

REBAR LOCATOR TC100/110



Brief Introduction

TC100/110 is used to detect the thickness of concrete covering layer and rebar diameter. Besides, it can detect the location of magnetic substance and electric conductor in non-magnetic and non-conductive medium, e.g. cable inside wall body and water & heating pipe etc. it is a kind of intelligent nondestructive test equipment possessing the functions of automatic detection, data memory and output.

Features

- Acceptance inspection of cover after formwork is removed
- Locate rebars to avoid them when drilling holes
- Provide essential data (location, cover, diameter of rebars) for strength calculations of reinforced concrete structures
- Measuring concrete cover thickness
- Quality assurance in mass production of fabricated concrete elements
- Measuring the thickness of concrete over steel reinforcement and metal pipes
- Signal strength bar display and sound alarm for high accuracy
- Real time graphic output both to screen and printer
- Data processing software compatible with windows 95/98/2000/Me/WT/XP
- Auto calibration, correct the system error
- Three scan modes for TC110: grid pattern, profile scan and large area scan
- For TC110: direct display gridding and profile image of rebar

Technical Specification

| | | |
|--|--------------------------------------|-------------|
| Covering layer thickness measuring range | Range :6mm-90mm | |
| | Range :7mm-180mm | |
| Rebar diameter measuring range | Ø6mm- Ø50mm | |
| Tolerance of covering layer thickness | Range | Range |
| ± 1mm | 6mm-59mm | 7mm-79mm |
| ± 2mm | 60mm-69mm | 80mm-119mm |
| ± 4mm | 70mm-90mm | 120mm-180mm |
| Display | Large graphic display with backlight | |
| Operating temperature | -10 -40 | |
| Relative humidity | <90% | |
| Dimension | 210mm x 153mm x 90mm | |
| Net weight | 880g | |

Other special testing conditions

- Avoid strong magnetic field interruption
- Avoid high temperature
- Has no corrosive gas in the atmospheric

Standard Delivery (TC100)

| | |
|--------------------|---|
| Main unit | 1 |
| Transducer | 1 |
| Software | 1 |
| Signal cable | 1 |
| Shoulder strap | 1 |
| AA battery (LR6) | 6 |
| Key | 2 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |

Standard Delivery (TC110)

| | |
|--------------------|---|
| Main unit | 1 |
| Transducer | 1 |
| Software | 1 |
| Signal cable | 1 |
| Shoulder strap | 1 |
| Connecting cable | 1 |
| Scanning trolley | 1 |
| AA battery (LR6) | 6 |
| Key | 2 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |

CRACK DEPTH GAUGE TC200



Brief Introduction

TC200 is used to measure concrete crack depth by applying principle of acoustic diffraction. It also can be used to measure propagation velocity of ultrasonic wave in concrete. This instrument is a kind of intelligent nondestructive test equipment possessing the functions of automatic detection, data memory and output.

Features

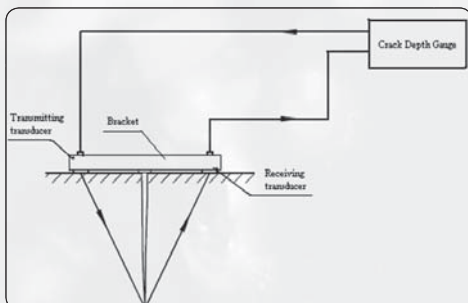
- Entire English display, clear and easy to use
- Direct digital read out of the crack depth
- Use special bracket to ensure the accuracy of two testing points
- A data base is set up to store and manage completed test data for analysis reporting
- RS232 interface to PC

Technical Specification

| | |
|-----------------------|---|
| Testing range | 500mm |
| Tolerance | ≤5mm (when crack depth is less than 50mm) |
| | ≤10%W (W means the crack depth) (when the depth is more than 50mm) |
| Memory | 25000 test data |
| Power | AA batteries (LR6) x 6 |
| Display | Large graphic display |
| Operating temperature | -10 -40 |
| Relative humidity | <90% |
| Dimension | 210mm x 153mm x 90mm |
| Net weight | 880g |

Standard Delivery

| | |
|--------------------|---|
| Main unit | 1 |
| Transducer | 1 |
| Signal cable | 1 |
| Bracket | 1 |
| Tapeline | 1 |
| Oil pen | 1 |
| Electric torch | 1 |
| Shoulder strap | 1 |
| AA battery (LR6) | 6 |
| Key | 2 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |



CRACK DEPTH GAUGE TC210



Brief Introduction

TC210 accomplishes the fast measurements of crack depth by means of analyzing the geometry relationships between the diffraction angle and the crack depth. It is designed specifically for the non-destructive testing of the crack depth of bridges, tunnels, constructions and such concrete structures. The crack depth can be obtained without measuring velocity.

Features

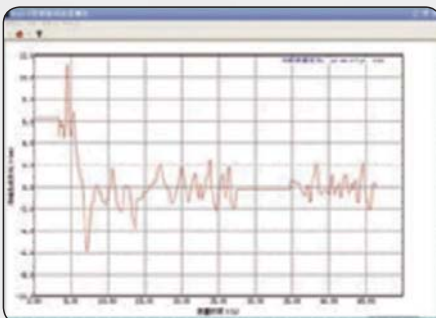
- New design of automatic reading device for the space between two probes
- Battery life can be greatly extended by low-power design
- Manage the measured data, print and generate report function available by software
- Easy to operate by the controller with english menu
- Work in wet environment available by waterproof and moisture-proof design

Technical Specification

| | |
|-----------------------|--|
| Measuring range | 10-500mm |
| Tolerance | $\leq \pm 5\%$ |
| Operating mode | Automatic and manual |
| Interface | RS232 and USB |
| Memory | More than 10000 test data |
| Power | 10Ah Li battery continuous working more than 30 hours |
| Operating temperature | -20 -50 |
| Relative humidity | < 85% |
| Dimension | 210mm x 120mm x 60mm |
| Net weight | 2.3kg |

Standard Delivery

| | |
|------------------------|---|
| Main unit | 1 |
| transducer | 2 |
| Software | 1 |
| Cable for probe | 2 |
| USB connecting cable | 2 |
| RS232 connecting cable | 1 |
| Measuring tape | 1 |
| Shoulder strap | 1 |
| Vaseline | 1 |
| Charger | 1 |
| Calibration stone | 1 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |



CONCRETE THICKNESS GAUGE TC300



Brief Introduction

TC300 is used for measuring the thickness of nonmetallic plate indirectly, especially for concrete slab. This gauge is to measure the concrete slab thickness mainly by using distribution characteristics of electromagnetic field and possesses function of thickness measurement, data analysis, data storage & output etc. it is a kind of intelligent thickness measuring instrument that is portable, convenient and accurate.

Features

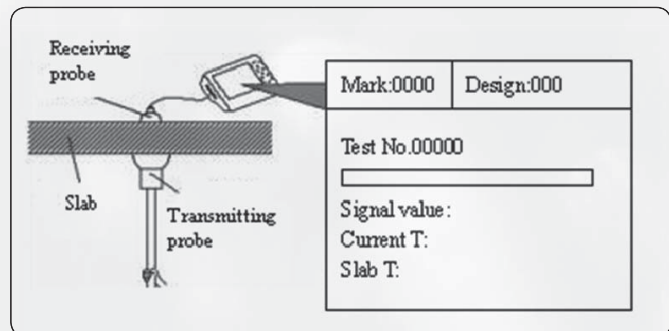
- Measuring the thickness of concrete, rock, glass and other nonmetallic plates
- Sound alarm, signal strength bar are used to improve measuring accuracy
- Direct digital read out of the thickness value avoid the inaccuracy of manual comparison
- Test data create and data logging
- RS232 and USB interface to PC
- Real time analysis of the tested data

Technical Specification

| | |
|-----------------------|-------------------------------------|
| Measuring range | 50-350mm |
| Accuracy | ± 1mm[When thickness = (50-260mm)] |
| | ± 2mm[When thickness = (261-350mm)] |
| Memory | 32000 test data and 4000 components |
| Power | AA batteries (LR6) x 6 |
| Display | Large graphic display |
| Operating temperature | -10 -40 |
| Relative humidity | <90% |
| Dimension | 210mm x 153mm x 90mm |
| Net weight | 880g |

Standard Delivery

| | |
|-----------------------------------|---|
| Main unit | 1 |
| Transmitting transducer | 1 |
| Receiving transducer | 1 |
| Supporting bar | 5 |
| Interphone | 2 |
| Signal cable | 1 |
| Charger | 1 |
| Shoulder strap | 1 |
| AA battery (LR6) | 6 |
| AAA battery (LR03) | 6 |
| Key | 2 |
| Instruction manual for interphone | 1 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |



CRACK WIDTH GAUGE TC400



Brief Introduction

TC400 is used for real time automatic detection of surface crack width on different material structure and real time observation of cracking process. This instrument is a kind of intelligent test equipment possessing the functions of automatic detection, data memory and output.

Features

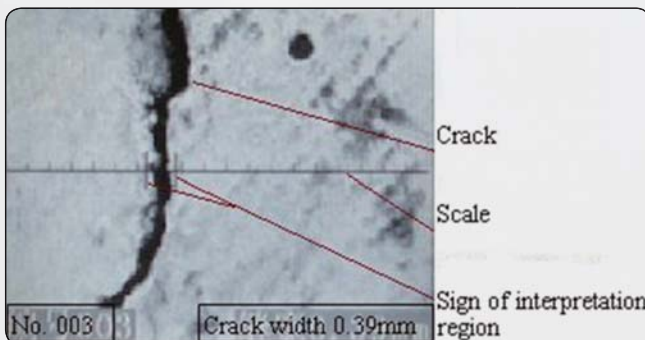
- Direct digital display of crack width
- Automatic interpretation of crack width to improve accuracy
- Designed with constant lighting source for convenient use
- Real time graphic display
- Data view or delete, create testing report
- With USB interface

Technical Specification

| | |
|--|-------------------------------|
| Measuring range | 0.02-8.0mm |
| Accuracy of estimation | 0.01mm |
| Measurement error for measuring line of standard width calibration | ± 0.01mm |
| Memory | 1000 test data |
| Display | Large graphic display |
| Power | Li-ion rechargeable batteries |
| Operating temperature | -10 -40 |
| Relative humidity | <90% |
| Dimension | 170mm × 120mm × 60mm |
| Net weight | 2.0kg |

Standard Delivery

| | |
|--------------------|---|
| Main unit | 1 |
| Transducer | 1 |
| Signal cable | 1 |
| Shoulder strap | 1 |
| Tapeline | 1 |
| Key | 2 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |



CRACK WIDTH GAUGE TC410



Brief Introduction

TC410 is widely used for non-destructive testing of the crack width of bridges, tunnels, constructions and such concrete structures. During the detection, the system takes the image of the crack automatically and displays real-time image and width data of cracks. The image data can be saved automatically.

Features

- The pistol-style design and integrated design with data acquisition probe
- Automatic image recognition and intelligent width calculation technique
- Quick measurement without any adjustment
- Large screen of PDA for the more accurate and clear image
- Image file can be saved in JPEG format
- Powerful processing software can be able to save and analyses image and data

Technical Specification

| | |
|-----------------------|---|
| The main probe | Specialized CCD camera |
| Controller | PDA |
| Display mode | Automatic calculation, save and display |
| Measuring range | 0.0-3.0mm |
| Accuracy | 0.02mm |
| Magnification | 60 × |
| Image formats | JPEG (Around 10K per image) |
| Memory | Internal memory (SD card extension) |
| Interface | USB 2.0 |
| Power | Lithium battery |
| Operating temperature | -20 ~ +60 |
| Dimensions | 180mm × 100mm × 50mm |
| Net weight | 1.0kg |

Standard Delivery

| | |
|-----------------------|---|
| Main unit | 1 |
| PDA | 1 |
| Software | 1 |
| USB connecting cable | 1 |
| USB extension cable | 1 |
| Extension bar | 1 |
| Charger | 1 |
| Power adapter for PDA | 1 |
| Instruction manual | 1 |
| Warranty card | 1 |
| TIME certificate | 1 |



CONCRETE TEST HAMMER TC500



Brief Introduction

TC500N/L is a portable instrument to test the compressive strength of concrete structures or rock in non-destructive testing field. The type N hammer is designed for measuring concrete thickness 100mm or more, or concrete with a maximum particle size no more than 32 mm. The type L hammer is used for measuring thin walled items with a thickness between 50 to 100 mm or for testing small components.

Features

- Suitable for testing a wide variety of concrete, rock and bricks
- Light, flexible and simple operation
- Friction adjusted by the pointer
- Adopt stretching techniques to let the button work well
- Supplied with carborundum stone to prepare test surface



Technical Specification

| Model | TC500N | TC500L |
|----------------------------------|---------------------------|----------------------|
| Measuring range | 10 to 70N/mm ² | |
| Impact energy | 2.207Nm | 0.735Nm |
| Spring extension | 75 ± 0.3mm | |
| Friction of pointer system | 0.65 ± 0.15N | 0.5 ± 0.1N |
| Length of pointer | 20.0 ± 0.2mm | |
| Radius of spherical tip | 25 ± 1.0mm | |
| Working length of the spring | 61.5 ± 0.3mm | |
| Mean value of steel-anvil rating | 80 ± 2 | 74 ± 2 |
| Flip tension spring rigidity | 785.0 ± 40.0N/m | |
| Operating temperature | 0 ~ +40 | |
| Storage temperature | -10 ~ +50 | |
| Dimensions | Hammer | 280mm × 60mm |
| | With case | 320mm × 170mm × 86mm |
| Weight | Hammer | 1.0Kg |
| | With case | 2.5kg |

Standard Delivery

| | |
|---------------------|---|
| Hammer | 1 |
| Carborundum stone | 1 |
| Flip tension spring | 1 |
| Buffer spring | 1 |
| Screwdriver | 1 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |



DIGITAL CONCRETE TEST HAMMER TC510



Brief Introduction

TC510N/L is a portable instrument to test the compressive strength of concrete structures or rock in non-destructive testing field. The rebound value can be converted into a reading on the digital display, and the estimated mean value, standard deviation and concrete strength can be shown.

Features

- Automatic record and display of rebound value
- The main unit can be equipped with three mechanical hammers
- Record and setting of carbonation depth, rebound angle and test parameters
- Evaluation of the test results on the estimated concrete compressive strength of the component
- Display of the result simultaneously on the hammer and the screen
- The error between the hammer pointer and the displayed value on screen is no more than ± 2
- Mass storage
- Possibility to store, display and transfer data to PC with USB interface

Technical Specification

| Model | TC510N | TC510L |
|----------------------------------|-------------------------------|----------------|
| Measuring range | 10 to 70N/mm ² | |
| Impact energy | 2.207Nm | 0.735Nm |
| Spring extension | 75 \pm 0.3mm | |
| Friction of pointer system | 0.65 \pm 0.15N | 0.5 \pm 0.1N |
| Length of pointer | 20.0 \pm 0.2mm | |
| Radius of spherical tip | 25 \pm 1.0mm | |
| Working length of the spring | 61.5 \pm 0.3mm | |
| Mean value of steel-anvil rating | 80 \pm 2 | 74 \pm 2 |
| Flip tension spring rigidity | 785.0 \pm 40.0N/m | |
| Power supply | AA batteries (LR6) \times 6 | |
| Operating temperature | 0 ~ +40 | |
| Storage temperature | -10 ~ +50 | |
| Dimensions | Hammer :280mm \times 60mm | |
| Net weight | 1.9Kg | 1.7Kg |

Standard Delivery

| | |
|-----------------------|---|
| Main unit | 1 |
| Hammer | 1 |
| Signal cable | 1 |
| USB connecting cable | 1 |
| RS232connecting cable | 1 |
| Flip tension spring | 1 |
| Buffer spring | 1 |
| Screwdriver | 1 |
| Radius gauge | 1 |
| Carborundum stone | 1 |
| AA battery (LR6) | 6 |
| Shoulder strap | 1 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |

REBAR CORROSION DETECTOR TC600



Brief Introduction

TC600 rebar corrosion detector is designed for assessing the corrosion of the reinforced concrete structure and components by half-cell potential method, the electrode is passed over the surface of the concrete and the potential voltage difference is recorded, then the corrosion of rebar is assessed.

Features

- Non-destructive testing the corrosion in rebar
- Detection of the corrosion condition of the rebar accurately and conveniently by field potential measurement
- Possibility to store, view, delete data and transfer all readings to PC with USB interface and serial port
- Faster and more accurate processing of data, presentation of test area and reading as numbers or graphics
- Display of measurement values in 9 grey-scale graphics
- Permanent copper/copper sulphate reference electrodes to measure electrical potentials

Technical Specification

| | | |
|------------------------------|------------------------|----------------------|
| Measuring method | Potential measurement | |
| Measuring range | ± 1000mv | |
| Resolution | 1mv | |
| Memory | Mass storage | |
| Space between testing points | 1 ~ 100cm adjustable | |
| Interface | RS232 and USB | |
| Power supply | AA batteries (LR6) × 6 | |
| Operating temperature | -10 ~ +40 | |
| Relative humidity | < 90%RH | |
| Dimensions | Main unit | 210mm × 153mm × 90mm |
| | Probe | 30mm × 120mm |
| Weight | Main unit | 880g |
| | Probe | 100g |

Standard Delivery

| | |
|-----------------------|---|
| Main unit | 1 |
| Electrode | 2 |
| Signal cable | 2 |
| USB connecting cable | 1 |
| RS232connecting cable | 1 |
| Connecting bar | 1 |
| Extension cable | 1 |
| Clamp | 1 |
| Hygrothermograph | 1 |
| Measuring tape | 1 |
| AA battery (LR6) | 6 |
| Shoulder strap | 1 |
| Instruction manual | 1 |
| TIME certificate | 1 |
| Warranty card | 1 |