



# HUMBOLDT

## Auto, Touch-Screen Vicat H-3052B.3F

### VICATRONIC

#### Automatic Touch-Screen Vicat Apparatus

Standards: ASTM C187, C191 | AASHTO T131,  
EN 196-3, 480-2, 13279-2 |

The new Vicatronic apparatus is designed and manufactured using the most recent and sophisticated technology to grant precise measurements of the setting time of cements, mortars, gypsum and other pastes.

The unit is manufactured with anticorrosion components perfect to work in environment with humidity and temperature requested by the relevant standards.



7" touch-screen display with user-friendly interface

Automatic sample-positioning system

High precision sensor for the probe positioning

Built-in printer to directly print test results

2 USB ports to save and transfer the data, 1 Ethernet port

H-3052B.3F

#### Main Features:

- Realtime graphic display of the test.
- Fully automatic execution of the tests.
- Pre-set penetration cycles according to the standards.
- Customizable programs for research tests.
- Easy data transfer simply using a USB stick.
- Free fall or guided fall option.

#### Technical Specifications:

- LCD, TFT, 800x480 pixels, 7 inches, graphic touchscreen
- 2 USB ports, 1 Ethernet port
- Internal encoder with 0,1 mm resolution
- No external PC required
- Minimum time between penetrations time: 15 seconds
- Mobile probe (300 g) and glass plate included
- EN needle (Ø 1,13 mm) and ASTM needle (Ø 1 mm)
- EN mould (Ø70/80) and ASTM mould (Ø60/70)
- Power supply: 230V 1ph 50-60Hz 50W
- Dimensions: 190x330x470 mm
- Weight: 13 kg approx.

## Specifications

### Probes

The mobile probe weighs 300 g (1000 g following the EN, NF Standards), the penetration needle has 1.13 mm diameter (1 mm following ASTM Standard) and its fall can be programmed in free fall or in guided fall. Totally flexible as far as the time is concerned, the penetrations time can be selected between 0.25 minutes and 900 minutes, the interval between two penetrations can be fixed or can change during the test basing on the penetration depth or on the number of penetrations. The options described here above can be combined together. The penetration measure is read by a very accurate encoder having a resolution of 0.1 mm

### The Vicatronic also calculates, visualises and prints:

- Date and time of the test.
- Time of each penetration.
- Depth of each penetration



### Timer 0 – 900 MINUTES

The firmware allows activating a delay on the appliance to the beginning of the test. This program is particularly useful when the approximate setting time of the mortar is known and the operator wants to start the working of the Vicatronic after a certain time in order to concentrate the penetrations with a short interval of time between them and have better measuring values.

### Test Results

The Vicatronic is equipped with two USB ports to allow the saving of the results on a USB stick. It is also possible to print data with the on-board printer.

### Accessories

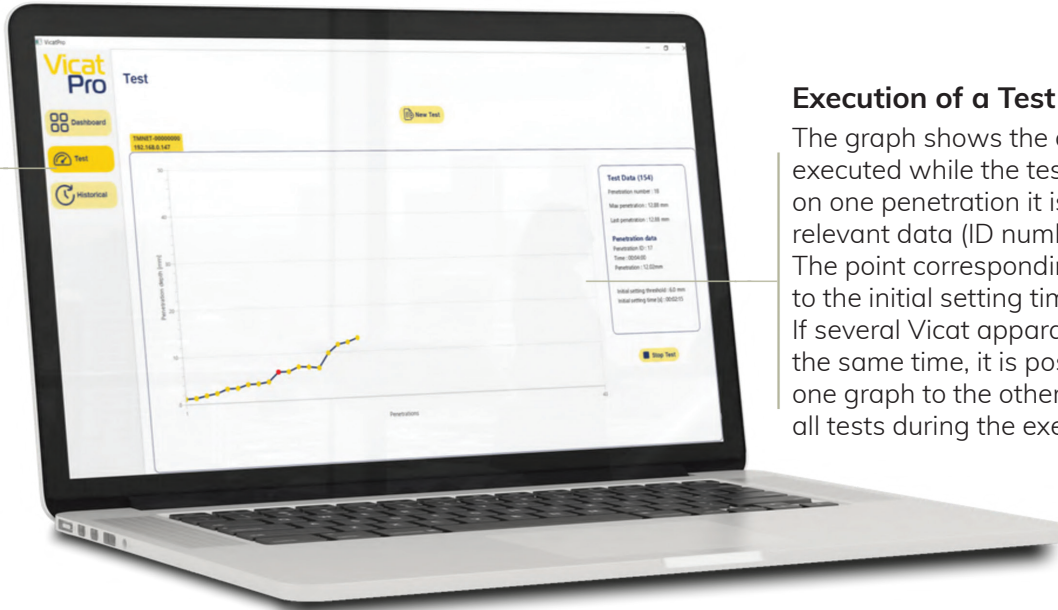
H-3052.3	EN 196-3 Mold container for tests on submerged specimens
H-3052.21	EN 196-3 Device produces water at 20°C for submerged specimen tests
H-3052.10	Needle cleaning device
H-3052.40N	Conical penetration needle for gypsum paste tests (ø8mm, length 50)
H-3052.41N	Probe 100g, for gypsum tests following EN, DIN specifications

# Software For Vicat Apparatus

STANDARDS: EN 196-3, 480-2, 13279-2 | ASTM C187, C191 | AASHTO T131

VicatPro is the latest software fully developed by Matest for the acquisition and management of tests on Vicat apparatus. It allows, via the Ethernet port, to download and manage all data directly from the PC. Its user-friendly interface allows to quickly set and start a test, even simultaneously on many Vicat apparatuses, which then perform the test in a completely automatic way. All the tests performed are stored into the software database and can be recalled and exported in a second time.

VicatPro is compatible only with model E044M equipped with the enabling for remote control E044-12M.



## Execution of a Test

The graph shows the different penetrations executed while the test is running, clicking on one penetration it is possible to see the relevant data (ID number, time and penetration depth). The point corresponding to the initial setting time is highlighted for easy recognition. If several Vicat apparatuses are working at the same time, it is possible to switch from one graph to the other in order to supervise all tests during the execution.

## Main Menu

The menu allows to switch among the main functions: Dashboard where you can see the vicat connected to VicatPro, their settings, status and ongoing operations; Test where it is possible to set a new test and visualize the test running; Historical where it is possible to visualize the database and every single test executed with the possibility to export them.

## PC Minimal Requirements for Running VicatPro:

- Processor: 1 GHz or bigger, single-core or multi-core.
- Screen: 15" monitor with a minimum resolution of 800 x 600 small characters.
- Software: Windows 8 or later

## Main Features:

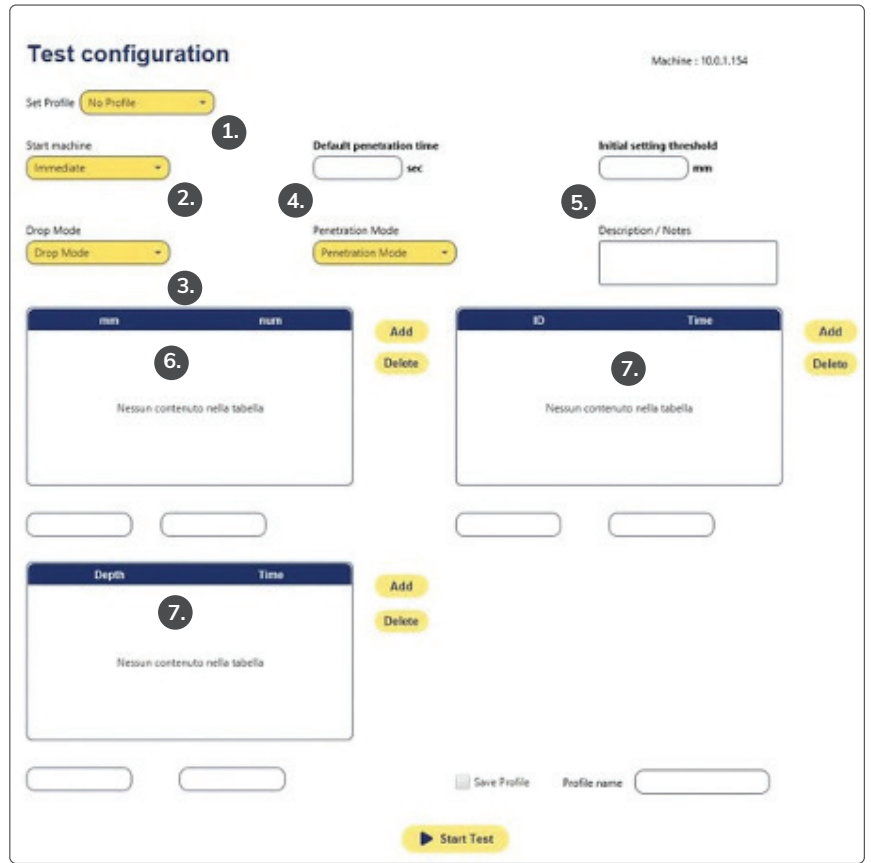
- VicatPro acquires data and manage the Vicat apparatus
- Connection via network or LAN cable
- Up to 20 Vicatronic can be connected and used simultaneously
- It is possible to set a test start time
- A single archive to manage all tests
- Possibility of exporting the report in .xls format

# Software For Vicat Apparatus

## Test Configuration

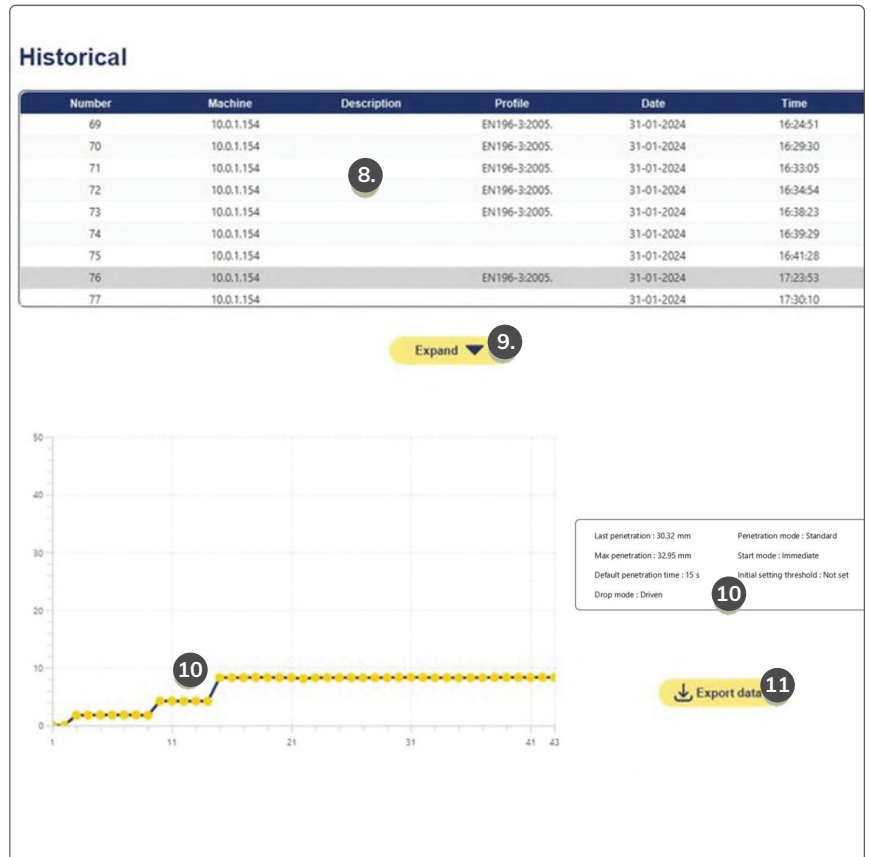
Test configuration is swift, particularly with a chosen reference standard. Moreover, users can effortlessly customize tests and save them in the profile list.

1. Choose the profile according to the reference Standard or among custom profiles.
2. Possibility to immediately start the test or to schedule the starting of a test at a determined hour or with a time delay.
3. The probe can move freely (for gravity) or driven
4. Default penetration time allows to choose the time between a penetration and another (in seconds).
5. Determination of the initial setting time (optional)
6. Based on the selected Standard, the default table of penetrations will be displayed
7. Possibility to set different penetration paths according to the number of penetrations executed or to their depth.



## Historical

8. Review of completed tests.
9. Allows to view the initial data of the selected test.
10. Possibility to see the data related to each individual penetration by clicking on the corresponding dot.
11. Export the test data in Excel format.



## Accessories

- Ethernet cable, 5 m long (1 for each Vicat to be connected to VicatPro)
- Hub to connect 2 to 7 Vicat apparatuses



**Humboldt Mfg. Co.**  
**www.humboldtmfg.com**  
 875 Tollgate Road  
 Elgin, Illinois 60123 U.S.A.

U.S.A. Toll Free: 1.800.544.7220  
 Voice: 1.708.468.6300  
 Fax: 1.708.456.0137  
 email: hmc@humboldtmfg.com