

PROGRAMMABLE MICROPROCESSOR BASED MELTING POINT APPARATUS:**User friendly key board****Over 160 Test records can be stored****Facility to test unknown sample.****Facility to store 10 Product names with their expected Melting Point.****On line / Off line Printing facility****Validation facility****For more clarity, stirrer speed adjustment on key board.****Model: VMP – PM :**

The instrument is designed to determine Melting Point of solids or Boiling Points of liquids, with high accuracy. The apparatus incorporates the latest type of MICROPROCESSOR BASED circuitry and is very simple to operate.

The apparatus consists of a cylindrical Silicon Oil bath with heater. The sample is filled in a capillary and suspended through Teflon cover of the Silicon Oil bath. Similarly a Boiling Point tube with sample liquid can also be suspended through Teflon cover to determine Boiling Point of a liquid sample. The temperature of bath is maintained uniform with built-in magnetic stirrer. Tips of the sample filled capillary can be observed through magnifying lens on illuminated background of silicon oil bath. The Apparatus equipped with four lines alphanumeric informative LCD screen, which indicates

PRODUCT NAME, BATCH NO. and SETTEMP.ACTUAL TEMP. Etc...

The self-explanatory feather touch keyboard enables to set the desired program for heating Silicon Oil bath. Expected MELTING POINT of the sample is entered as Set Point. On pressing the 'START' key, the instrument automatically executes the program with ideal heating rates. The temperature of both starts rising fast in the beginning and automatically adjusts the rate of heating in suitable steps and 1°C/ min. towards the end of program.

The unit is provided with Printer socket. Any 80 column dot matrix printer can be connected, it will print the header, product name, batch no. date and time of the test and rise in temp./min towards last 10°C. It also prints START OF MELTING POINT and END OF MELTING POINT. OVER 160 Test Records can be stored in the memory. ON line or OFF line printing is possible. Date-wise selection for printing is possible.

An audio signal draws attention of operator for close observation of Melting Point towards the final reading. Melting Point can be clearly observed through Magnifying Lens and after reaching the actual Melting Point, the STOP key is to be pressed. At this stage Temperature will stop rising and displayed Temperature indicates completion of Melting Point. If through oversight one fails to press 'STOP' key, the heating will stop automatically, after the Temperature reaches above set Temperature with TEST OVER message.

The range of the Melting Point can also be determined by pressing RECORD TEMP. When RECORD TEMP, key is pressed start of Melting Range is indicated on the screen. Four such temperature values can be stored in the memory. On pressing the STOP key after complete melting of the sample, the heating is stopped. Start and end temperature of the Melting Range is then displayed.

The instrument is also having facility for testing unknown sample. When UNKNOWN SAMPLE option is selected the temperature will start rising at nominal rate so that is easy to observe the temperature at which the sample melts.

Validation Program for the Standard Samples like Vanillin, Benzoic Acid and Caffeine is incorporated.



Model : VMP – CM

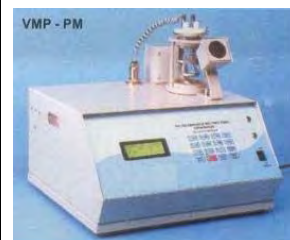
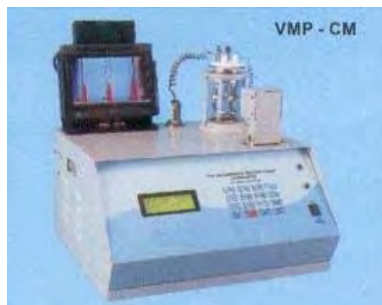
The feature of MODEL : VMP – CM is same as MODEL : VMP – PM, but equipped with capillary with sample, so that minute physical changes can be observed on the color monitor with ease.



Specification:

Temperature range of the instrument is about 2° C above room temperature up-to 300°C, readability $\pm 0.1^\circ\text{C}$, with accuracy $\pm 0.1\%$. The unit works on 230 volts / 50 Hz, (0.750 KW Max.) A.C. mains supply. The Instrument is supplied with 200 ml of Silicon Oil and a box of capillaries.

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Features of different models of Melting Point Apparatus we offer					
Model Name	VMP-1	VMP-D/DS	VMP-PM/CM	VMP-II/III	VMP-AM
With Silicon oil bath heating	√	√	√	-	-
Temperature display	Thermometer	Digital	Digital	Digital	Digital
Suitable for Melting Point	√	√	√	√	√
Suitable for Boiling Point	√	√	√	-	-
Suitable for dark colored samples	√	√	√	-	-
Accuracy	1 deg C	1-0.3 deg C	1-0.3 Deg C	0.3 deg C	0.3-1 Deg
Recommended for Melting range	√	√	√	-	-
Programmable	-	-	√	-	-
Display on colored monitor	-	-	√	-	-
Self validation facility	-	-	√	-	-
Fully Automatic	-	-	-	√	√
USP Compatible	√	√	√	-	-
Printer Interface	-	-	√	-	-



Note : Images Shown here are illustrative. As the design & manufacturing of Machines are subject to improvement, the product supplied will be as per our Techno-Commercial offer.