# Vicat Test Set

LT-CE0014 / LT-CE0015 | EN and ASTM set options

Manual mechanism • Interchangeable tools • Penetration readings



**150 × 190 × 318**

**EXTERNAL DIMENSIONS • mm**

**3 kg**

**SET WEIGHT**

EN 196-3 • EN 450-1 • EN 459-2 • ISO 9597 • ASTM C187 / C191

# Photograph and Test Components

Vertical movement, penetration readings and specimen mould

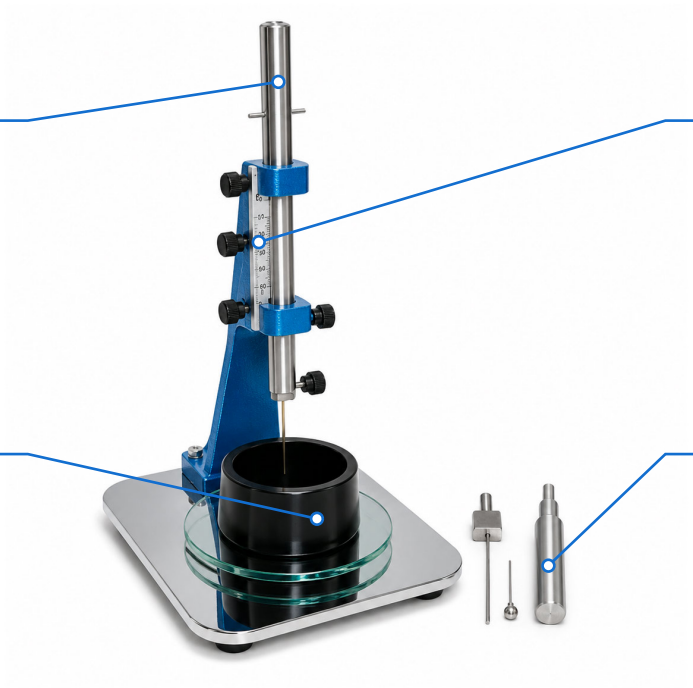
The Vicat set evaluates cement paste consistency and setting behaviour by penetration. The operator selects the plunger or needle for the test and records penetration depth together with elapsed time.

### VERTICAL MOVEMENT

The moving shaft applies the selected plunger or needle vertically to the paste. Check free movement before testing.

### READING ASSEMBLY

The moving assembly position provides the penetration reading. Check the starting position and reference level.



### SPECIMEN MOULD

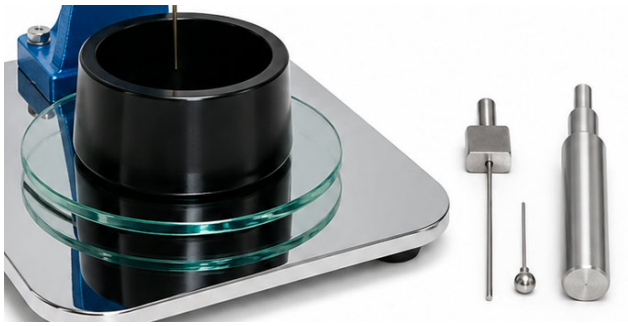
Fill the mould required by the method with paste. The glass supporting plate provides a flat, stable base.

### INTERCHANGEABLE TOOL

Use the plunger for consistency and the appropriate needle for setting. Match tool geometry to the selected method.



**Moving shaft and reading assembly detail**

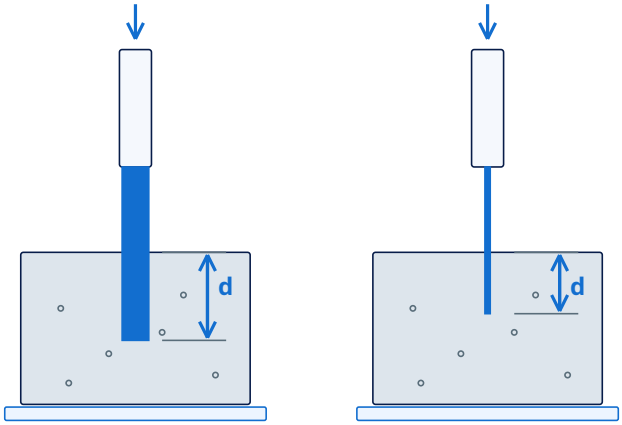


**Mould, supporting plate and penetration tools**

# From Consistency to Setting Times

Prepare paste • Select the tool • Record penetration and time

PLUNGER / NEEDLE • PASTE PENETRATION




DIFFERENT TOOLS • SEPARATE TESTS

CONSISTENCY: WATER • SETTING: TIMED READINGS

d: PENETRATION • t: TEST TIME

CONSISTENCY: WATER • SETTING: INITIAL / FINAL

OPERATING PRINCIPLE • REPRESENTATIVE VIEW • NOT TO SCALE

## Determine Consistency

Fill the mould with paste. Apply the Ø10 mm plunger. Evaluate water content against the method criterion.

## Monitor Initial Setting

Take timed readings with the appropriate initial needle. Record the time at the specified penetration criterion.

## Check Final Setting

Use the final-setting tool and criterion for the selected method. Report time, conditions and specimen identity.

Consistency testing assesses paste water demand; setting testing assesses penetration changes over time. Plungers and needles have different roles. Setting results are separate from compressive strength. Select tools and criteria for the EN or ASTM procedure.

## EN and ASTM Configurations

LT-CE0014 is the EN set; LT-CE0015 is the ASTM set. Use each with the corresponding mould and penetration tools. The EN initial needle is Ø1.13 mm; the ASTM initial needle is Ø1 mm.

The consistency plunger is Ø10 mm. A 700 g additional weight is listed for the EN arrangement. Apply additional weight only where the relevant procedure requires it.

## Preparation and Test Records

Prepare homogeneous paste and fill the mould without voids. Check vertical movement, tool cleanliness and the glass base. Maintain the specimen environment required by the method.

Record the time of water addition and penetration readings. ASTM C187 covers normal consistency; ASTM C191 covers Vicat setting time. Follow the relevant consistency and setting procedures in EN 196-3 or ISO 9597.

# Set Options and Accessories

EN and ASTM models • 150 × 190 × 318 mm • 3 kg

| Product Code | Set Option | Size / Weight |
|---|---|---|
| **LT-CE0014** | Vicat Test Set • EN | 150 × 190 × 318 mm; 3 kg |
| **LT-CE0015** | Vicat Test Set • ASTM | 150 × 190 × 318 mm; 3 kg |

| Product Code | Part / Accessory | Specification |
|---|---|---|
| **LT-CE0014/1** | Vicat Frame | Manual frame |
| **LT-CE0014/2** | Vicat Mould | EN model |
| **LT-CE0014/3** | Initial Setting Needle | EN; Ø1.13 mm |
| **LT-CE0014/4** | Final Setting Needle | EN final-setting tool |
| **LT-CE0014/5** | Consistency Plunger | Ø10 mm |
| **LT-CE0014/6** | Glass Supporting Plate | Mould base |
| **LT-CE0014/7** | Additional Weight | 700 g; EN |
| **LT-G0182** | Glass Thermometer | 110 °C maximum |
| **LT-AS0028** | Transfer Dish | Specimen / mould transfer |
| **LT-CE0015/1** | Vicat Mould | ASTM model |
| **LT-CE0015/2** | Initial Setting Needle | ASTM; Ø1 mm |

## Tool Selection and Free Movement

Select plungers and needles for the method. Check the shaft and reference reading; record penetration together with time and specimen information.

## From Cement Paste to Test Result

**01**
**Prepare**
Mix paste; place it in the mould on its base.

**02**
**Select**
Fit the consistency plunger or setting needle.

**03**
**Read**
Record penetration and measurement times.

**04**
**Report**
Report consistency and setting with the method.

**Product Page | liyatest.com.tr/en/urun/vicat-test-set/**