

# NextSPOT 600+

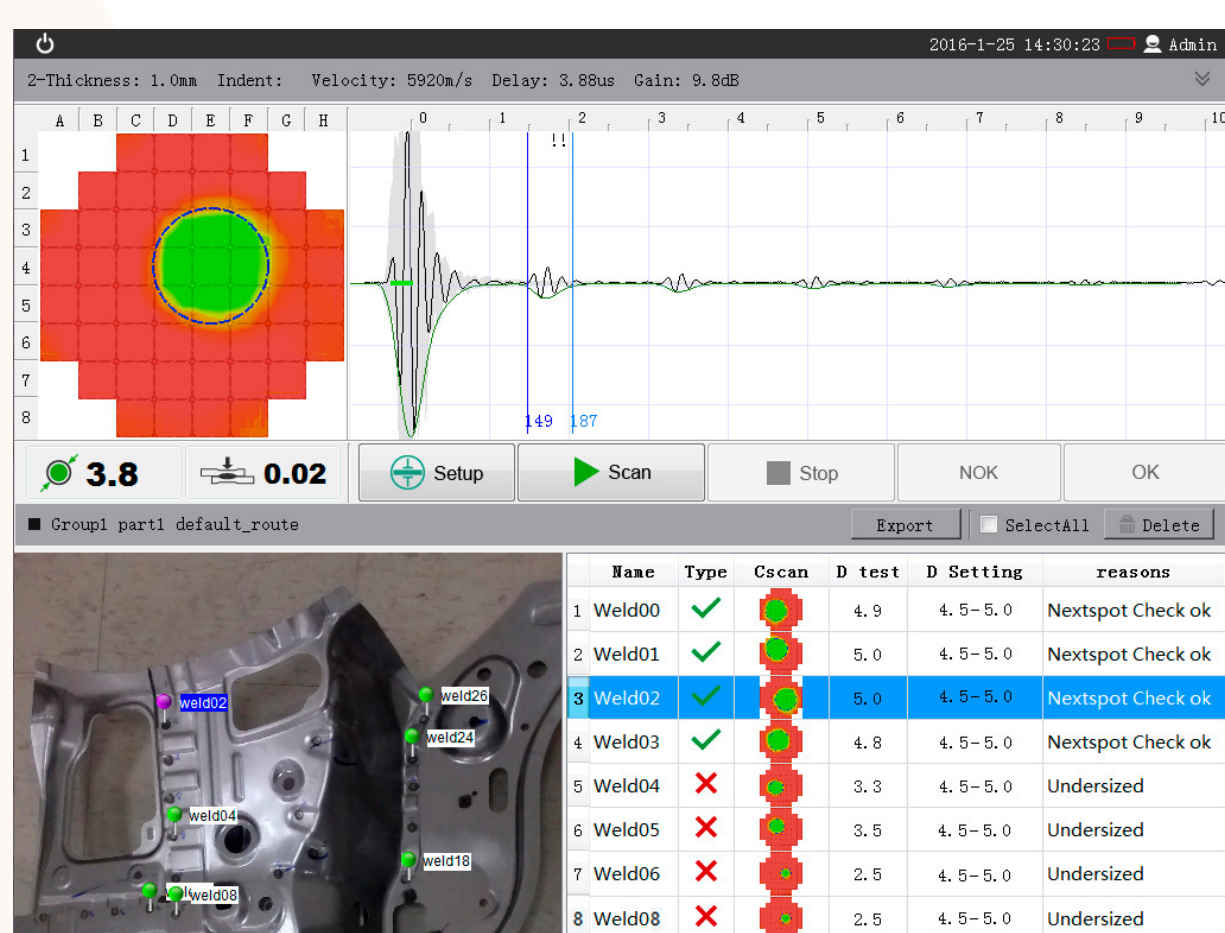
Spot Weld Phased Array Ultrasonic Flaw Detector  
All New Windows Edition



# Ultrasonic Phased Array Spot Weld Detector

## 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.



NextSPOT User Interface



## 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 NextSPOT 600+ is both portable and reliable, especially for conducting field testing.



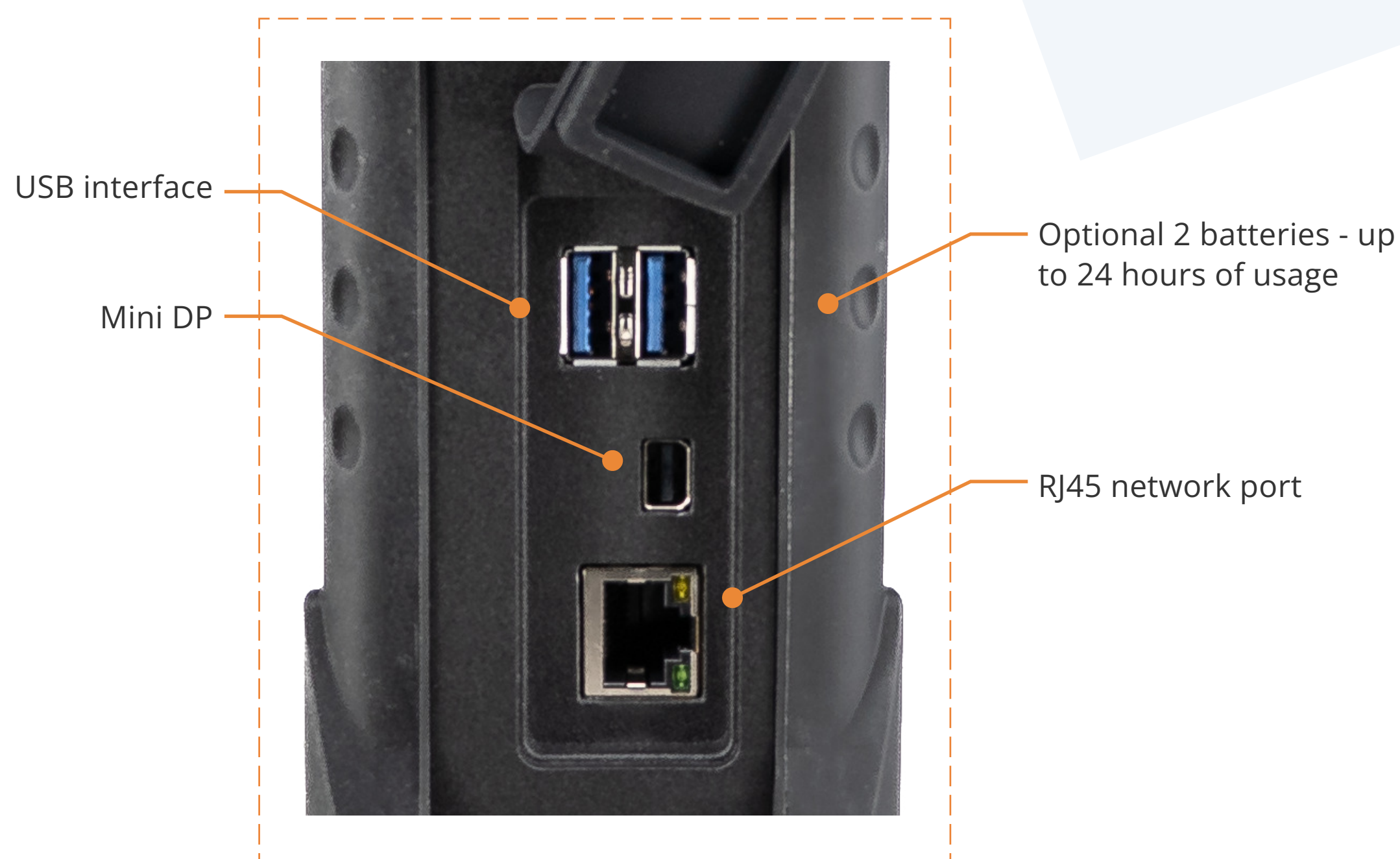
## Long Battery Life - remove

NextSPOT 600+, which know for enery efficient, and along with a fanless design, a fully charged unit can perform 12 hours of normal operation (1 battery), and requires only 3 hours for a complete recharge. 2 batteries will bring it close to 24 hours.

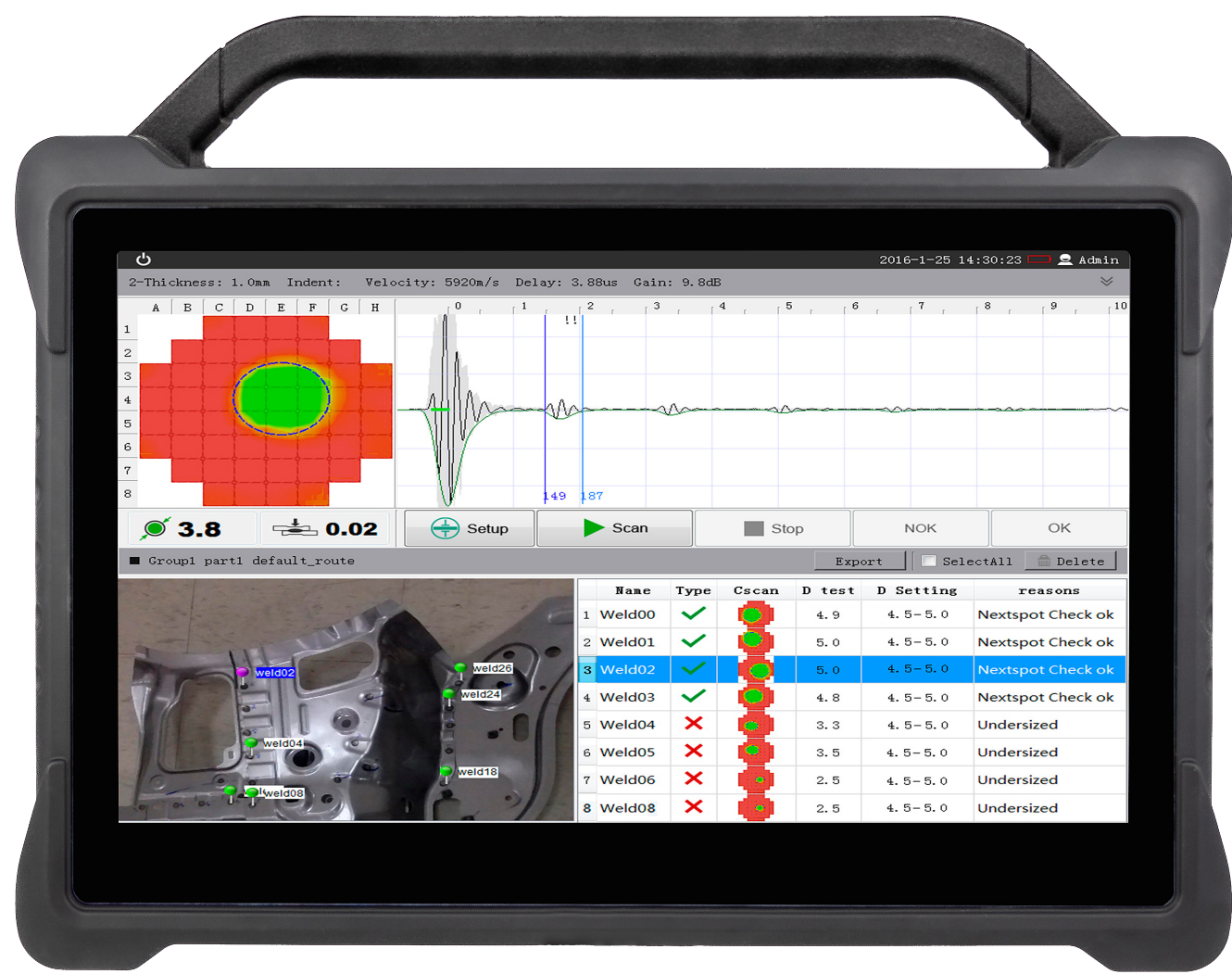


## Powerful, Flexible, yet Easy-To-Use Software

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.



# Ultrasonic Flaw Spot Weld Dectector



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



## Exceptional Visual Interface - 10.4 inches Full TouchScreen 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 Matrix Transducer

52 Channels  
Matrix Diameter: 10 mm  
Frequency: 16 MHz  
Stainless steel housing  
Hard delay line

## Available Size - Tip Diameter

10, 15, 20 mm

## Cabling

Length: Custom  
52 coaxial channels  
Protective Shell

## Application



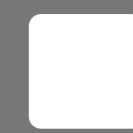
### Joint Structures

2-Layers, 3-Layers, and 4-layers (Non-Glue/Glue Bonded)



### Plate Thickness Calibration

0.5 mm ~ 4.0 mm



### Material Coverage

Mild steel, Cold Pressed High Strength Steel, Hot Stamped Ultra High Strength Steel, Aluminum Alloys, Stainless Steel, and Titanium



### Surface Processing

Bare Metal, Al-Coating, Zinc Coating, Electrophoretic Coating, and Paint Coating.

## KEY FEATURES

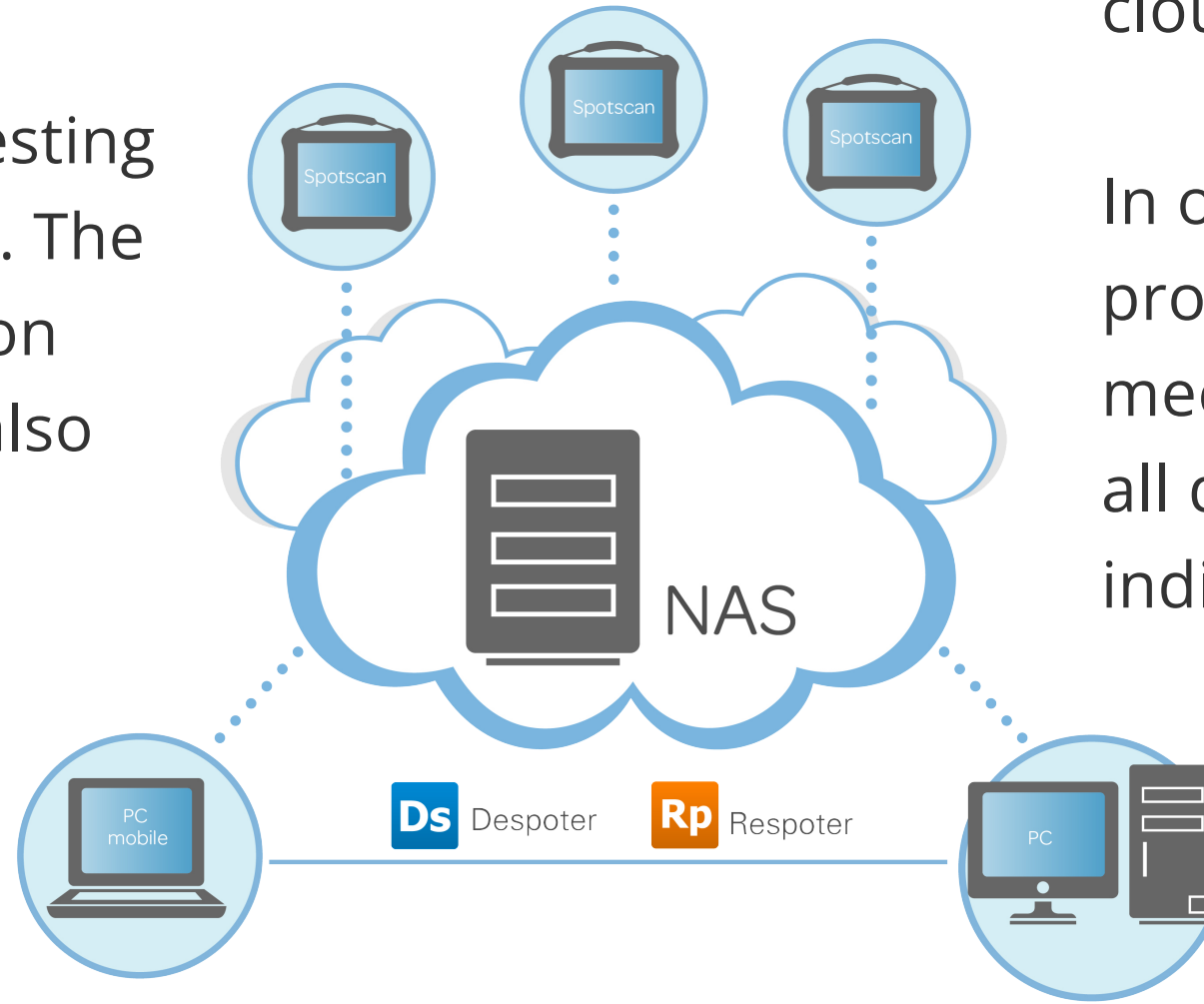
- 1 Real-Time Detect and Visual Feedback
- 2 Multi-Channel Phased Array System
- 3 10.4" Touchscreen XGA Wide-Angle View
- 4 NextSOFT Studio Cloud Data Management

# Complete Spot Weld Management Software Solution



## NextSOFT Studio Admin

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 management 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.

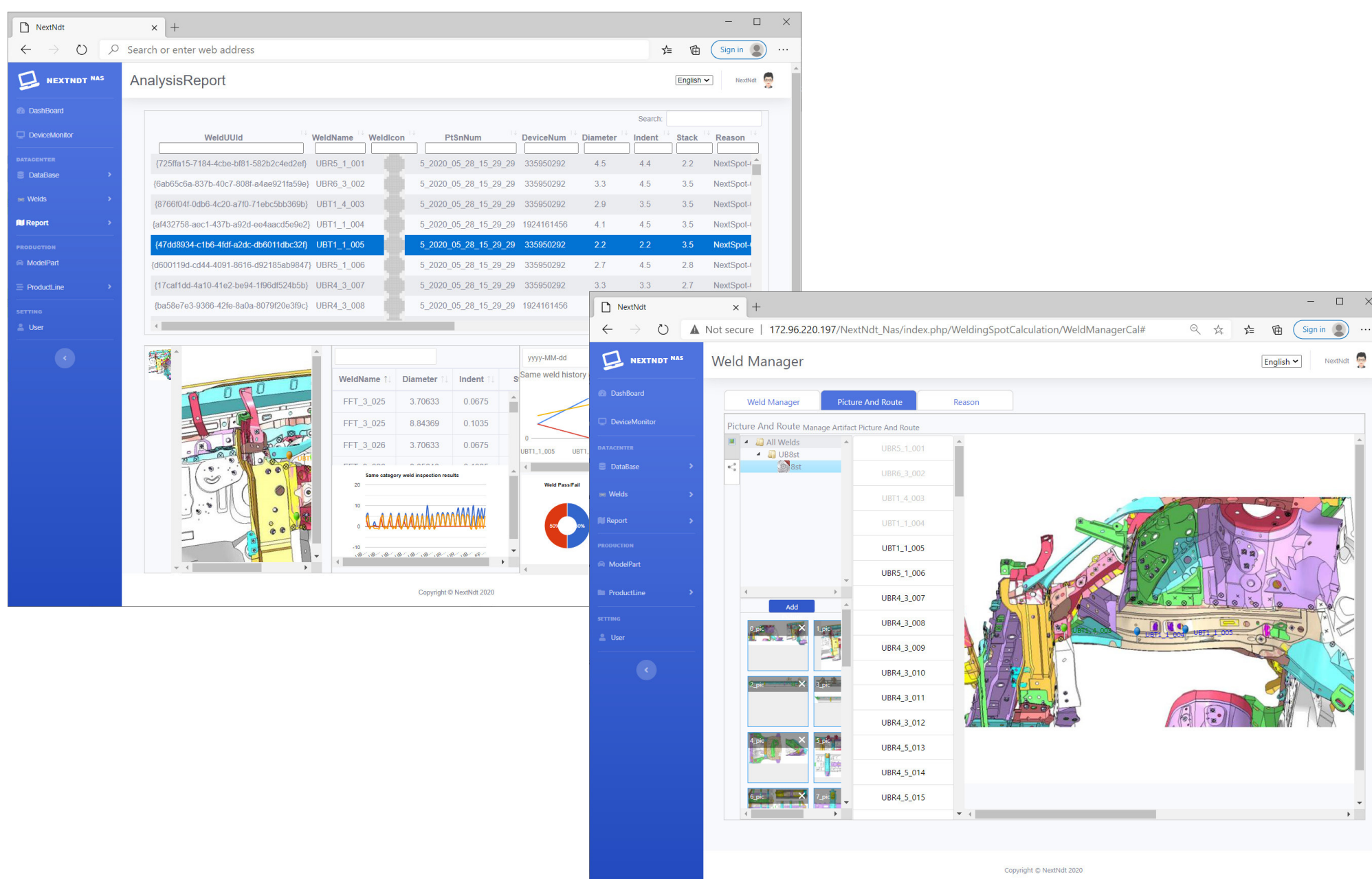
Once the data are in the cloud repository, they can be downloaded into a remote management system off-site for further analysis.



## NextNAS - An online browser-based spot weld management analyzer tool

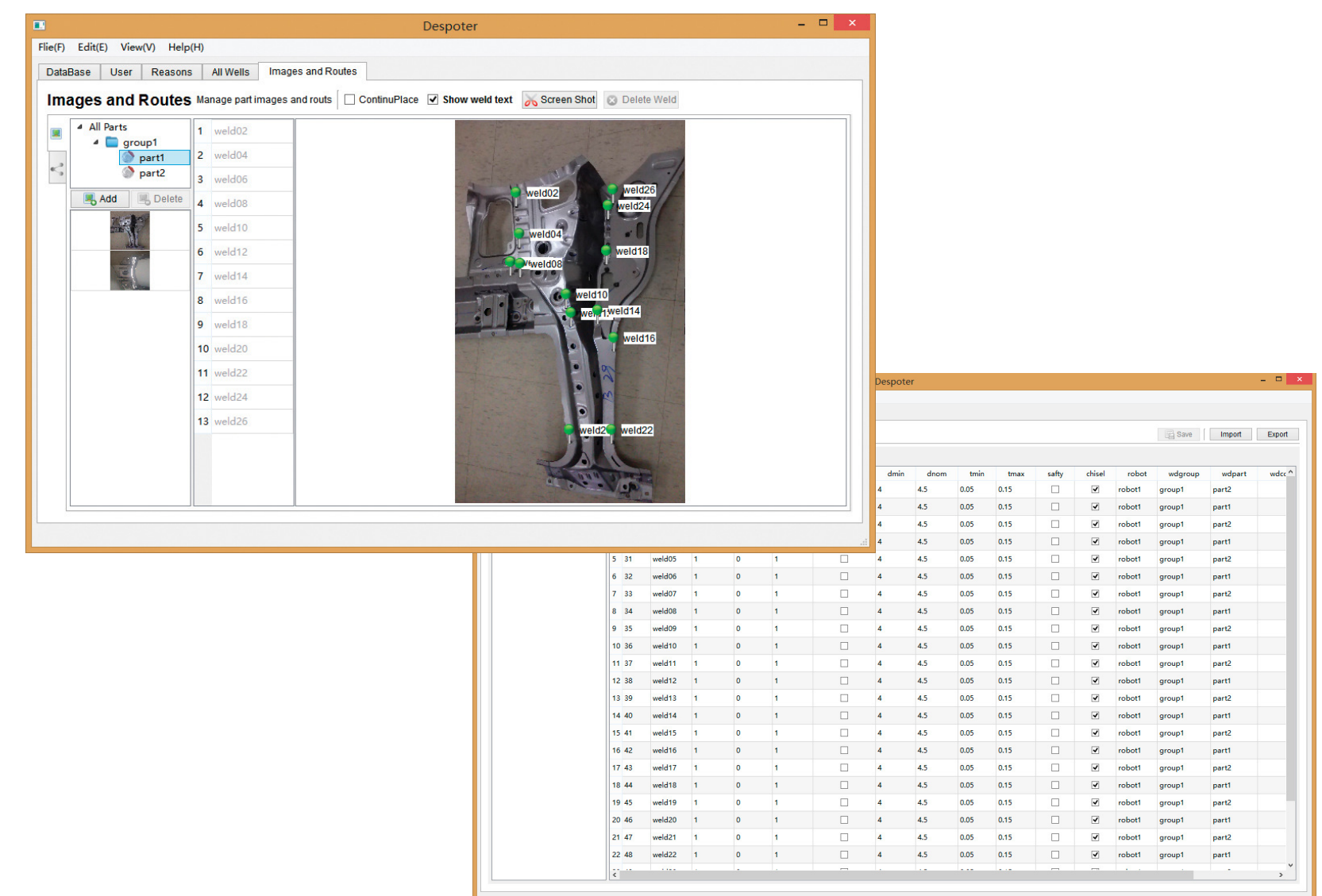
Introducing NextNAS...An online browser-based spot weld management analyzer tool where your data can be hosted online and share globally. Here you can customize your dashboard, create custom reports, drill down to individual spot weld detail with full graphs and graphics. To learn more, please contact your local representative for a full demonstration.

- Dashboard
- Detector Monitor
- Database Management
- Report Manager
- Spot Weld Manager
- User Manager
- Many More ...



## NextSOFT Studio

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.



# NextSPOT 600+ Specification

## Housing

Overall Dimensions	311.6mmx213.8mmx69mm (12.2 in. × 8.4 in. × 2.7 in.)
Weight	About 4kg with one battery
IP	IP 54
Control Device	Remote control, Touch screen
Probe	D-sub 68 - Matrix
Power Socket	5.5-2.5 mm DC Socket

## Display

Display size	11.6 in
Resolution	1920 x 1080
Brightness	600 cd/m
Viewing angles	Horizontal: -85° to 85° Vertical: -85° to 85°
Type	TFT LCD

## Ultrasound Specifications

Number of Channels/Elements	64 Channels / 52 Elements
Voltage	50 V
Pulse shape	Negative square wave
Initial pulse rise time	< 2.5 ns
Damping	50 ohm
Thickness Measuring Range	0.5 - 9mm
Velocity range	2000 - 8000 m/s
Probe delay	2 - 8 us
Frequency (Center Frequency)	1Mhz - 25 Mhz (16MHz)
Gain	40 dB
Sampling	12 bit 100 MSPS

## Environmental Specifications

Operating Temperature	-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

## Power Supply

Battery type	Smart Li-ion battery
Number of batteries	1 Included. Can hold up to 2 batteries.
Battery life	Approximately 12 hours under normal operating conditions
Power supply unit	100 - 240 V AC, 47 - 63 Hz, 1.45 A
PRF	8K Hz(No continuous pulse series)

## Data & Views

Display mode	A-scan, C-scan
Welding Nugget	Real-time welding nugget diameter measurement
Indentation	Real-time detect, Smart Average
Stack of Welding Joint	Real-time detect, Smart Average
Data Synchronism	USB; NAS (Optional)

Note: We reserve the rights to technical modifications without prior notice. Always refer to our website for the latest info.