



HDT 3 JUNIOR



CEAST 

DESIGN AND PRODUCTION OF
INSTRUMENTS AND APPARATUS
FOR QUALITY CONTROL
ON MATERIALS



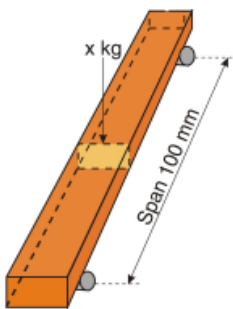
These instruments are made in
compliance with CE health and
safety requirements



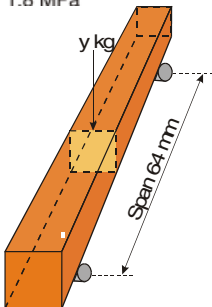
HDT 3 Junior - code 6910.000



Keyboard



1.8 MPa



1.8 MPa

To generate the same stress as required by international standards, it is necessary to apply a different weight to specimens with different cross-sectional areas.

The CEAST "HDT 3 Junior" has been designed to perform HDT and VICAT tests on plastic materials - raw materials, compounds, and finished products, pipes, or profiles - according to international standards. The HDT 3 Junior combines touch structural design for long-term high performance with advanced control and measurement systems (PID/PT100 temperature measurement and control, digital data display, and LVDT displacement measurement).

The HDT 3 Junior offers an easy, manual operating procedure and will automatically store the test results for later display. There is a soft touch keyboard to insert test parameters, and an automatic cooling system is built-in.

The HDT 3 Junior is the most compact of the CEAST HDT-VICAT range. More advanced models offer Windows software control for up to 6 test stations, data elaboration, and different levels of automation (please ask for the HDT 3, the HDT 6, the HDT 300, or the HDT 500).

How to create the correct stress for HDT tests?

International norms state very precise stresses to be applied to the specimens. The stress is determined by the cross-sectional area of the specimen. When you use different specimen sizes a different weight must be applied to the specimen to create the required stress. Even among specimens in the same batch there may be small differences in cross-sectional area, so it is very important to have a highly flexible weights system to guarantee that you create the correct stresses stated by international norms.

CEAST Binary Weights System

CEAST have calculated the necessary weights for every cross sectional area possible in international norms. The result is the Binary Weights system, which allows you to apply any weight from 67 g up to 5140 g in steps as small as 1 g. With this system you know that you can guarantee to test all possible specimens according to international standards.

Standards

Designed and built to meet the following standards:

"HDT" test

ASTM D 648 - ISO 75 - DIN 53461 - BSI 2782-Met. 121 C - NTT 51-005 - UNI EN ISO 75

"VICAT" test

ASTM D 1525 - ISO 306 - DIN 53460 - BSI 2782 - Met. 120 C - NFT 50.021 - UNI EN ISO 306 and others equivalent.

Technical Data

- Keyboard numerical with X pressure
- Display alphanumeric 2x20 digits
- Number of stations 3
- Thermal distributions °C (100 to 250°C) ± 0.2 to ± 0.3
- Thermal stability °C (300°C) ± 0.5
- Temperature range °C 20 to 300
- Temperature preset °C error ± 0.2
- Temperature resolution °C 0.1
- Temperature ramps 120°C/h - 50 °C/h
- Linear transducer movement N. 1 LVDT for each station with a resolution of 0.001 mm
- Transducer temperature N. 1 PT 100 (to visualise and programme the temperature inside the test bath)
- Cooling time water system from 200 to 50°C in 25 min
- Binary mass system (one set for each station) consisting of a set of 13 masses to cover all HDT and VICAT tests using any mass from 67 to 5140 g in minimum steps of 1 g

Optional

Individual PT 100 thermoresistances for each station.

Physical specification

• Total bath capacity (l)	18	• Supply	230 V - 50 Hz - Singlephase (110 V - 60 Hz on request)
• Physical dimensions (LxDxH) (mm)	1100 x 510 x 600	• Power (kW)	3
• Weight (kg)	95		

"Due to the continuous development policy of CEAST's Research and Development Department, changes may be introduced without notice"



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