PAC | solid partners proven solutions



VH1 & VH2

Automatic Huillon Viscometers

- High throughput with complete results in minutes
- Up to 75 tests per hour
- Automated cleaning and drying programs with minimal solvent usage
- Multi-instrument networking

VH1 & VH2

ACURATE KINEMATIC VISCOSITY

Using a “Houillon” capillary tube, ISL’s VH Series Viscometers automatically determine kinematic viscosity of lubricating oils, used oils, fuels, polymers, and similar materials over a wide viscosity range. Initially developed for lubricant blending facilities, research laboratories, and used oil monitoring where small sample size and quick results were required, the ISL VH viscometer offers exceptional performance, providing results in 60 seconds using less than 1 ml of sample.

HOUILLON VISCOSITY METHOD

The term “Houillon” refers to the specific capillary tube used to measure viscosity in ISL’s VH systems. The principle based on straight flow approach requires less than 1ml of sample, therefore speeding the warm-up and analysis time. Because the specimen flows throught the detection points only once, the houillon method is ideal for both transparent and opaque samples.

KEY ADVANTAGES

SIMPLE AND FAST ANALYSIS

- Modular design with ultimate configuration flexibility
  -Adapts to increasing workload demands
  - Enables up to 16 simultaneous tests
- Easy constant calibration
- ±0.01°C bath temperature stability
- Built-in cooling coil for perfect stability at sub-ambient temperatures
- Rapid bath temperature adjustment and stabilization
- Informative on-screen and printed reports with unlimited results storage
- LIMS export following user-defined protocols
- Easy tube replacement in minutes; no need to drain bath media

POWERFUL DATA MANAGEMENT

- Standard and/or averaged viscosity measurements
- Viscosity Index computation in minutes when 40°C and 100°C bath temperatures are programmed
- Tags outlier results according to user preferences
- Informative evaluation reports
- Saves calibration parameters for multiple bath temperature settings, making bath immediately ready for use following a temperature change (i.e. no need to recalibrate)
- Diagnostic menus for service

EFFICIENT CLEANING PROCEDURE

- Automated cleaning system, individually programmable for each tube
- Minimal solvent consumption for cleaning cycle
- All solvent removed under vacuum, not under pressure
- Enhanced cleaning options with Model VH2:
  - dual-solvent washing option for hard-to-clean samples and fast drying
  - withstands use of aggressive solvents

APPLICATION RANGE

- Used oil analysis
- Lubricant blending
- Metalworking fluids
- Pharmaceuticals
- Research & development



SMALL SAMPLE

Requires less than 1 ml. of sample

HOUILLON METHOD

Capillary tube ideal for transparent and opaque samples

SINGLE OR DOUBLE SOLVENT

Model VH1

Integrates a single solvent capacity for tube cleaning

Model VH2

Accommodates two solvents, offering added flexibility in solvent selection for efficient tube cleaning and drying and withstands the use of aggressive solvents

In both models, ISL's custom Windows-based management software enables central monitoring of up to 16 capillaries spanning up to 4 baths. Results are displayed, saved to the database, and printed or sent directly to a LIMS following user-defined protocols. With 40ºC and 100ºC bath temperaturesprogrammed, viscosity index can be performed, calculated and printed within minutes.

SPECIFICATIONS

Standard Methods	In compliance with: ASTM D7279, ASTM D2270 In correlation to:ASTM D445, ASTM D341, IP 71,IP 226, EN3104
Viscosity Range	2 to 2000 cst (mm2/s) at 40ºC
Temperature Range	User programmable: 20ºC to 120ºC
Bath Temperature Stability	±0.01ºC
Electrical	115V 50/60 Hz or 230V 50/60 Hz
Safety	Adjustable ove-temperature protection
Dimensions	
VH1	30cm (12”) W x 45cm (18”) D x 82cm (33”) H; 28 kg (62 lb)
VH2	30cm (12”) W x 45cm (18”) D x 87cm (35”) H; 35 kg (77 lb)
Vacuum Kit	50cm (20”) W x 27cm (11”) D x 76cm (31”) H; 27 kg (59 lb)

Continuing research and development may result in specifications or appearance changes at any time

ABOUT PAC

PAC develops advanced instrumentation for lab and process applications based on strong **Analytical Expertise** that ensures **Optimal Performance** for our clients. Our analyzers help our clients meet complex industry challenges by providing a low cost of ownership, safe operation, high performance with fast, accurate, and actionable results, high uptime through reliable instrumentation, and compliance with standard methods.

Our solutions are from industry-leading brands: AC Analytical Controls, Advanced Sensors, Alcor, Antek, Herzog, ISL, Cambridge Viscosity, PSPI, and PetroSpec. We are committed to delivering superior and local customer service worldwide with 16 office locations and a network of over 50 distributors. PAC operates as a unit of Roper Technologies, Inc., a diversified technology company and a constituent of S&P 500, Fortune 1000, and Russell 1000 indices.

HEADQUARTERS

PAC LP | 8824 Fallbrook Drive | Houston, Texas 77064 | USA
T: +1 800.444.8378 | F: +1 281.580.0719

Contact us for more details.

Visit our website to find the
PAC representative closest to you.

Copyright © 2018 PAC L.P. All rights reserved
VH1 & VH2 Brochure Rev2 09/18