Pundit®

Compressive strength and homogeneity



Pundit Live Array Pro

Ultrasonic testing of concrete with the pulse velocity and pulse echo methods, provides information on the uniformity of concrete, cavities, cracks, defects, slab thickness, and also enables the detection of voids, pipes and cracks. The pulse velocity in a material depends on its density and its elastic properties, which in turn are related to the quality and the compressive strength of the concrete.

Proceq's revolutionary wireless tomography scanner **Pundit Live Array Pro** is connected with an iOS app to an Apple iPad®. Thanks to its Artificial Intelligence (A.I.) and 3D visualization capabilities, it supports the user to assess concrete structures and detect defects faster and easier than ever before.

Applied standards and norms: EN12504-4, ASTM C 597-02, BS 1881 Part 203, ISO1920-7:2004, IS13311, CEOS 21. CE certification.

Portfolio and applications overview

Technology		Product	Measurement modes	Assessment of concrete quality		
Ultrasonic pulse velocity Through transmission: access from two sides		Pundit Lab(+)	A-scan Data logging	Compressive strength using SONREB		
		Pundit 200	A-scanLine scanData loggingArea scan	 Determination of crack depth Modulus of elasticity 		
Ultrasonic pulse echo Single side access	Single-channel	Pundit 200 Pulse Echo	A-scan B-scan Area scan	 Slab thickness from a single side Detection and localization of voids, pipes, cracks (parallel to surface), and honeycombing Location of pipes and tendon ducts 		
	Multi-channel 8 dry point contact channels	Pundit 250 Array	Real-time B-scan Panorama B-scan	beyond the rebar layer Pundit 250 Array: with real time B-scan and panorama B-scan capability Upgrade to 16 channels		
		Pundit Live Array Pro	B-scan Line scan 3D scan	Pundit Live Array Pro: Fastest solution with best on-site imaging capabilities Wireless and IoT-enabled with reporting features and A.I. user support		

Ultrasonic pulse velocity transducers

	24 kHz	54 kHz	150 kHz	250 kHz	500 kHz	54 kHz	40 kHz (S-wave)
Max. grain size	≈ 77 mm	≈ 34 mm	≈ 12 mm	≈ 7 mm	≈ 3 mm	≈ 34 mm	≈ 34 mm
Min. lateral dimension	154 mm	69 mm	25 mm	15 mm	7 mm	69 mm	55 mm
Applications	Mass concrete	Most concrete applications	Small concrete objects	Fine grained rock, refractory bricks	Fine grained rock, ceramics	Rough/rounded concrete surfaces	Determination of elastic modulus