Ray-Ran

6 Station Advanced HDT/Vicat Softening Point Apparatus

RR-HDV6

For maximum testing capability look no further than the Ray-Ran **6 Station Advanced HDT/Vicat Apparatus**. Built for simultaneous testing of 6 samples to HDT or Vicat testing methods, the apparatus uses dedicated microprocessor technology to accurately determine the deflection and softening point characteristics of all thermoplastic test specimens. The high accuracy and ease of use of the apparatus make it ideal for product development and quality control, with the design adhering to multiple International Testing Standards.

On start up, the on board microprocessor starts work immediately by conducting a self-diagnostic procedure to ensure test result accuracy and reliability. The built-in liquid crystal display (LCD) provides simple on-screen instructions and test parameters are easily selected using the onboard membrane keypad. A simple data selection process using yes/no prompts make the setup and operating procedure very simple to undertake and reduces user error and operator training. The microprocessor's temperature control function ensures the ramping rates of either 50°C/h or 120°C/h are kept within the specified test standard requirements, as well as performing non-standard ramp rates to customers' own specific needs.

Each test station is fitted with a PT100 platinum resistance thermometer, which accurately records the temperature next to the sample under test to 0.1°C and an electronic displacement transducer, which measures the sample displacement to 0.01mm as standard or to 0.001mm as an option.

The integrated power raise and lower function of the test stations ensures safe and easy access to the test sample supports for sample loading and retrieval before and after each test. For maximum temperature stability across each of the test stations the apparatus is fitted with a dual pump oil stirrer system. Test temperatures of 300°C are easily achieved and to ensure optimum safety at higher temperatures, the Nitrogen Blanket option is recommended.

The apparatus is supplied as standard with an integrated solenoid operated cooling system, which is automatically activated after each test. It can be connected to either a standard water supply or to the optional chiller unit for improved heat reduction. The integrated cooling coil ensures rapid heat loss back to start temperature conditions within a short time period increasing test throughput.

The one-touch, self-calibration feature of the apparatus ensures that the machine and test results remain accurate. A unique calibration interface unit is supplied with each machine that is simply connected to the apparatus for you to carry out the calibration procedure.

The apparatus is supplied as standard with data logging software, which connects via the RS232 serial interface connector. The software records the temperature/deflection profile of each station in real time during a test. Test results are displayed in tabular format and reports can easily be generated by the software for results presentation. If required, test results can also be saved as .CSV files, which can be opened with Microsoft Excel for data manipulation, further report presentation or for importing into customer specific software.

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INDUSTRIAL PHYSICS

Ray Ran

Technical Specification

- HDT/Vicat testing enabled
- Microprocessor control
- Power rise and fall of test stations
- Dual pump stirrer system
- 6 sample test stations
- Digital temperature control
- Temperature range to 300°C
- Solenoid operated cooling system
- Integrated safety thermostat
- HDT Heads (1 per station)
- Vicat Nibs (1 per station)
- Standard Fibre Stress 0.45, 1.8 or 8.00MPa
- Used defined fibre stress for HDT testing available
- Standard Vicat penetration of 0.1mm or 1.00mm
- User defined penetration depth for Vicat testing available
- Temp resolution +/- 0.1°C
- Temperature ramp rates of 50° or 120° C/hr
- User defined ramp rates available
- HDT span supports 64mm or 100mm
- Resolution +/- 0.01mm
- Bath capacity 18 litres
- Built in printer
- RS232 connection & cable
- Windows data logging software
- Fully traceable certificate of calibration
- Product user manual
- CE declaration certificate
- 1 year return to base warranty
- 240v 16amp
- Conforms to ISO 75-1, 75-2, 75-3, 306, and ASTM D648, D1525, D5944, D5945

Optional Ancillaries

- Displacement Transducer 0.001mm
- Binary HDT Test Weights (1 set required per station)
- 1.00kg Vicat Test Weight (1 required per station)
- 5.00kg Vicat Test Weight (1 required per station)
- Light Weight Load rods to test to .45MPa
- Heat Transfer Medium 5ltrs
- Nitrogen Blanket
- Air to Nitrogen Extractor
- Water Chiller unit

Weights & Dimensions

Net Weight (kg)	50
Width (cm)	90
Depth (cm)	60
Height (cm)	40

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