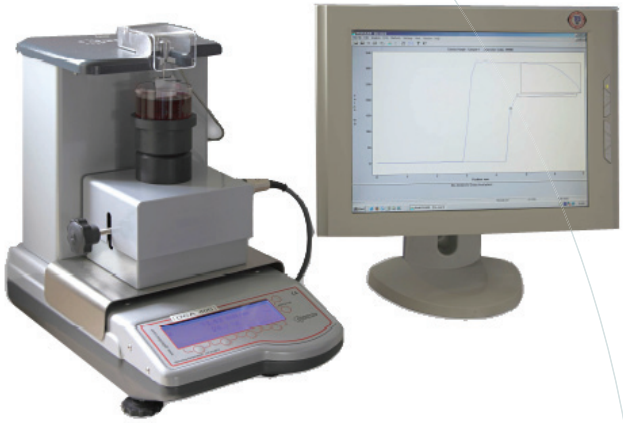
DCA400 : Digital Contact Angle

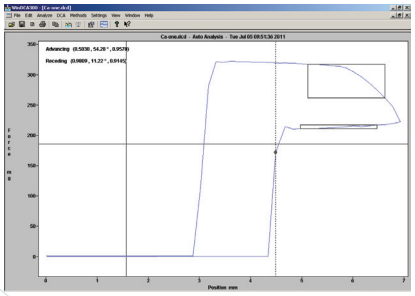


Technical specifications

- Power source: 230 V -15% +10% by external power supply, 50 Hz
- Power consumption: 10 VA

Digital tensiometer

- Display of surface tension value expressed in mN/m dyne/cm) measured with the Wilhelmy method
- Precision: ± 0.02 mN/m (dyne/cm)
- Capacity: 1-1000 mN/m resolution 0.01 mN/m
- Max capacity: 110 g
- Autocalibration with internal mass
- Contact angle 0-180 degrees



Automatic feature allow you analyze a dynamic hysteresis curve, complete with on-screen advancing, receding and zero depth of immersion results for contact angle or surface tension.

Equipment

- Glass plates (dimensions 24´24´0.15 mm)
- Suspended system for the arrangement of glass plate
- Glass container for liquid sample
- manual adjustable lab jack

Software with the following performances

a) contemporaneous display on PC:

- force changes during the measurements
- past time
- surface tension value

b) data recording (useful for other elaborations)

c) changing value of perimeter plate (if different from the standard)

d) selection of manual or automatic system for the end of measurement determination

- Automatic jack with programmable speed (from 21 to 328 mm/sec)
- Platinum Wilhelmy plate
- Platinum Du Nouy ring
- Floater calibrated in weight and in volume and double wall cylinder for relative density measurement:
  - range of measure for the density: 0.5 ÷ 2.25
  - readability: 0.00005 g/cm3
  - precision and reproducibility: ± 0.00005

  g/cm^3

- Specific container for sample thermostatation
- Special pan for metrological control
- Thermometric probe PT 100 1/3 DIN
  - Range of measure: 0-50 °C
  - Accuracy: 0.05 °
  - Readability: 0,1 °C