

A1221 ANCHOR

An ultrasonic low-frequency tester for in-situ assessment of concrete anchors, solid rebars and reinforcement.

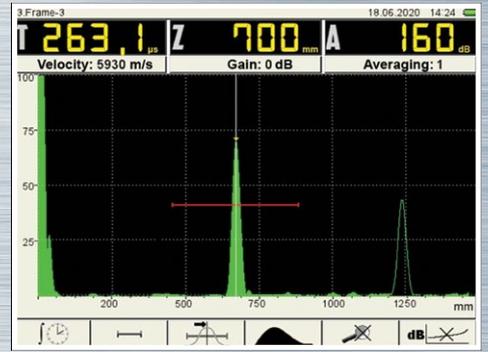
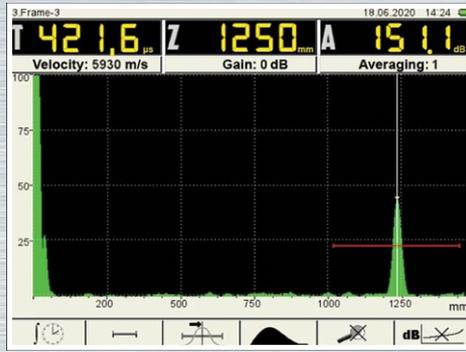
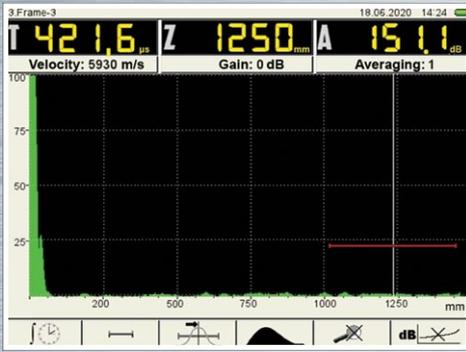


Designed and suitable for:

- Detection of anchor breaks
- Residual length/fraction assessment
- Adhesion quality assessment

Application features:

- Assessable bolt / rebar diameter: 20-40 millimeters (0.8-1,6 inch)
- Not grouted assessment length: up to 8 meters (26.3 feet)
- Minimal assessment length: 0.3 meter (9.8 feet)
- Assessable grouting depth in concrete: up to 1 meter (3.3 feet)
- Assessable grouting depth in rock: up to 4 meters (13.1 feet)

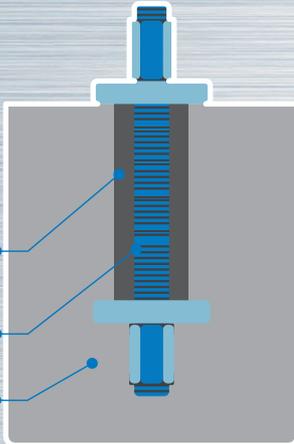


Failure-free specimen

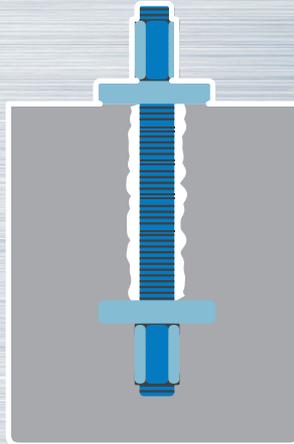
Adhesive interface

Rod/Anchor

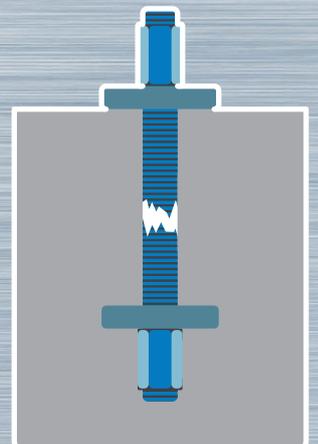
Concrete



Detection of adhesive interface failure



Detection of rod/anchor break



Specification:

Parameter	Value
Operating frequency range, kHz	25-250
Maximal data acquisition length, μs	4000
Assessment length, m	0.5-3
Assessment length of embedded rods, m	up to 1
Assessable rod diameter range, mm	20-40
Material velocity range, m/s	500-15000
Transmitter output voltage, V	±20, ±100, ±200
Transmitter pulse form	Bipolar meander, 0.5÷5.0 periods
Pulse repetition rate, Hz	1-45
Gain setup range, dB	0-100, step 1
Number of the programmable points of DAC function	24
Dynamic range of DAC function, dB	30
Power supply	Built-in battery
Operation time, h	14
Battery charging time, h	3
Display type	TFT (640 x 480)
Electronic unit dimensions, mm	260×156×43
Electronic unit weight, kg	0.8
Operating conditions:	
Operating temperature range, °C	from -20 to +55 °C
Relative air humidity at +35 °C, %, max.	95



Delivery volume:

Name	Quantity, pcs.
A1221 Anchor electronic unit	1
Power adapter AC 80-264 / VDC 15V	1
USB 2.0 Cable USB-A to USB Micro-B	1
Lem00 to Lemo0 cable, 2.25m	1
Carrying map case	1
Soft Cover	1
Instrument support	1
Hard shell case	1
Low frequency piezoelectric transducer S0205, 25 KHz	1
Low frequency piezoelectric transducer S0206, 50 KHz (optional)	
Low frequency piezoelectric transducer S0208, 100 KHz (optional)	
Rexilite test block	1
Ultrasonic couplant 80ml	1