Extended Range Tribology Viscometer

Viscosity Measurement System for the Used Oil Analysis Laboratory

One tube size covers the lubricating oil viscosity range. Tubes are sized for 40°C or 100°C working temperature:

40°C Range: 9.8cSt. - over 800 cSt.
100°C Range: 2.3cSt. - over 50 cSt.

The TriVisc takes two timings of each sample to verify accuracy. Two separate timing measurements allows for confident viscosity measurements. Customers have reported a 90% reduction in viscosity re-testing after switching to the TriVisc.

It's FAST and it's ACCURATE

Sample temperature uniformity and monitoring of viscometer tube condition are critical to making accurate and consistent viscosity measurements. The TriVisc design ensures this for every sample.

It is critical that the oil sample be at a uniform temperature prior to timing the flow. Oil undergoes a large volume expansion as well as viscosity change upon heating. Any thermal change or non-uniformity occurring during the timing period will result in inaccurate and inconsistent viscosity calculation.

Solvent rinsing and drying of the viscometer tube changes the glass temperature. The TriVisc design guarantees that the viscometer tube glassware, and the oil sample within, attains the uniform bath temperature prior to flowing down the capillary tube for timing.

Your customers will notice and appreciate the TriVisc difference!

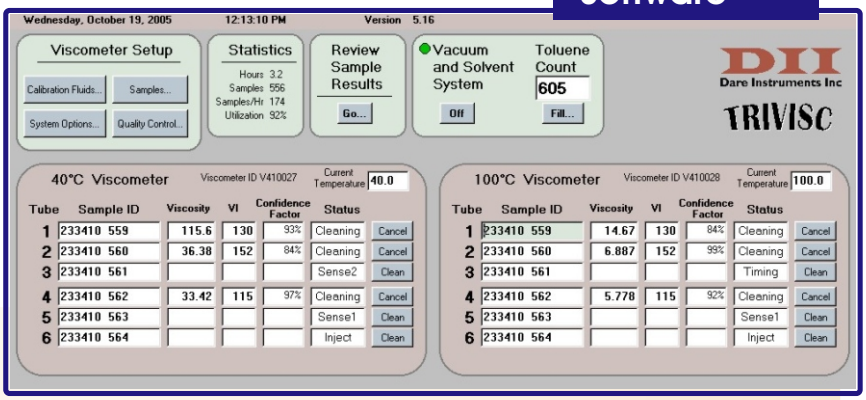
Features

- Wide viscosity working range without having to change to different capillary tube sizes.
- Precise and uniform sample temperature for every measurement.
- Unique rinsing system eliminates solvent drips and vapors from contaminating your lab.
- Automatic rinsing and drying after each sample. Rinsing parameters are automatically adjusted based on viscosity measurement to minimize solvent consumption, yet ensure oil is flushed from the viscometer tube.
- 6 Viscometer tubes in each bath for very high sample throughput. Over 160 viscosity measurements per hour with our two-bath systems.
- Confidence factor is calculated for every sample measured. Automatic re-queuing of low confidence measurements.

High Speed Kinematic Viscosity

An easy to learn software package handles queuing of samples, measurement results, quality control, and monitoring of throughput and usage statistics.

Software



Specifications*

Bath Temperature Range: 38.0°C - 102.0°C
Digital PID, adjustable. Stability +/- 0.01°C

Viscosity Range @ 40°C
9.8 cSt - 800 cSt

Viscosity Range @ 100°C
2.3 cSt - 70 cSt

Accuracy:
RSD - 0.67% over stated range

Repeatability:
RSD - 0.50% over stated range

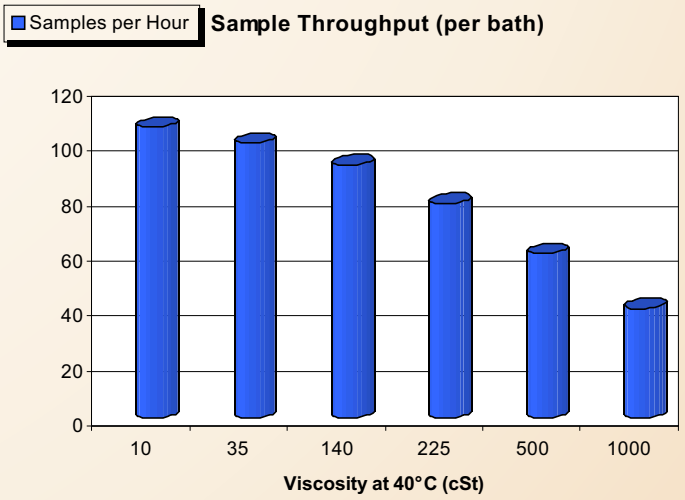
Dimensions:
Width: 15.3"
Depth: 17.5"
Height: 24.0"

Weight: 84 pounds with oil bath full

Power Requirements:
110 VAC 50-60Hz 8 Amps
220 VAC 50-60Hz 4 Amps
specify voltage and line frequency

Computer:
Microsoft Windows XP
One USB Port available for each TriVisc
1 GB RAM
100 GB HD
17" or larger Display
Mouse
LIMS Interface if required

*Subject to change without notice



TriVisc Accessories

The TriVisc **Solvent Delivery System** holds 20 liters of rinse solvent and delivers a precisely metered solvent volume. This ensures the viscometer tubes are always rinsed consistently without splashing, spills, or vapors evaporating into the lab. There is no longer a need for frequent solvent re-fills.

The TriVisc **Vacuum/Waste System** combines a high quality, low noise vacuum pump with a large metal liquids trap. The trap is emptied easily using front mounted control valves to purge the tank into a waste pail for disposal. You no longer mess with glass flasks, rubber stoppers, hose fittings, and frequent emptying.

Dare Instruments Inc
9486 - 51 Ave NW
Edmonton, Alberta
Canada T6E 5A6
Toll Free: 1-877-450-0401
International Ph: 1 (780) 450-0401
Fax: (780) 454-8690
www.dareinc.com