

## LANGRY concrete test hammer list

### 1. HT225-N Concrete Test Hammer



#### Standards and Regulations Applied

- ISO/DIS 8045 International
- EN 12 504-2 Europe
- ENV 206 Europe
- BS 1881, part 202 Great Britain
- DIN 1048, part 2 Germany
- ASTM C 805 USA
- NFP 18-417 France
- B 15-225 Belgium
- JGJ/ T 23-2001 China
- JJG 817-1993 China

#### Application field

Used for testing the compressive strength of ordinary concrete in the range of 10 ~ 60Mpa in structural engineering.

#### Product features and advantages

- (1) Imported high-quality springs are more fatigue-resistant, aluminum alloy spring seat snap ring assembly
- (2) Adopt CNC machining center and other machine tools to refine the movement, and the rebound value is guaranteed.
- (3) Silicone bracket for soft hand protection, more comfortable rebound operation.
- (4) Finely grind the spherical zero-setting screws to make the rebound firing smoother and smoother.
- (5) Improved pointer design, easy to adjust friction and more stable.
- (6) Beautiful label and ruler are easy to read, and the hard oxidation treatment of the parts is beautiful and durable.
- (7) High-precision aluminum alloy flange is not easy to be damaged, and high-precision hook is not easy to be elastically empty due to abrasion.
- (8) Multiple original imported dust-proof components, cleaner movement and longer maintenance period

(9) Abrasion resistance of super-hard 6061 aluminum alloy casing, and the button is not easy to fall off by stretching process.

### Technical parameters

Standard impact energy: 2.207 J

Pointer length:  $20.0 \pm 0.2$ mm

Friction of pointer:  $0.65 \pm 0.15$ N

Spherical radius of bouncing rod:  $25 \pm 1.0$ mm

Elastic tension spring stiffness:  $785.0 \pm 30.0$ N/m

bounce hammer unhook position: Scale line "100" at the score line

Operating length of elastic tension spring:  $61.5 \pm 0.3$ mm

Impact length of bounce hammer:  $75 \pm 0.3$ mm

Bounce hammer take-off position: Scale "0"

Calibration value on steel anvil:  $80 \pm 2$

## 2. HT225-B Integrated Digital Concrete Test Hammer

**LANGRY**



### Standards and Regulations Applied

- ISO/DIS 8045 International
- EN 12 504-2 Europe
- ENV 206 Europe
- BS 1881, part 202 Great Britain
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### Select Wireless Bluetooth Printing

Used for testing the compressive strength of ordinary concrete in the range of 10 ~ 60Mpa

in structural engineering

### **Technical advantages**

- 1.It adopts mobile phone keystroke technology and seven-key design. The product is characterized by better hand feeling, longer life, faster response, easier to operate
- 2.Large-size and highlighted OLED liquid crystal display screen can display more content information
- 3.Built-in bluetooth chip is connected to portable bluetooth printer and can print out the original records and test results in the field
- 4.Equipped with high-power loudspeaker, the voice messages on the spot are clearer. In addition, a headset jack is equipped to facilitate the use in a noisy environment
- 5.The modular design of the electronic warehouse can be quickly assembled with the ordinary mechanical rebound apparatus into a new integrated digital rebound apparatus
- 6.The rebound value is collected by non-contact grating and photocoupling sensor. There is no wire connection between the pointer block and the circuit board
- 7.The mechanical concrete test hammer , produced by LANGRY Technology, is characterized by longer service life and more stable rebound value after more than 10 technological innovations
- 8.The computer online software adopts the latest data processing platform developed by LANGRY Technology, which has the function of automatic importing rebound value and automatic identifying port, integrating rich report formats and various data export formats, and giving users a more perfect experience

### **Main functions**

It has the functions of rebound sampling, automatic recording, automatic storage, automatic calculation, strength result viewing, field bluetooth printing, background management settings, online upload data and so on. The work efficiency of rebound detection is greatly improved and the labor intensity of testing personnel is reduced.

### **Technical parameters**

- 1.Basis for detection data processing: *Technical Specification for Inspecting of Concrete Compressive Strength by Rebound Method* JGJ/T 23-2011
- 2.Strength-measuring curve: Unified curve of factory preset national standard and local strength-measuring curve of each province, city and district
- 3.Memory storage: 240 standard components or more than 76,000 measuring points and related parameter data
- 4.Display screen: 256\*64 (dot matrix), high-light OLED blue-ray display screen
- 5.Online communication rate: 115.2k bps
- 6.Battery Power: 3.8v lithium battery, 2300mAh
- 7.Standard impact energy: 2.207 J
- 8.Elastic tension spring stiffness:  $785 \pm 30\text{N/m}$
- 9.Impact length of bounce hammer:  $75 \pm 0.3\text{mm}$
- 10.Anvil rate setting:  $80 \pm 2$
- 11.Consistency of sampling indication:  $\cong \pm 1$

### 3. HT75-L Concrete Test Hammer (Brick rebound hammer )



Used for testing the compressive strength of ordinary concrete in the range of 6 ~ 30Mpa in structural engineering

Brick rebound hammer is the equipment that one spring drives the impact hammer and impacts the resilience of transient elastic deformation produced on the surface of sintered common brick masonry or sintered porous brick masonry middle brick, so that the hammer drives the pointer to rebound and points the rebound distance. The rebound value is used as one of indexes of compressive strength of sintered common brick masonry or sintered porous brick masonry middle brick to deduce the compressive strength label of the brick.

Because of the advantages in light weight, flexibility, low price, easiness to operate, non-damage, wide detection surface, convenient and rapid test, the concrete test hammer is widely used in practical engineering detection.

#### **Technical parameters**

Stretching length of bounce spring:  $75\pm 0.3\text{mm}$

Operating length of elastic tension spring:  $61.5\pm 0.3\text{mm}$

Standard impact energy: 0.735J

Friction of the pointer slider:  $0.5\pm 0.1\text{N}$

Anvil rate setting:  $74\pm 2$

## 4. HT450-A High-Strength Concrete Test Hammer



Used for testing the compressive strength of ordinary concrete in the range of 20 ~ 110Mpa in structural engineering

### **Technical Background and Product Profile**

With the development of economic construction, there are more and more high-rise buildings in the construction project, and more high-strength concrete is used. It becomes more and more urgent to use rebound tester to detect the strength of high grade concrete in the field. On the basis of the medium concrete rebound tester with the original impact energy of 2.207 joules, and referring to the performance and advantages of other types of rebound tester and improving them for many years, our company has developed a HT450-A high-strength concrete rebound tester based on 4.5 joules impact energy, which can be used to detect concrete structures or components in the range of concrete compressive strength of 20-110Mpa.

### **Technical parameters**

Pointer length:  $25.0 \pm 0.2$ mm

Friction of pointer:  $0.65 \pm 0.15$ N

Spherical radius of bouncing rod:  $35 \pm 1.0$ mm

Elastic tension spring stiffness:  $900.0 \pm 40.0$ N/m

Operating length of elastic tension spring:  $106 \pm 0.5$ mm

Standard impact energy: 4.5 J

Instrument weight: 1.3KG

SIZE:  $\Phi 54 * 380$ mm

Anvil rate setting:  $88 \pm 2$

## 5. HT550-A High-strength Concrete Test Hammer



Used for testing the compressive strength of ordinary concrete in the range of 50 ~ 90Mpa in structural engineering

### Technical parameters

Pointer length:  $20.0 \pm 0.2$ mm

Friction of pointer:  $0.65 \pm 0.15$ N

Spherical radius of bouncing rod:  $18 \pm 1.0$ mm

Elastic tension spring stiffness:  $1100 \pm 40.0$ N/m

bounce hammer unhook position: Scale line "100" at the score line

Operating length of elastic tension spring:  $86 \pm 0.5$ mm

Standard impact energy: 5.5 J

Instrument weight: 1.28kg

SIZE:  $\Phi 54 \times 350$ mm

