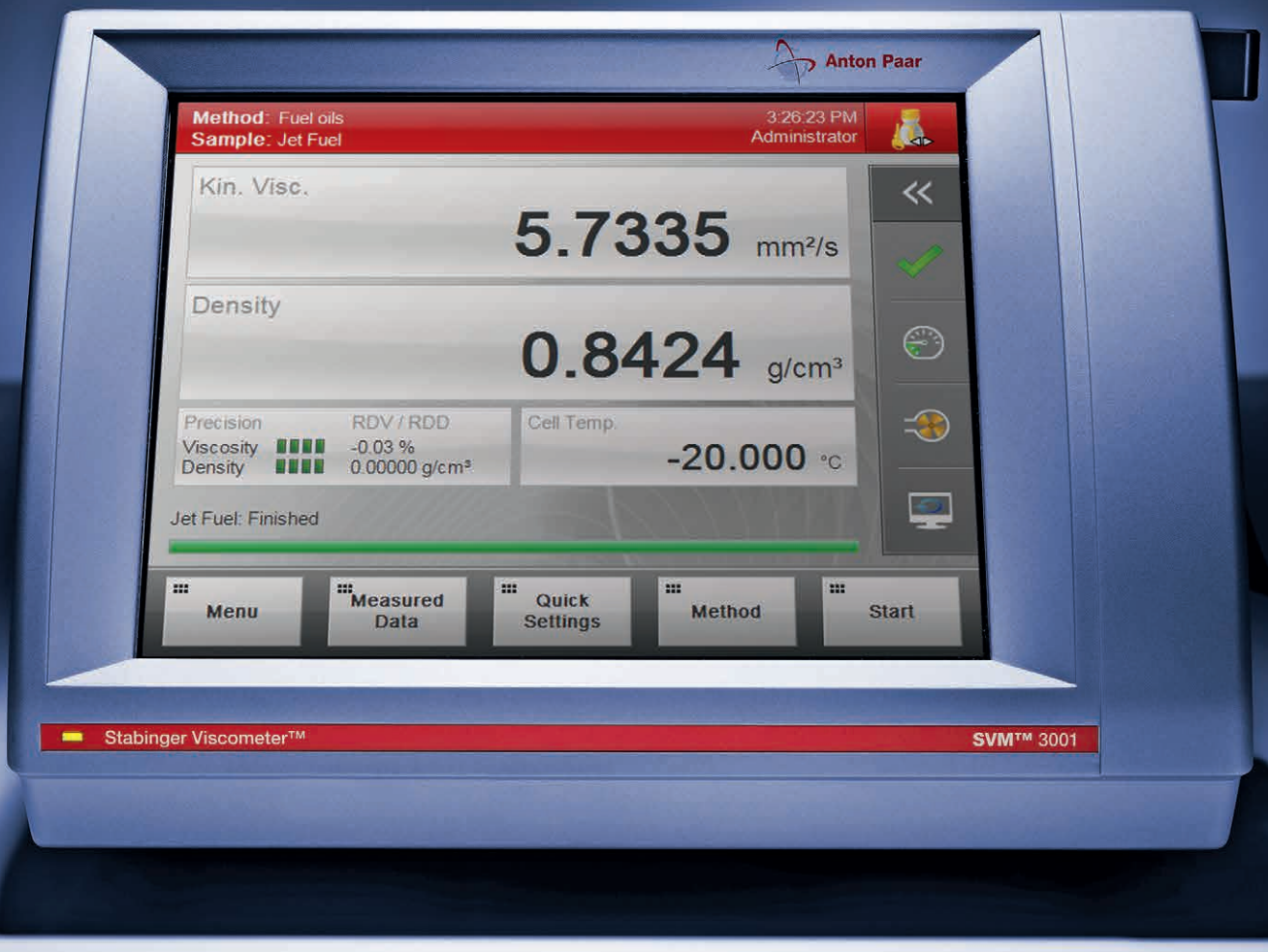
Anton Paar

SVM™ 3001

Stabinger Viscometer™



Expect More

Welcome to New Viscometry

Measuring the viscosity of oils and fuels is all about certainty and compliance. Two approaches get you there: the traditional glass capillary method or new viscometry with Anton Paar's SVM™ 3001 Stabinger Viscometer™. Compared to the traditional way, SVM™ 3001 boosts your lab's productivity by reducing your costs and saving massive amounts of time. After one single measuring cycle on a small sample volume, you get kinematic viscosity, density, dynamic viscosity, Viscosity Index and more.

Kinematic viscosity (ASTM D7042, EN 16896, DIN 51659-2)

API Grades (ISO 91, API 2540, ASTM D1250, IP 200)

Density (EN ISO 12185, ASTM D4052, IP 365)

Viscosity Index (VI) (ISO 2909, ASTM D2270)

Dynamic viscosity (ASTM D7042)

Saybolt viscosity (ASTM D2161)

SVM™ 3001 gives you more parameters than any other kinematic viscometer on the market.

These Features Make the Difference

Multiple parameter measurement from a single syringe

- Kinematic viscosity (ASTM D7042, EN 16896, DIN 51659-2)
- Density (EN ISO 12185, ASTM D4052, IP 365)
- Dynamic viscosity (ASTM D7042)
- Viscosity Index (VI) (ISO 2909, ASTM D2270)
- API Grades (ISO 91, API 2540, ASTM D1250, IP 200)
- Saybolt viscosity (ASTM D2161)

Wide temperature range from -60 °C to +135 °C

- From jet and diesel fuel to lubricating oil and wax – with one integrated cell
- Built-in air cooling down to -20 °C
- Cooling down to -60 °C using external cooling (i.e. water/glycol mixture)

User-friendly interface

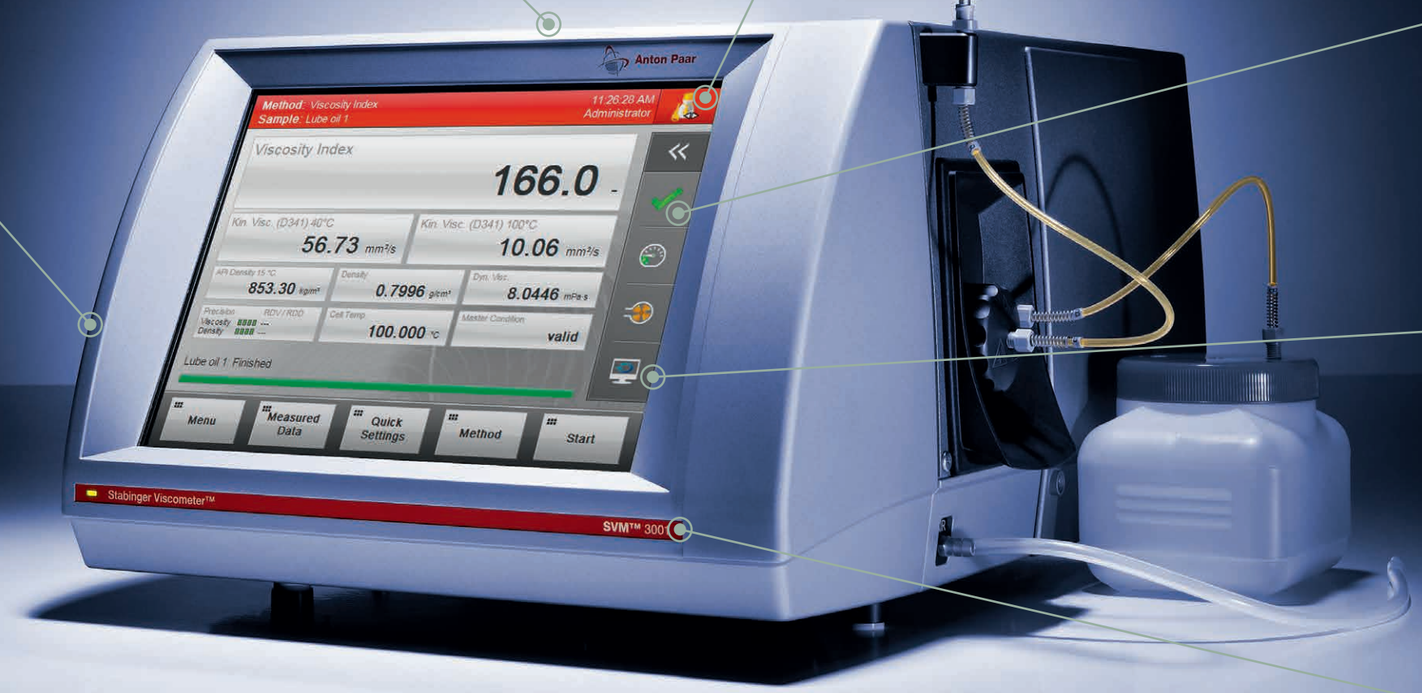
- 10.4” touchscreen display easily operated, also with gloves
- Intuitive GUI and software
- Measurement precision and repeat deviation at a glance

Unbeatable ease of operation

- Simply inject the sample by syringe and start the measurement
- Easy and safe handling without leaks or breakage
- Simple cleaning with a wash bottle
- Low maintenance
- Factory adjusted: ready for immediate use

FillingCheck™

- Filling quality of the density cell monitored in real time
- Compliant with D4052 requirements
- Saves valuable operating time



Reliable data handling

- Data storage of up to 1000 measuring results
- Data export via USB, printer, Ethernet or LIMS
- Report in PDF or xls formats

Quality

- Break-proof robust measuring cells made of metal
- CE-certified product for safe and reliable measurement
- User management and audit trail

Your Application – Your Benefits

Lubricating oils, base oils and additives

“SVM™ enhances the quality of our products by enhancing our lab performance.”

- Simultaneous determination of kinematic viscosity and density according to ASTM D7042 and D4052
- Special VI method with automatic temperature changes and calculation
- One measuring cell for your entire viscosity range: from lube to wax and grease
- Unparalleled heating/cooling rates: up to 20 °C/min

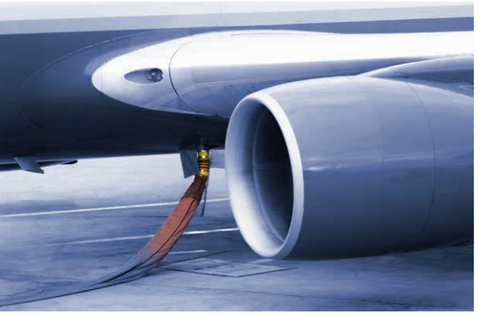
Compliance with: ASTM D7042, D2270, D4052, D7152, D6074

Fuel oils: from diesel to residual fuel (bunker C)

“With SVM™, we certify our fuels for both kinematic viscosity and density in one run.”

- Simultaneous determination of kinematic viscosity and density according to ASTM D7042 and D4052
- Wide temperature range
- Robust metal measuring cells
- High sample throughput with an optional auto sampler

Compliance with: ASTM D7042, D4052, EN 16896
Product specifications: ASTM D975, ASTM D396



Low temperature: jet fuel, brake fluids, hydraulic fluids

“When it comes to our passengers’ safety, we rely on SVM™.”

- Measure at -20 °C without additional counter-cooling
- Temperature scan for comprehensive information on low temperature fluidity
- Cleaning and drying at minus temperatures without heating in between
- Methanol-free cooling down to -60 °C; no flammable cooling liquid required

Compliance with: ASTM D7042, D4052
Product specification: ASTM D1655, ASTM D7566

Oil condition monitoring

“When is the right time for an oil change? SVM™ tells us!”

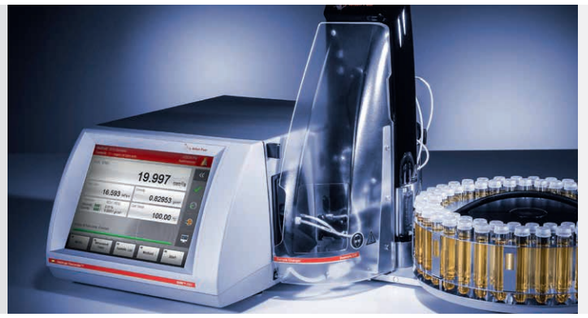
- Special VI method with automatic temperature changes and calculation
- Fast kinematic viscosity and high automation for high sample throughput
- Low sample and solvent consumption, little cleaning effort
- Robust design, low maintenance

Compliance with: DIN 51659-2

Hot Filling Attachment Option

The hot filling attachment for SVM™ 3001 keeps your sample warm for easy filling and prevents sample freezing. Highly viscous samples are easily refilled for repeat measurements.

The hot filling attachment is ideal for measuring samples with melting points of up to 100 °C (such as wax) or high pour points (such as heavy fuel or tar).



Modular Automation Option

Maximize productivity and minimize costs by employing Anton Paar’s sample changers. Select an automatic system according to your sample’s characteristics and plug it in – SVM™ 3001 automatically recognizes it. While the sample changer takes care of repetitive tasks like filling, cleaning and drying, you are free to perform other important tasks.

This automation option ideally serves all applications with high throughput requirements.

Technical data*		
Measuring range	**Viscosity** **Density** **Temperature**	0.2 to 30.000 mm²/s 0.6 to 3 g/cm³ -60 °C to +135 °C
Main standard test methods		ASTM D7042, D4052, EN 16896, EN ISO 12185
Special functions		Temperature scan, Temperature table scan, Time scan, Viscosity and density temperature extrapolation, Automatic repetition measurement, Automatic viscosity index measurement, Density FillingCheck™, Built-in air pressure sensor, Full range viscosity correction of density, LIMS connectivity
Minimum sample required | Typical sample required		1.5 mL | 5 mL
Minimum solvent required | Typical solvent required		1.5 mL | 6 mL
Maximum sample throughput		30 tests per hour
Autosampler capacity		Up to 71 positions
Data memory		1000 measuring results
Interfaces		4 x USB (2.0 full speed), 1 x Ethernet (100 Mbit), 1 x CAN Bus, 1 x RS-232, 1 x VGA
Controls		Touchscreen, optional keyboard, mouse and 2D bar code reader
Power supply		100 V to 240 VAC; 50 Hz to 60 Hz; 250 VA (max.)
Ambient conditions		15 to 35 °C (59 °F to 95 °F), max. 80 % r.h. non condensing
Net Weight | Shipping Weight		17.6 kg / 38.8 lbs | 22.2 kg / 48.9 lbs
Dimension (WDH)		33 x 51 x 23.1 cm / 13 x 20 x 9.1 in
Compliance		CE mark; EMC directive EN 61326-1, LV directive EN 61010-1, RoHS

*For more information, please refer to instruction or reference manual.

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