

## Model 45 Automatic Programmable Viscometer (APV)

### Description

The Model 45 APV (Automatic Programmable Viscometer) allows for customized, pre-programmed test schedules and provides the oil and gas industry with a new standard for accurate and user friendly testing.

### Application

This Couette type coaxial viscometer measures the shear stress in the gap between an outer rotating cylinder (rotor) and an inner suspended bob.

The viscosity measurements are made by rotating the rotor at a known velocity and measuring the drag (torque) that is exerted on the bob. This measured torque value is then used to compute the viscosity in centipoise and dial units.

### Advantages

- Springless design improves accuracy and resolution
- Measurements over a broad range of viscosity (0 to 30 oz-in of torque)
- Bi-directional testing functionality
- 100% digital measuring technology
- Onboard Smart Screen Computer with Windows® 7 touch panel technology
- Certified factory calibration

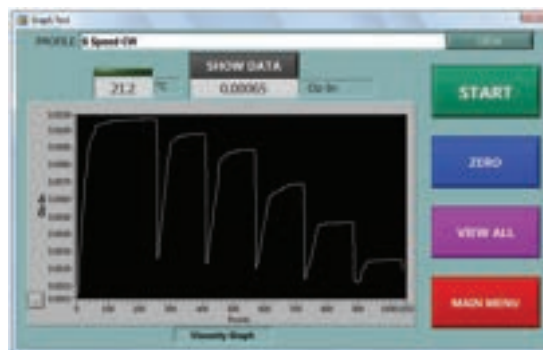


## Testing

Custom testing profiles can be created and saved on the unit; no external computer is required. As tests are performed, data will be graphed onscreen and saved into memory (exportable via USB).

The Model 45 APV has five pre-programmed sample test profiles. These profiles include testing for:

- Viscosity: combining speeds, run-ins, moves, and naps in a single test profile.
- Gel: designed to perform in accordance with the API procedure for measuring gel strength.
- PV/YP Measurement: designed to perform in accordance with the API procedure for measuring Plastic Viscosity and Yield Point of a test sample.
- Manual Mode: This test enables the user to select a speed, program a time, then observe the torque or dial units that are displayed as the test is performed.



## Performance Specifications

Attribute	Value
Speed Range	0.1 to 600 RPM
Speed Accuracy	+/- 0.001 RPM
Torque Accuracy	0.5%
Resolution	0.001 oz-in
Repeatability	+/- 1.0%

## Ordering Information

Part No. 102410859 Model 45 APV Automatic Programmable Viscometer

*Fann Instrument Company offers a complete line of equipment, materials, and supplies for analyzing various drilling fluids and oil well cements in accordance with API Specifications and API Recommended Practices.*