

CONCRETE WATER PERMEABILITY TESTER TPCW-04

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I. Description

The concrete water impermeability tester is mainly used in the lake and is screwed soil impermeability tests and impermeability grade determination. Users also can use it to make building materials permeability measurements and quality checks, so it has been on production, construction, design, widely used in teaching and research and other departments. Concrete water impermeability tester: function and the same general type, whose main characteristic is pressure through the pressure sensor is displayed on the display device, and according to the procedures set automatic boost, automated testing.

II. Technical specifications

Working pressure	4MPa/cm ²
Number of specimen	6
Motor power	90W
Working method	Microcomputer automatic pressurization
Motor speed	1400r/min
Voltage	380V

III. Installation and Operation

Preparation

- a. Placed the tester on a flat, solid interior foundation.
- b. Close the drain in the bottom right of the relief valve housing
- c. Initial use, water injection into the box, open the control valve, turn on the power, to six water overflows within the mold base for air exhaust system
- d. Close the control valve

Specimen fabrication and installation

- a. Specimen forming conservation, according to the design requirements with the mold material ratio (also known as sub-mode) produced forming, and then carried out according to standard specifications cover.
- b. Conserve a good specimen's surface dried, and then smear melted sealing material(Wax or sealing wax) on its side, please note that don't smear on its top and bottom of specimen, coated with a sealing material is strictly prohibited.
- c. Test mold was heated to 40 °C, then coated with the sealing material into the mold cavity a test piece, and then on the press (or borrow laboratory screw press pressure testing machine) pressed into the specimen in test mode and cooled to room temperature, mold.
- d. Installed pressure is good tryout specimen analyzer installed in the workbench impermeability and evenly tightens the screw cap.

Power on the tester

- a. Press the red button to turn on the power, then the pump started working with electric contact pressure.
- b. Set the upper limiting value through press the "set" key on control panel.
- c. Open the valve marked No 0, until the water of left brass tube overflow, and then close it.

When the water pressure is constant (or achieve lower limiting value), open the valves marked No. 1, No2, No. 3.....NO.6

- d. Observe whether the exudation tryout at the bottom,
- e. Every eight-hour working pressure increases 0.1MPA automatically, observe the specimen face whether have water seepage. If have, then close the corresponding control valve.
- f. When six specimens in three specimens face pressure water leaking, they can stop the test, write down ten o'clock cents as calculated on the basis of pressure.
- g. After test, power off the power, open the drain pressure relief valve, the system pressure drops to zero, remove the test mould.

IV. Calculate

Concrete impermeability grade specimens in groups of six four permeable does not appear when the maximum pressure that the calculation formula:

$$S = 10H - 1$$

Where:

S-impermeability grade

