

Specifications - Computerized Langavant calorimeter

Reference	111-101238
Dewar flask	<p>Manufactured in borosilicate glass, hemispherical bottom. Inner diameter: 95 mm. Overall diameter: 120 mm. Depth: 280 mm. Includes a plug insulator and a rubber disc (Ø 85 mm - 20 mm thickness), which supports the sample container and evenly distributes the load on the glass wall.</p>
Dewar housing	<p>Ready to place inside the Dewar described above. Made of duralumin (3 mm thickness), high rigidity and sturdy wide base ensures good stability. The Dewar flask is separated from the sidewalls of the housing by an air gap of about 5 mm and rests on a support of about 50 mm thick. The upper edge of the glass Dewar is in contact with a cap, crown-shaped, 5 mm thick, being so tied up in its accommodation. The crown locking provides a support surface of the glass stopper and ensures tightness. Both support the glass and the crown locking are made of a material with low thermal conductivity.</p>
Insulating cover	<p>It's inserted into the vessel and limit heat loss. Central part. Consists of a disc made of foam rubber, 120 mm in diameter, which ensures the tightness of the calorimeter. Upper part. It consists of a hard case, with locking device that compresses the foam rubber disc of the central part, ensuring the sealing of the lid and the correct positioning of the cover of the Dewar flask.</p>
Disposable Mortar tins.	<p>Intended to receive the cement mortar sample to be tested, discarded after the test. Manufactured standard sheet of 0.3 mm thick. Diameter: 80mm Height: 165 mm Approx. volume: 850 cm³ Steam-tight at a pressure of 0.3 bar. In the middle of the tin lid, a tube is located to insert the measurement element (thermocouple, Pt 100 probe, or thermometer). It is approximately 100 to 120 mm long, in order to reach the central inner part of the specimen.</p>
Electronic module	<p>4 measuring channels for Pt-100 probes (allowing the connection up to 3 test calorimetric bottles and 1 reference bottle, according stated in the standard). Up to 24 additional modules can be linked, to measuring up to 96 temperature probes. USB port for PC connection 16 bits A/D converter. Linearity: ± 0,1% F.E. Thermal drift: ± 0,01%/°C a F.E. Protocol: MODBUS RTU/ASCII Sampling rate: 0,5 - 2 readings/second (*) Isolation to 2000 VCA Influence of the R line: 0,05% Ω (50 Ω max, balanced). Exiting current: 0,350 mA. Data transfer speed: max 38,4 Kbps. Compliance with: EN standards: Electromagnetic (2014/30/UE). Immunity EN 61000-6-2. Emissivity EN 61000-6-4</p>
Data acquisition software WINTEST.LANG Data acquisition under Windows®	<p>Exclusively developed by IBERTEST for the Langavant test. Suitable for measuring up to 8 channels at the same time. Allows a continuous reading of the reference heat and the amount of heat transmitted by the samples placed in the test. It calculates the hydration heat of each sample showing the test results graphics according with the standard Full free parameterization of tests, samples data, etc. Real time graphics for temperature/time.</p>
Electric supply	Single-phase 220-230 V + G ~ 50/60 Hz

(*) Depending on the number of simultaneous reading channels.