

Pundit® 250 Array Ultrasonic Imaging Scanner



# Deep scanning of concrete and fibre reinforced concrete

# Thickness measurements

Thick concrete elements and tunnel linings

# Localization of defects

Voids, honeycombing and depth and extent of delaminations

# **Detection** of objects

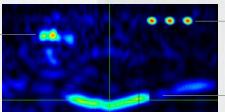
Pipes and tendon ducts beyond the rebar layer



# Intuitive output - more than just graphs or values!



Rapid identification of suspect areas



Rebar detection in near field

Accurate depth measurement >1m

# A Quantum Leap in Ultrasonic Pulse Echo Testing



### **Effective**

- High quality images of defects, rebars and tendon ducts
- Superior near field performance
- Highly durable ceramic tips



 No couplant required due to dry point contact technology

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- Real-time B-scan visualization
- Image optimization before saving a scan
- Panorama B-scans for rapid identification of suspect areas
- Scan several meters in less than a minute
- Lightweight and compact design for increased accessibility and faster scans

#### **Versatile**

- Single handed positioning
- Double handle upgrade for increased control

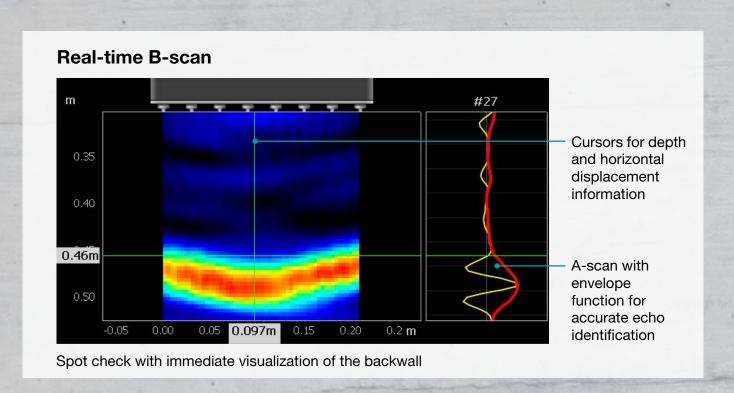


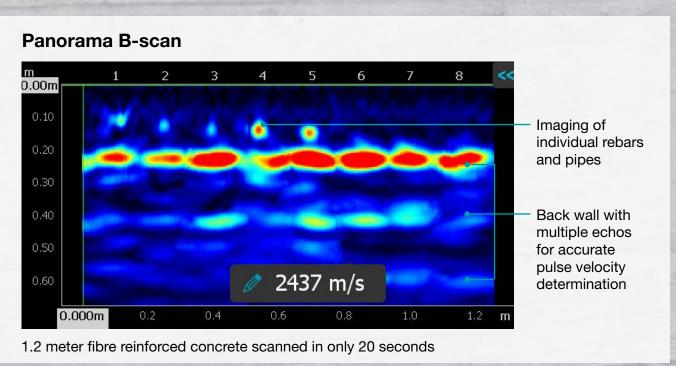
 Upgrade to 16 channels to double the scan width



Raw data export

# **High Resolution Imaging**Optimize Live Image Before Saving







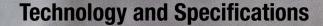
# Pundit Array Transducer

Rugged, Lightweight and Scalable





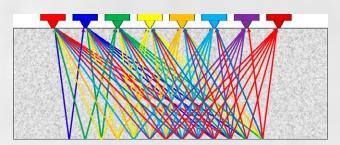




### The technology

The Pundit 250 Array is based on the ultrasonic multichannel pulse echo technology using 8 channels. One channel transmits and the echoes are received by the other seven channels. Each channel transmits in turn.

A complete measurement consists of 28 A-scans. These are used to compute and display a B-scan in real-time using the Synthetic Aperture Focusing Technique (SAFT). Coupling two transducers results in a 16 channel aperture processing a total of 240 A-scans per measurement cycle.



## **Technical specifications**

#### **Pundit Array Transducer**

Gain	0 to 80 dB
Analog bandwidth	15 to 100 kHz
Nominal transducer frequency	50 kHz shear wave
Range / resolution	0 to 1000 μs / 1 μs
Pulse voltage	+/-150 V
Pulse shape	Square wave
Pulse delay	8 to 200 ms
Number of channels	8 (with upgrade option to 16)
Battery lifetime	> 7 h
Dimensions	240 x 273 x 153 mm
Weight	~ 3 kg

#### **Pundit Touchscreen**

Display	7" colour display 800 x 480 pixels
Memory	Internal 8 GB flash memory
Regional settings	Metric and imperial units and multi- language and timezone supported
Power input	12 V +/-25 % / 1.5 A
Battery	3.6 V, 14 Ah
Battery lifetime	> 8 h (in standard operating mode)
Humidity	< 95 % RH, non condensing
Operating temperature	-10 to +50 °C
IP classification	IP 54
Dimensions	250 x 162 x 62 mm
Weight	~ 1.5 kg (incl. battery)

## Master training on ultrasonic testing

Proceq master training courses take place at the Proceq training facilities in Schwerzenbach (Switzerland), Pittsburgh (USA) and Singapore and include classroom lectures and hands-on sessions. The training sessions require a technical background or prior experience with the respective NDT products. Please contact our website or your local Proceq representative.

# **Ordering Information**

# Flexible and Future-Proof

327 30 110

#### **Pundit 250 Array**



consisting of Pundit touchscreen, Pundit Array transducer, Pundit 250 Array software, Pundit Array cable 12-pin 1.5m, Pundit Array contact tester, 6x Rechargeable AA NiMH batteries, power supply, USB cable, calibrated tape, DVD with software, documentation, carrying strap and carrying case

to 16 channel

**Upgrades** 

327 30 140 I

#### Pundit Array 16 Channel Upgrade Kit

consisting of Pundit Array transducer, Pundit Array transducer extension kit, Dual handle kit, Power supply, 6x Rechargeable AA NiMH, Pundit Array carrying case.

to dual handle

327 30 370

**Dual Handle Kit** 

327 30 130

# Upgrade Kit to Pundit 250 Array



consisting of Pundit Array transducer, Pundit 250 Array software, Pundit Array cable 12-pin 1.5m, Pundit Array contact tester, 6x Rechargeable AA NiMH batteries, calibrated tape, DVD with software, documentation, carrying case.

**Upgrade kit for existing Pundit 200 users** 

#### **Accessories**

327 30 337 Pundit Array Transducer Battery Pack Complete

327 30 384S Rechargeable AA NiMH battery (Set of 6)

327 01 071S Calibrated Tape (Set of 5)

### **Service and Support**

Proceq is committed to providing the best support and service available in the industry through the Proceq certified service centers worldwide. This results in a complete support for the Pundit by means of our global service and support facilities.

#### **Warranty Information**

Each instrument is backed by the standard Proceq warranty and extended warranty options.

- · Electronic portion of the instrument: 24 months
- Mechanical portion of the instrument: 6 months

Subject to change without notice. All information contained in this documentation is presented in good faith and believed to be correct. Proces SA makes no warranties and excludes all liability as to the completeness and/or accuracy of the information. For the use and application of any product manufactured and/or sold by Proces SA explicit reference is made to the particular applicable operating instructions.





# **Proceg – A Success Story since 1954**



#### **Market Leader**

Proceq SA, founded 1954 in Switzerland, is the global leader in portable measurement solutions for the non-destructive testing of material properties of metal, concrete, rock, paper and composites.

Find out more on the Proceq history

# **PATENTED**

**INDUSTRY STANDARD** 

**NON-DESTRUCTIVE** 



**PULSE VELOCITY** 

SONREB

**PULSE ECHO** 

**ARRAY** 



#### **Worldwide Local Support**

Our team of dedicated experts are available to advise you on our instruments and their applications. In addition you may take further benefits from our instructional videos, evaluation tools, online webinars and of course our live seminars globally.



#### **Swiss Made**

Proceq instruments are developed, designed and manufactured in Switzerland. Since 1994, Proceq has been certified to the ISO 9001 standards that guarantee highest quality of processes, products and services.

### Experience

Proceq has been a proud innovator in the field of portable nondestructive testing, developing solutions that have conquered the inspection industry for decades. Most famous brands are Equotip®, Schmidt®, Pundit®, Profometer® and Carboteq®.







Click on the Proceq subsidiaries for more information





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Globally organized seminars to help you learn more about our products and applications. Contact your local representative for further information.

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