

# CALEVA MIXER TORQUE RHEOMETER



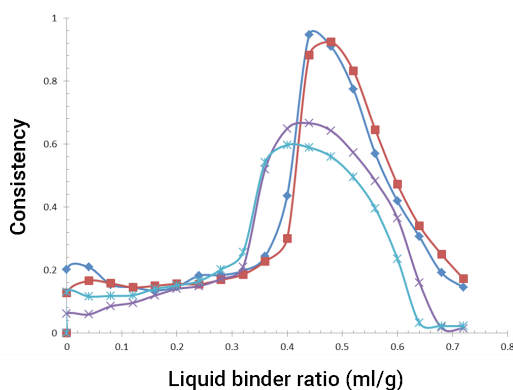
TECHNICAL SPECIFICATIONS

CHARACTERIZE YOUR WET MASS  
SPEED UP PRODUCT DEVELOPMENT  
FACILITATE QUALITY CONTROL

The Caleva Mixer Torque Rheometer with automatic binder addition pump and laptop with necessary software



An example of data collection from multiple addition trials with the same formulation processed under different temperature conditions



## CHARACTERIZE THE CONSISTENCY OF YOUR WET MASS

### The Units

**Base unit** containing two counter rotating mixing blades, rotating at different speeds, creating a torque which is measured on a load cell. The torque generated is related to the consistency of the material being mixed.

**Automatic binder unit** so that trials can proceed without operator intervention

**Laptop PC** included with required software

### Operational and data collection

#### Multiple addition (MA)

Multiple addition is used to determine an estimate for the optimum binder ratio for a formulation

#### Variable mix time (VMT)

Used to assess the cumulative effect of mix time and mix intensity on a sample

#### Consistency (C)

Direct measurement of small samples generally taken from a larger batch

#### Standard torque range from 0 to 5 Nm

**Data generated** can be retrieved as "csv" files for import to your PC/spreadsheet/database

### Other data

#### Weight

Approximately 35 kg

#### Cabinet

670 mm d x 400 mm w x 400 mm h.

Brushed 304 stainless steel

#### Space required

Space for a laptop computer is also required.

#### Product contact

Brushed 316L stainless steel and approved plastics

#### Batch Size

Generally 15 to 40 g (product and trial type dependant).

A reduced half size bowl is available for use with smaller samples

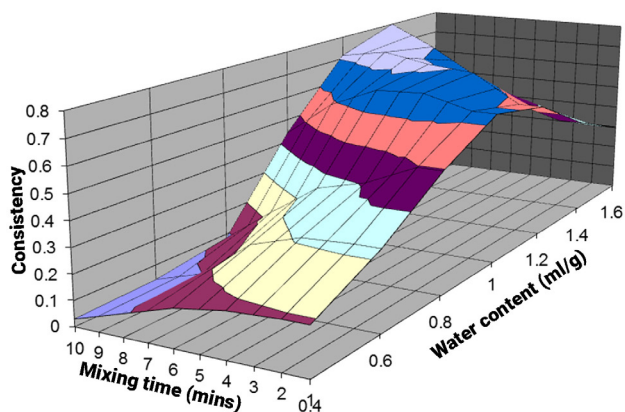
#### Power requirement

230V, 50Hz, 6.3A or 110V, 50Hz, 10A. 1 ph.

#### Primary shaft

Rotation speed from 10 rpm to 250 rpm

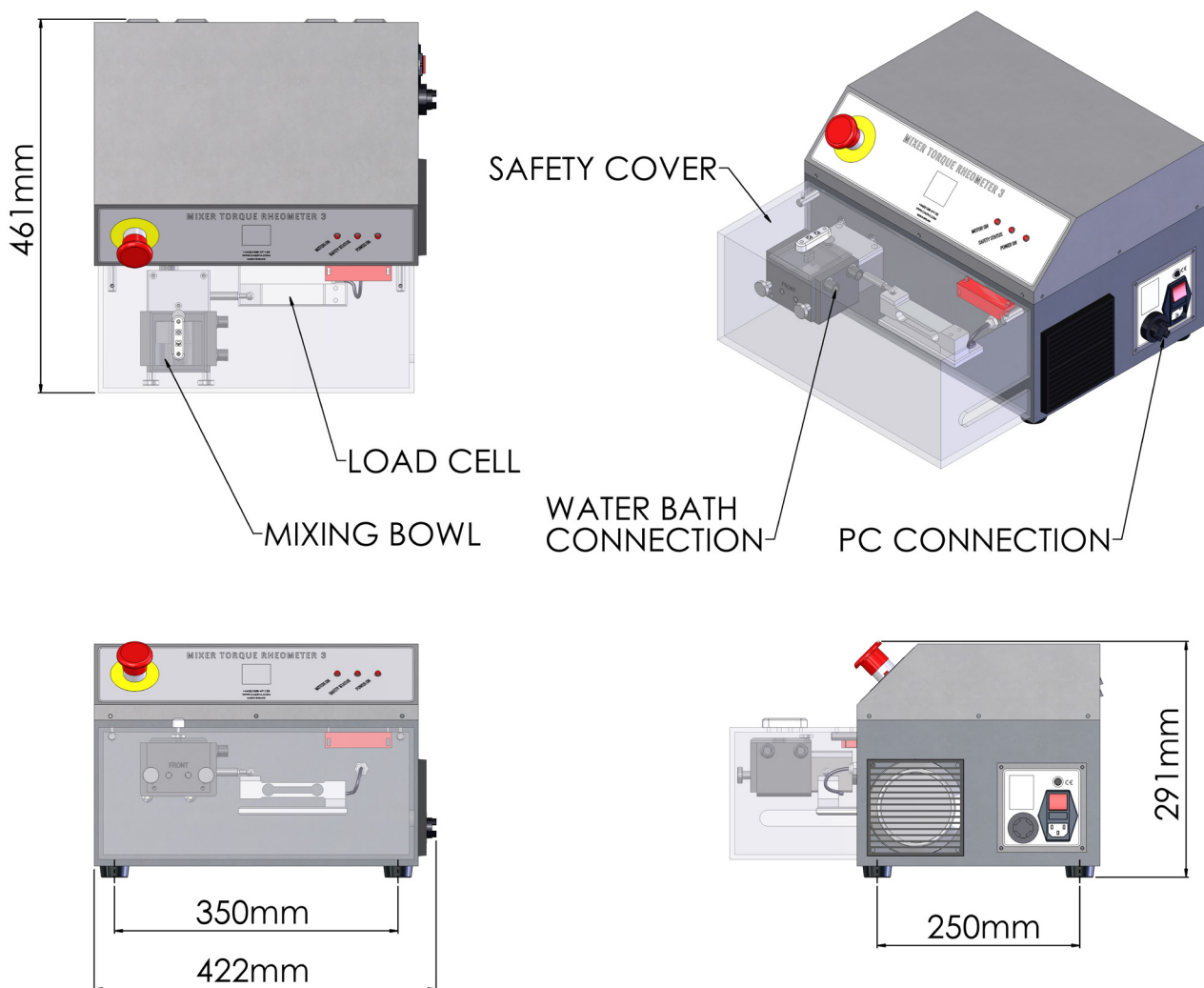
Once a series of experiments have been carried out at various binder ratios a three dimensional plot can be produced (as shown) giving an indication of the torque response of a formulation with respect to both binder ratio and mixing time.



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General arrangement diagram  
Base unit weight approximately 35 kg



## TALK TO US

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