

TEMPERATURE DATA ACQUISITION SYSTEM for MANUAL TESTING APPARATUS

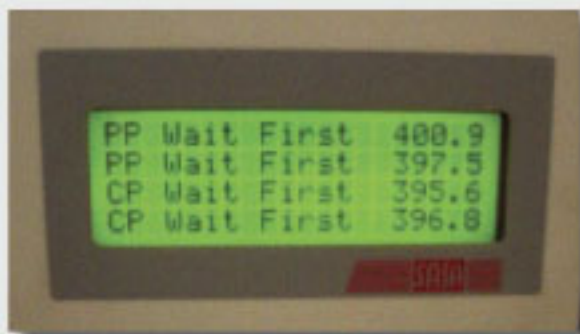
- Acquires, Stores, and Prints Temperature and Results Data
- Assists Operator with the Manual Testing of: Cloud Point, Pour Point, Freeze Point, Flash Point, and Distillation
- Alerts Operator for Next Observation
- Four Simultaneous Tests
- Small and Portable
- Economical Tool Gives New Life to Old Manual Apparatus

Maven Temperature Data Acquisition System is specifically designed to assist the operator in the performance of a number of popular manual tests for petroleum products.

The tests able to be performed with the assistance of Maven are cloud point, pour point, freeze point, flash point, and distillation. It fully conforms to the ASTM D2500, D56, D97, D2386, D92, D93, and D86 test methods, respectively. Any of these tests (mix or match) can be performed simultaneously and independently of each other (up to 4).

Maven accepts up to 4 Pt-100 RTD temperature probes that replace the currently used thermometers. Calibration of these probes is facilitated with the internal firmware.

When prompted by Maven, the operator makes the needed visual observation for any of the test events (such as for cloud, for pour, for flash, for freezing, or for distillation volume). The operator responds by the pressing of a key to indicate the absence of the end point or to indicate the end point itself. A screen displays the test temperature, what action is required, the results, etc.



▲ Maven Screen Close up

Also for Methods:

ASTM	D56, D86, D92, D93, D97, D1310, D2500, D2386, D5853, D6371
ISO	2592, 2719, 3013, 3015, 3016, 3045
IP	15,16,36, 219, 304, 309
FTM	791-201, 1001, 1015, 1103, 1411
DIN	51 597, 51 421
NF	T60-105, M07-002, M07-019, M07-048



▲ Maven

Maven's key benefits are: Improvement of data precision since the automated data acquisition does not rely on the operator's readings or recording of the temperature. Fully traceable recording of data reduces lost data or operator errors. Increased efficiency allowing operator to monitor more tests than now practical. Guides the operator as to the next temperature event such that even new operators can perform the respective tests with less training. Results are printed at the end of the test (printer is an option).

The data output may also be directed to a PC (with an optional software package) allowing the data to be stored in the lab's LIMS or on the hard drive for further statistical analysis.

Maven-D is designed for monitoring and data capture for 4 manual distillations by ASTM D86 test.

Maven and Maven-D are light (15 lbs) and small units (13 x 14 x 7 inches high), portable for easy movement between different test apparatus within a laboratory.