OMNITEK

BitUVisc viscometer
Automatic viscometry systems
for bitumens and similar products

The BitUVisc viscometer

OmniTek introduces the newest member to the U-VIsc family of fully automatic viscometer systems. Specifically developed to cover sample types which pose great challenges to automatic sampling, measurement and cleaning because of their high pour point and viscosity.

The BitUVisc system provides users with completely automatic heating, sampling, measurement and cleaning of high viscosity samples such as bitumen and vacuum residue

Flexible and reliable

The instrument was designed to be versatile and flexible, yet easy to use to cover the hardest applications. Different models are available with 1 or 2 tubes, allowing for the analysis of a wide range of viscosities and sample types.

The tubes are based on the well-known and proven Ubbelohde design. Using specially designed thermal sensors, these tubes allow the detection of fully opaque fluids without any problems or limitations and eliminate the need to use the reverse flow tubes common in bitumen testing. The standard configuration offers viscosity measurement up to 165 ºC, and sample preheating up to 200 ºC.

Sophisticated temperature control ensures that measurements are carried out well within the required temperature stability. The system features an innovative single position autosampler which provides integrated heating of the sample up to 200º and uses preheated solvent to effectively clean the viscometer tube.

The BitUVisc is fitted with a dual solvent cleaning system and can use both vacuum and pressure to raise the sample up into the tubes, allowing the analysis of volatile samples.

The instrument can be controlled through an advanced PC application which not only logs the test results but also monitors the bath temperature during the test to ensure the validity of the result. It allows the operator to specify optimized and fully customizable test methods for each individual sample with the click of a mouse button.

Finally an instrument that eliminates the need for the tedious, labour intensive manual loading, measurement and cleaning of high viscosity samples.

Features

- Compliant with requirements for ASTM D2170, D445 and related specifications
- Very easy to use and maintain
- Use of preheated solvent to maximize cleaning efficiency
- Fully automatic heating, sampling, measurement and cleaning
- Especially developed for high temperature, high viscosity applications
- Advanced PC software for storage, reporting and calculations
- Easy tube exchange. Back to work in minutes without the need for a service tech
- No external vacuum required
- Chemically resistant to allow for all common solvents
- Advanced thermal sensors eliminate the need for reverse flow tubes
- Sampling using vacuum or pressure allows analysis of volatile samples
- Can be used from room temperature up to 165ºC

ASTM D2170 / D445

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The BitUVisc is supplied with:

20-fold viscometer tubes

Bath oil

Cooling coil

Calibration standards

Advanced PC software

All parts required for standard operation

Options and accessories

External chiller

Pedestal base

Digital thermometer

Specifications

Applicable standards	ASTM D2170, D445 and related standards for kinematic viscosity
Measuring range	up to 100,000 mm²/s and / or up to 165 ºC
Temperature range	20 - 165º C*
Temperature stability	±0.01ºC @ 40º C, ±0.015 @ 100º C and higher
Sample volume	15 ml
Solvent consumption	20-30 ml per cycle, sample dependent
Viscometer type	Modified Ubbelohde
Sensor type	Thermal
PC Control	Up to 4 instruments controlled with 1 PC

* For temperatures around ambient, an external cooling circulator is required

Available models

	BitUVisc 110	BitUVisc 120
Nr. of baths	1	1
Tubes	1	2
Dimensions	38 x 62 x 78 cm.	
Weight	54 kg.	

Your authorized distributor is :

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