



Characteristics

The ICAR Plus Rheometer is the successor to the ICAR Rheometer. This device is provided with a strong motor, personalized electronics and more comprehensive software. The main advantage of the ICAR Plus is its digital calibration process, allowing users to always have a ready to use system under any environment and working condition. ICAR Plus will always be calibrated by the user on-site and can be verified in the laboratory with the same silicone as its predecessor ICAR Rheometer.

ICAR Plus Software Capabilities

After every digital calibration, the software displays the uncertainty torque measurement value, which is typically less than 0.5%. ICAR Plus software displays the Torque vs Time function as the test is being performed during the stress growth or flow curve test. If the raw data of every test is saved, the stress growth and dynamic flow curve plots can always be displayed.

ICAR Plus Specs

- Minimum slump: The concrete has to have a slump greater than 75 mm, otherwise the concrete is too stiff for testing by the apparatus
- Nominal maximum size of aggregate: 32 mm for largest available container
- Vane rotation speed: 0.001 to 0.667 rev/s
- Motor type: Integrated Servo Motor
- Minimum Torque: 0.01Nm
- Peak Torque: 90Nm for not more than 2 seconds
- Continuous Maximum Torque: 32Nm
- Power Supply: Input of 100-240 VAC – 3.5A.
Output of 48V - 6.7A. IP67
- Digital Calibration can be performed by user anytime
- Performs static stress growth test and dynamic flow curve tests
- Software controls tests and computes static yield stress, dynamic yield stress, and plastic viscosity in fundamental units
- Test time: 1 minute
- Computer requirements: Windows 7 or higher. Processor I3 or higher
- Motor drive dimensions: 11 x 11 x 43 cm
- Motor console weigh: 7.5 kg
- Carrying Case dimensions: 67 x 52 x 28 cm
- Carrying Case weight: 20 kg, Including Motor Drive, Base Frame, Vane, Power Supply and Cables



RHM-4000 ICAR Plus Rheometer Kit



Item	Order #
Motor drive/torque meter unit	RHM-4001
Power cord for motor drive/torque meter unit	RHM-4002
Base plate for attaching motor drive/torque meter unit to container	RHM-3003
Container for 19 mm NMSA aggregate – standard (see below for other sizes)	RHM-3005
Four-blade vane for 19 mm NMSA aggregate Vane is 127 mm in height and diameter Overall length depends on NMSA (see below for other sizes)	RHM-3009
USB cable to connect motor drive/torque meter unit to computer	RHM-3012
Laptop computer with installed software	RHM-4013
Software on CD-ROM	RHM-4014
User manual	RHM-4015
Carrying case for laptop computer	RHM-4016
Carrying case for Rheometer and accessories. Container does not ship with case. Weight of case and Rheometer kit – 20 kg	RHM-4017
Silicone oil for verification of instrument (19 L)	RHM-4018