AUTOMATED COLD SHEAR RHEOMETER

- Correlates to ASTM D5293 and D2602
- Compact Design with Extra Small Bench Top Footprint
- Integral Cooling without ANY Alcohol
- · Integral PC and Touch Panel Screen
- · Small Sample Size 20 mL
- Self Cleaning
- Solvent Free Operation
- · Self Compensating Rotor and Stator
- Very Low Power Consumption

ACTAL	DOCCO DECCO	
ASTM	D2602, D5293	
IP	350	
DIN	51-377	

Model CS2 Cold Shear Rheometer is specifically designed to correlate to Cannon's line of CCS cold cranking simulators, particularly to CC-5. It correlates to ASTM D5293 and D2602.

The compact design of Model CS2 includes an integral PC running on Windows NT4, a touch screen, an integral 18 sample carousel auto sample loader, and integral cooling with direct refrigeration using no alcohol. The sample loader carousel accepts 100 mL sample bottles.

This integral construction has a very small bench top footprint, only 24 x 24 x 15 inches high (61 x 61 x 38 cm). No external connecting cables are needed thus eliminating the frequent problem of cable disconnection or tampering.

The test requires less than 20 mL of test sample, including that needed for flushing of instrument with the next sample to be tested. No methanol or other solvents are required for this cleaning processes. Once the samples are placed on the carousel and identified in the PC, no further operator involvement is required. Additional samples can be loaded on the carousel as the tested samples are removed while the unit is operating.

The unique geometry of Model CS2 allows the calibration procedure to monitor and self-compensate for wear of the rotor and stator. This is particularly important when metal contaminated used oils are being tested.

Model CS2 offers multiple measurement modes, such as measuring its flow curve (shear stress vs. shear rate). The computer can control this precision rheometer under conditions of constant shear, constant shear rate, or constant speed. Model CS2 has been successfully used with gear oils down to -55°C.

This self compensating rotor and stator feature allows the adjustment of the rheometer to any future changes in the specifications of the test method. Calibration is by means of industry standard calibration oils, but the unique design allows calibration with a single oil per temperature. It is also possible to calibrate the instrument with a SINGLE oil at a SINGLE temperature and still get data within better than the stated precision of D5293.



