



PR No. 100030022 (Rfx No. 610001302)

Detailed Technical Specifications for Melting Point Apparatus

We intend to procure Visual Melting Range Apparatus to check melting range & Melting Point of various sample types i.e. Powder, Wax type, Polymer fibers, Polymer Chips etc. It is also to be used to judge the purity level of a sample/product.

1. System should be suitable for White & Colored Powder samples, waxes, polymer, plastics chips etc. with option for auto and manual detection and should have capillary attachment as and slide attachment as per BP.
2. System should have compliance to USP method class 1a & EP protocol.
3. Principle should be Change in the Intensity of reflected Light by the Sample. This helps in detection of Melting Range as well as Melting Point of various types of Samples.
4. The detection of Melting range should be automatic with optional provision image capture or video clip thru special software on PC. Also in-case of some critical samples it should also have a manual detection mode.
5. The system should have horizontal furnace plate design for precise temperature control & for easy placement of sample.
6. System should have a provision to have minimum 10X Magnified Image of the Sample to be viewed on a Black & White Monitor Screen via B&W CCD Camera. This facility should enable user to study the physical changes with respect to higher temperature during melting analysis.
7. Should have complete GLP Compliance like Result Printouts with Sample Name, ID No., Date, Time etc for Authentication and graphical report of time v/s light unit with marking of start and end of melting.
8. Calibration mode – Built-In Calibration Facility for Two Point Auto Calibration with USP Reference Standards with password protection.
9. Nonvolatile memory for minimum 20 methods with programmable heating rates from 0.2° C to 12° C /min.
10. System should have a provision of doing a trial run for unknown sample with higher heating rate like 6°C or 12°C.

Specifications:

1. Temperature Range: Ambient + 5°C to 350°C.
2. Melting Result accuracy: - Ambient + 5°C to 200.0°C - +/- 0.5°C
200.0°C to 300.0°C - +/- 0.8°C
3. 300.0°C to 350,0°C - +/- 1.4°C
4. Heating Rates: 0.2°C to 12°C in steps of 0.1°C.
5. Temperature Readability: 0.1°C.
6. Furnace Construction: Horizontal Round Metal Block.
7. Temperature Sensor: PT100 Sensor.

Warranty: 1 year.