

Heated Oil Viscometer for Test of Fuel Oil Viscosity Reducing Downtime Significantly

TURNKEY SOLUTIONS

There are many variables to take into account when fitting a blending system and our highly skilled engineers will adapt our system to fit your exact requirements.

TECHNICAL SUPPORT

We are with you all the way. Before, during and after the installation to secure a flawless integration and operation.

ZERO DOWNTIME

As a central part of a bunker delivery system; mechanical stability, toughness and durability is an important aspect of the manufacturing and design philosophy.

For more information on these or other of our products or services please visit us on the Web at:

www.cbi.dk



Readings are uniquely provided directly in centistokes (cSt) and can be used in 2 ways:

- Heated to 50°C for viscosity measurement of residual fuel oils
- Heated to 40°C for viscosity measurement of distillate fuels

The CBI Viscometer has been proven to be just as accurate as laboratory test methods by Saybolt, Denmark - an independent, leading analysis laboratory.

Protect your Assets

Viscosity is regarded as oils most important characteristic. It is the viscosity that shows the oil's resistance to flow and the strength of the oil film between surfaces.

Viscosity can increase or decrease as a result of problems such as contamination, fuel dilution and shear thinning.

With the growing use of low sulphur fuels and increased frequency of bunkering, testing the stability of the fuel oil and its compatibility for blending is becoming increasingly important.

The CBI Heated Oil Viscometer is suitable for measuring fuel oil viscosity from a wide variety of applications including diesel engines, gas turbines and fuel oils.

Testing fuel oil viscosity is important for verifying that the correct grade of fuel is delivered, for calculating combustion performance, plus

adjusting of fuel handling and injection systems.

The CBI Heated Viscometer Monitors and Verifies that the correct fuel grade or blend has been delivered, checks that fuel viscosity is acceptable for storage, pumping and purifiers and estimates the combustion performance (CCAI) of fuel oil while supplying the correct density from 50°C. to kg/m^3 @ 15°C in vacuo.

The CBI Heated Viscometer is extremely rugged and ideal for harsh applications. It comes as a stand-alone kit, supplied in its own case and with a Calibration Certificate issued by Saybolt Denmark.

SERVICES AVAILABLE

- Consulting Services
- Technical Support
- Installation and Setup
- Maintenance
- Warranty

Technical Specifications

HEATED VISCOMETER	
Range	20 - 810 cSt at 50°C (ISO Fuel Grades RMA10 to RML55) 20 - 810 cSt at 40°C (lube oils SAE 5 through SAE 50)
Test time	Heating from 25°C 10 minutes Viscosity at 40°C 3 minutes (unheated)
Repeat test	Maximum 30 seconds
Calculations	Viscosity at 50°C or 40°C (heated) Viscosity at 40°C (unheated, corrected to 40°C) Viscosity at 100°C (calculated) Calculated Carbon Aromaticity Index (CCAI) Density correction from 50°C to 15°C in vacuum Variable Viscosity Index (for unheated mode)
Accuracy	Typically with +/- 3% (20 - 450 cSt) or +/- 2 cSt
Power	110 to 240 VAC 50/60Hz 200 VA
Fuse Rating	2.5A 20 mm 250 VAC HRC A/S (T) Ceramic

DENSITY METER	
Range	800 to 1,010kg/m ³ at 15°C (ISO 8217 Fuel Grades DMA to RML55)
Test time	Heating from 15°C 10 minutes Repeat test maximum 30 seconds
Cleaning	1 minute
Test temperature	Selectable 50°C or 70°C
Calculations	Density at 15°C in vacuum, centiPoise to centiStokes Calculated Carbon Aromaticity Index (CCAI)
Accuracy	Typically with ±0.1% (800 - 1,010kg/m ³)
Power	110 to 250 VAC Autoselected 50/60 Hz 200 VA
Fuse rating	2.5A 20 mm 250 VAC HRC A/S (T) Ceramic



The Recommended Service interval is 12 months.

A Fuel Oil Test Kit is available for loan while your own is being serviced. Contact our service department for further information.



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Seabright
FAST TO THE POINT

CALIBRATION CERTIFICATE Report No: 1027029-901

ROLLING BALL VISCOMETER

Mandates/Approvals: CE, Kitemark, ISO 9001:2008, ISO 17025:2005
Reference No: 1027029-901
Ref. Obj: Rolling ball viscometer

Ref. Viscometer	Ref. Viscosity Reference Fluid (cSt)	Measured Viscosity (cSt)	Deviation From Ref. (cSt)	Acceptable Deviation (cSt)
CF-150-575A	10.0	10.1	0.10	±0.20
CF-300-05	100	111.0	11.0	±1.5
CF-100-11	100	104.1	4.1	±1.5
CF-400-475	100	102.4	2.4	±1.5

DENSITY METER

Mandates/Approvals: CE, Kitemark, ISO 9001:2008, ISO 17025:2005
Reference No: 1027029-901
Ref. Obj: Density meter

Ref. Density Reference Fluid (kg/m ³)	Measured Density (kg/m ³)	Deviation From Ref. (kg/m ³)	Acceptable Deviation (kg/m ³)
1.000	0.999	-0.001	±0.002
1.010	0.999	-0.011	±0.002

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