STANLAY™

NOVASONIC ULTRASONIC PULSE VELOCITY TESTER FOR TESTING OF CONCRETE, GRAPHITE, MASONARY MATERIALS

2019 - 20

High Performance Ultrasonic Pulse Velocity Tester

For Onsite usage & laboratory.

- **Windows CE Based : Easy to Use by Any Level of Operator.**
- **Long Length Transducers : For Field Use.**
- **Touchscreen Display with Waveforms Displayed on Screen : For Quick Analysis.**
- **Large Memory : Datalogging .**
- **Use for : Concrete, Graphite, Refractory bricks & masonry other materials.**

Quality In Construction. Delivered.

NOVASONIC ULTRASONIC PULSE VELOCITY TESTER

For Concrete Testing

Description :

The **Novasonic ultrasonic pulse velocity tester** is a **high performance, microprocessor** based instrument that measures transit time & other parameters for evaluating uniformity, cavities, cracks, **delamination & deterioration** for **determining quality of concrete** and other masonry materials.

Based on a **windows CE operating system** & **touch screen** colour **VGA screen** with a **large capacity Li-ion battery**, any level of operator can use the instrument in the field or in lab by simply observing wave forms on the display for anomalies and observing transit time.

Novasonic conforms to : EN 12504-4, ASTM C 597-02, Bs1881 PART 203, IS 1311, CEC 521, ISO 1920-7:2004

Features : For Field or Lab Use

- The appliance allows measuring the ultrasonic impulse speed inside the material (by knowing the distance between the probes).
- It measures the distance between the probes (by knowing the speed of the ultrasonic impulse to go through the tested material).
- It measures the required time by the ultrasonic impulse to go through the tested materials.
- Young's modulus is also measured (by knowing the distance between the probes and the density of the tested material).
- Calculation of the crack depth.
- Zero calibration with depuration of the time for the impulse to go through the probs. Calibration of a defined time value.

Advanced function for research purposes:
Selection of the transmission frequency of the impulse.
Selection of the impulse amplitude.

Possibility to use the instrument with two exponential probes, or with one standard probe and one exponential probe.

Datalogging

Measure Transit Time

Quick Analysis through waveforms

Homogeneity

Anomalous

SonReb Method:

Combined ultrasonic and rebound hammer determination.
The Novasonic ultrasonic tester houses an integral data logger for processing and store of rebound hammer values.
The measures of the velocity of ultrasonic pulses and the rebound values are automatically processed, giving estimates of dynamic modulus of elasticity and Poisson's Ratio, and providing information on possible voids, cracks and strength of the structure.

Through mathematical formulas it is possible to evaluate the compressive strength of the concrete, useful to estimate formwork striking times.

The combined test allow to rectify different inaccuracies that are typical of the simple rebound hammer test, and obtaining estimates on the compressive strength of the concrete, that cannot be obtained with the ultrasonic test, granting high accuracy and reliability of the results.

Windows® CE is registered trademarks of Microsoft Corporation

Technical Specification :

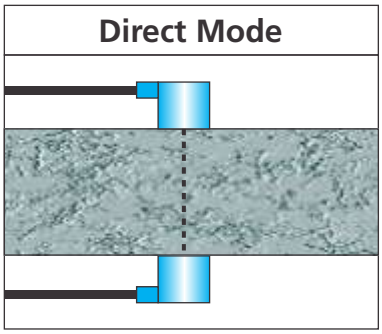
Transit Time Range	**0.1µs to 9999.9µs**
Resolution	0.1µs
Energizing Pulse	1000V
Default Transducer	2 X 55kHz probes with connecting cables
TX Frequency Range	24kHz to 150kHz
Other Transducers Available	24kHz, 55kHz , 150 KHz
Cable lengths Available	Standard Length=3.5m ; OPTIONAL Length 10m
Exponential / Shear Wave Transducers Available	Exponential 55 KHZ

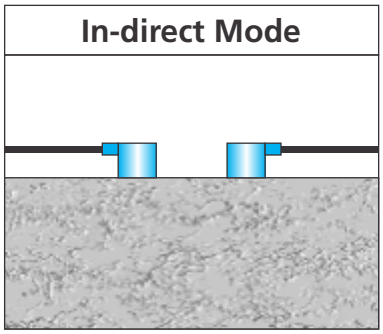
Measures	
Pulse Velocity Through Material	Yes
Transit Time	Yes
Distance/Thickness Measurement	Yes
Young Modules	Yes
Crack Depth Measurement	Yes
SonRab Method	Yes
Review Measurement on Instrument	Yes

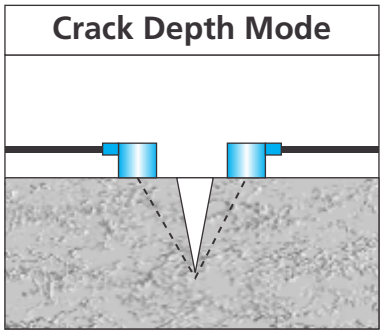
Configuration	
Display Type	¼ VGA colour touch screen (With Stylus)
Operating System	Windows CE
Display	64MB flash memory, 64MB RAM
Memory Capacity	>25000 readings based on flash memory & expandable to infinite capacity using SD card.
Expandable Memory	Through SD card
Ports	USB, SD card, RS232
Connection to PC	Yes, through USB interface or RS232
Processor	X Scale 400MHz
Battery Pack	11.1V, 3000mAh Li ion Rechargeable
Power Supply	230V External feeder battery charger provided
Protection	Instrument provided in hard impact & shock proof carry case
Battery Pack	11.1V, 3000mAh Li ion Rechargeable
Weight	3Kg
Item Code	**ST-UPVT**

NOVASONIC ULTRASONIC PULSE VELOCITY TESTER

Measurement Modes :







Supply Includes:

- Ultrasonic Pulse velocity tester instrument in standard configuration (X-scale 400mHz, 64MB Flash Memory, 64MB RAM.
- Two 55kHz probes with connection.
- Cables Length: 3.5m.
- Calibrating cylinder and contact paste.
- Strong shock case holding the instrument and the accessories.
- Battery pack Li-Ion 11.1V, 3000 mA/per hour.
- External feeder 230V and battery charger.
- Vaseline box for probes coupling.

Calibration Rod

Shock Proof Hard Carry Case

Instrument

Transducers

Connecting Cables

Battery Charger

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