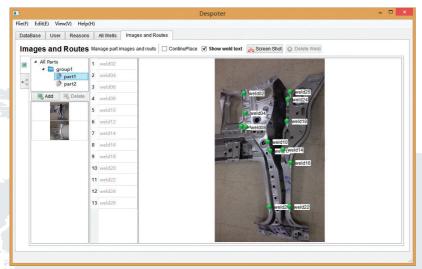
By adopting a parallel 64 channel design, 1MHz-25 MHz analog bandwidth, and 12 bits DSP, it gives NextSpot 600 the most accurate measurement of welding nuggets and indentations. Furthermore, the results are all visual and can be immediately determined whether the results are passed or failed.

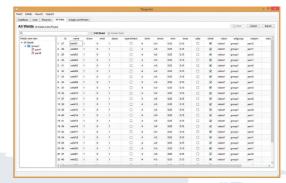
### **Real-time Imaging and Other Testing Methods**

NextSpot 600 can provide A/C - scan and real-time display on spot weld.

NextSpot 600 can support single element probe testing, PA imaging testing as well as various non-ultrasonic methods, data capture, chisel inspection, visual inspection, and many more.

### Next**Soft** Studio





**NextSoft Studio Admin** 

### **NextSoft Studio Admin - (Optional)**

Each NextSpot 600 comes with the standard version of the our NextSoft Analyser System, which works well as an independent stand-alone spot weld inspector. But often NDT inspections require to function as a group or a team that is supervised by management. The NextSoft Studio Admin (software) provides this function.

The admin version can upload any testing required part images into the system. The system can then create visual labels on exactly where and what to test, and also setup the testing sequences. All inspection points' results will then be individually captured and logged into a database for further statistical evaluation.

### **NextSoft Studio Cloud - (Optional)**

Our NextSoft Studio Cloud is a cloud data managment tool that can synchronize data among multiple units of NextSpot 600 devices via the cloud to a single repository location.

In order to manage a full team of inspectors in a production line and/or in a field environment that meet strict quality NDT management requirements, all data captured by each NextSpot 600 unit can be individually upload data to a cloud based data repository along with information such as inspection plans, test location, test settings, and etc.

Once the data are in the cloud repository, they can be downloaded into a remote management system off-site for further analysis.







# **Specifications**

### Housing

Overall dimensions 287 mm  $\times$  267 mm  $\times$  67 mm(11.3 in.  $\times$  10.6 in.  $\times$  2.6 in.)

Weight 3.5 kg (7.7 lb) with battery

IP IP54

Control Device Remote control, Touch screen

Probe D-sub68 - Matrix
Power Socket 5.5-2.5mm DC Socket

### **Environmental Specifications**

Operating temperat ure -10°C to 50°C (14°F to 122°F)

Storage temperature -20°C to 60°C (-4°F to 140°F) with battery

-20°C to 70°C (-4°F to 158°F) without battery

Relative humidity Max. 70% RH at 45°C noncondensing

### Display

Display size 26.4 cm (10.4 in.)
Resolution 1024 x768
Brightness 600 cd/m

Viewing angles Horizontal: –89° to 89° Vertical: –89° to 89°

Type TFT LCD

### **Power Supply**

Battery type Smart Li-ion battery

Number of batteries 1

Battery life Minimum 8 hours under normal operating conditions

Power supply unit 100-240V AC, 47-63Hz,1.45A PRF 8K Hz(No continuous pulse series)

### **Ultrasound Specifications**

Number of Channels/Elements 64:52 PR Voltage 50 V

Pulse shape Negative square wave

Initial pulse rise time <2.5 ns

Damping 50 ohm

Range 0.5-9mm

Velocity range 2000-8000m/s

Probe delay 2-8 us
Frequency 1Mhz-25Mhz

Gain 40dB

Sampling 12bit 100MSPS

### **Data & Views**

Display mode A-scan, C-scan

Welding Nugget Real-time welding nugget diameter measurement

Indentation Real-time detect, Smart average

Data Synchronism USB; NAS (Optional)

Note: We reserve the rights to technical modifications without prior notice.



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