

CANNON® Fully Automated Viscometers



Model	miniAV®	miniAV-HT	miniAV-LT	miniAV-X	miniQV®-X	CAV® 4.1	CAV 4.2	UltraVIS® 192	
	<p>mini Viscometers A mid-market automation solution, mini laboratory viscometers are designed for testing in small to medium size sample batches. They feature full automation of sample loading, viscosity determination, viscometer tube cleaning, and sample vial washing and drying.</p>					<p>CAV Viscometers Designed for laboratory testing in large sample batches, our flagship CAV viscometers feature full automation of sampling, viscosity determination, viscometer tube cleaning, and sample vial washing and drying.</p>		<p>UltraVIS Viscometer Revolutionary design eliminates costly solvent and the expense of waste solvent disposal. It features full automation of sampling, viscosity determination, and viscometer tube cleaning.</p>	
Key Features	<ul style="list-style-type: none"> Lowest cost for fully automated testing D445 precision Option for sample preheating and heated drain line for waxy samples 	<ul style="list-style-type: none"> Developed specifically for asphalt kinematic viscosity at 60 °C and 135 °C Up to 12 determinations per hour Includes adjustable sample preheater and heated waste lines 	<ul style="list-style-type: none"> Sub-ambient temperature control D445 precision 	<ul style="list-style-type: none"> 10-position, unattended sample handling D445 precision 	<ul style="list-style-type: none"> Optimized for high throughput testing 25-position, unattended sample handling Follows most D445 principles but with only one analysis for rapid output 	<ul style="list-style-type: none"> Single bath for simultaneous testing of two samples at the same temperature 28-position (2 trays x 14), unattended sample handling Color, touchscreen interface D445 precision Options for sample preheating where heat is maintained on entire tray and heated drain line 	<ul style="list-style-type: none"> Dual bath for simultaneous testing at two different temperatures 28-position (2 trays x 14), unattended sample handling Color, touchscreen interface D445 precision Options for sample preheating where heat is maintained on sample being tested and heated drain line for waxy samples 	<ul style="list-style-type: none"> Solvent-free Large, intuitive, color touchscreen Fast analysis time: typically 2.5 minutes per test 192-position (2 trays x 96), unattended sample handling FlowHub™ PC software for configurable LIMS output Solid bath design, no bath fluid needed Follows most D445 principles but with shorter flow times for rapid analysis 	
Application	Various applications (formulation, refining processes, blending, final specification testing, testing of waxes)		Asphalt binders, cements, and cutbacks	Jet fuel QC	Various applications (formulation, refining processes, blending, final specification testing)		Various applications (formulation, refining processes, blending, final specification testing)		In-service oil testing, used oil analysis, fleet maintenance, condition monitoring
Sample Handler Positions	1	1	1	10	25	28	28	192	
Minimum Sample Volume	5 ml (as little as 3 ml with fast run tubes)	5 ml	5 ml	5 ml (as little as 3 ml with fast run tubes)	4–5 ml	8 ml (as little as 3 ml with fast run tubes)	8 ml (as little as 3 ml with fast run tubes)	10 ml	
Minimum Solvent Volume	15 ml	15 ml	15 ml	15 ml	8 ml	15 ml	15 ml	0	
Temp Range	40–100 °C 15–40 °C w/ cooling option	40–150 °C	-20 °C	40–100 °C 15–40 °C w/ cooling option	40–100 °C	40–150 °C down to 20 °C with bath options	40–100 °C 15–150 °C with bath options	40 °C or 100 °C	
Viscosity Range	<p>Standard tubes: 0.5–10,000 mm²/s (cSt) in 100-fold increments</p> <p>Fast-run tubes: 0.5–1,000 mm²/s (cSt) in 10-fold increments</p>	0.5–10,000 mm ² /s (cSt) in 100-fold increments	1–10 mm ² /s (cSt)	<p>Standard tubes: 0.5–6,000 mm²/s (cSt) in 100-fold increments</p> <p>Fast-run tubes: 0.5–1,000 mm²/s (cSt) in 10-fold increments</p>	<p>5–800 mm²/s (cSt) in 10-fold increments at 40 °C and 5–50 mm²/s (cSt) in 10-fold increments at 100 °C</p>	<p>Standard tubes: 0.5–10,000 mm²/s (cSt) in 100-fold increments</p> <p>Fast-run tubes: 0.5–1,000 mm²/s (cSt) in 10-fold increments</p>	<p>Standard tubes: 0.5–10,000 mm²/s (cSt) in 100-fold increments</p> <p>Fast-run tubes: 0.5–1,000 mm²/s (cSt) in 10-fold increments</p>	<p>5–50 mm²/s (cSt) at 100 °C 30–680 mm²/s (cSt) at 40 °C</p>	
Up Front Cost	\$\$	\$\$-\$\$\$	\$\$-\$\$\$	\$\$-\$\$\$	\$\$\$	\$\$\$	\$\$\$-\$\$\$\$	\$\$\$\$	

