AUTOMATIC VICAT NEEDLE APPARATUS TPVN-8

STANDARD: ISO 9597

The automatic Vicat needle apparatus TPVN-8 is an automatic testing equipment for determination of the setting time of cement. It has 8 measuring positions, automatically tests the cement setting by imitating manual testing, without manual intervention during the testing process. It can completely replace the manual test process and the functions of constant temperature and humidity chamber.

FEATURES

◎ Fully automatic measurement, no manual intervention required.

◎ Multiple reliability designs provide all-round protection for the needle and automatic cleaning.

◎ Adopt new technology to measure the needle displacement with an accuracy of ≤50μm, avoiding manual reading errors, and automatically measure the cement end face to reduce measurement errors.

◎ Up to 8 samples can be tested in parallel, each sample is independent of each other, and samples can be added at any time.

◎ The software displays the status and the measurement hole position of each sample in real time.

◎ It comes with a constant temperature and humidity curing chamber to achieve humidity ≥90% and temperature 20±1℃ curing conditions.

TECHNICAL SPECIFICATIONS

Linear displacement measurement accuracy	≤50μm
Initial setting time accuracy	±15 minutes
Final setting time accuracy	±45 minutes
Measuring position	8
Slide assembly weight	300g±1g, including test rod and needle
Effective length of test needle	70±1mm, diameter: 1.13±0.05mm
Vicat mould	Φ65±0.5mm×Φ75±0.5mm×40±0.2mm
Ambient temperature	20±1℃
Test chamber humidity	≥90%
Power	Motor: DC24V, 30W
	Cooling: DC frequency conversion 24V/120W
	Heating: 100W
	Humidifying: 25W
	Water pump: 220V, 15W
Power supply	220V 50Hz