

# Automated Viscometry Systems for Analysis of Newtonian Fluids



Coenecoop 715 Tel : +31 (0)182-302990  
2741 PW Waddinxveen Fax : +31 (0)182-302999  
The Netherlands info@omnitek.nl

**OMNITEK**

[www.omnitek.nl](http://www.omnitek.nl)

Koehler Instrument Company is proud to be an authorized distributor of Omnitek BV in the United States, Canada, and Mexico.

## test method

Determines the Kinematic viscosity by measuring the time taken for a sample to fill a calibrated volume at a given temperature. The specimen is introduced into the apparatus and then flows into the viscometer tube which is equipped with two detection cells. A timing sequence tracks the time for flow of the sample to travel from the first detection cell to the second detection cell.

## Omnitek S-flow IV+ Viscometry System

- Conforms to ASTM D7279 and D2270
- Correlation to ASTM D445 and related specifications
- Features built-in VI calculation
- Consists of two bath system with two tubes per bath

The Omnitek S-flow IV+ instrument consist of compact, bench-top automated viscometry systems for the analysis of Newtonian fluids. It complies fully with in ASTM D7279 and as such, gives full correlation with ASTM D445. It is the ideal system for used oil labs that need to test a wide range of lubricant viscosities.

The latest generation of S-flow builds on the strong foundation of its pre-decessors to offer the ultimate in automatic viscosity testing of Newtonian samples such as petroleum products. The system offers all the tried and tested advantages of a Houillon-type tube design such as short process times, small sample volume and low solvent consumption, but now also includes an optional auto-sampler to allow for fully unattended operation. All controlled from a central software interface that takes care of result storage, auto-sampler control, calculations and much more. The new S-flow IV+ consists of 2 baths system with 2 tubes in each bath and it provides dual temperature measurements in an extremely compact package. Other options include dual solvent cleaning and integrated duplo-testing which obtains 2 flow time determinations with only 1 sample injection. Additional parameters such as tube constants and cleaning cycle are also controlled by the operator, because the sample volume is very low (0.3-1 ml), the entire measurement cycle is very short. cycle time ranges between 3-10 minutes per tube, allowing a throughput of up to 80 tests per hour. After the injection of the sample, operator presence is no longer required. All measurement parameters, such as warmup times and cleaning parameters can be set through the high resolution 12" touchscreen or with optional PC software. The diagnostic system alerts the operator to possible issues such as empty solvent supply tanks, full waste bottles, insufficient vacuum, etc. The optional auto-sampler is fully modular and can be installed after market, meaning you can purchase the analyzer first and then upgrade to auto-sampling when the need arises.



Omnitek S-flow IV+ Automatic Viscometry System

## specifications

Conforms to the specifications of:

ASTM D7279, D2270 with correlation to ASTM D445

Number of Baths: 2

Viscometers per Bath: 2

Measuring Range: 0.3 – 3,000 cSt at 40°C

Temperature Range: 20 to 120°C

Temperature Stability: Better than  $\pm 0.02^\circ\text{C}$

Timer Resolution: 0.001 s

Sample Volume: 0.3 to 1.0 mL

Viscometer Type: Houillon

Sensor: Optical, self-calibrating

### Electrical Requirements:

115V-240V 50/60Hz

950 kW

### Included Accessories

Viscometer Tubes Starter Kit

Reference Standards Bath Oil

### Shipping Information

Shipping Weight: 120 lbs

Dimensions: 15 cu.ft.

### Dimensions wxdxh,in.(cm)

15.75 x 23 x 26" (40 x 58 x 66 cm)

Net Weight: Cabinet: 99 lbs (45 kg)

## ordering information

catalog no.

**S-Flow IV+**

description

Omnitek S-flow IV+ Automatic Viscometry System, 115-240V 50/60Hz



85 Corporate Drive, Holtsville, New York 11742  
1-800-878-9070 (in u.s. only) TEL: +1 631 589 3800 FAX: +1 631 589 3815  
Email: sales@koehlerinstrument.com www.koehlerinstrument.com