SEO Dynamic Contact Angle Systems

SEO DCA 200 series Analyzers

The SEO DCA series 200 analyzers offer a powerful, and versatile approach to comprehensive understanding of the complex interactions at liquid-liquid and liquid-solid surfaces. Whether you need to improve adhesion, apply a coating, or modify a surface, a SEO DCA system provides the solutions for;

· Dynamic Contact Angle of general solid materials.
· Dynamic Contact Angle of a powders, Washburn Method.
· Surface / Interfacial Tension
· Surface energies, wettability, cleanliness and topographical homogeneity of solid sheets, films, and fibers.
· Dry materials absorption, wicking rate
· Surfactants analysis with the automatic / manual Critical Micelle Concentration, CMC, software.

SEO *Quantum-S* Software

SEO Quantum-S is windows based software which accomplishes all DCA functions with ease. Using Wilhelmy Plate and DuNöuy ring methods.

· Dynamic Contact Angle Measurement
· Surface tension Measurement to ASTM / DIN / ISO
· Interfacial Measurement
· Surface energies Measurement
· Surfactant studies (Critical Micelle Concentration, CMC) with optional accessory

SEO DCA Application

· Film / Fibers
· Powders
· Composites
· Adhesives
· Bio-Polymers
· Inks
· Paints
· Oil recovery
· Shampoos
· Cosmetics
· Detergents
· Pharmaceuticals
· Eye-Care products
· Moisture Barriers
· Semiconductor & Electronics
· LCD, OLED display

SEO DCA 200
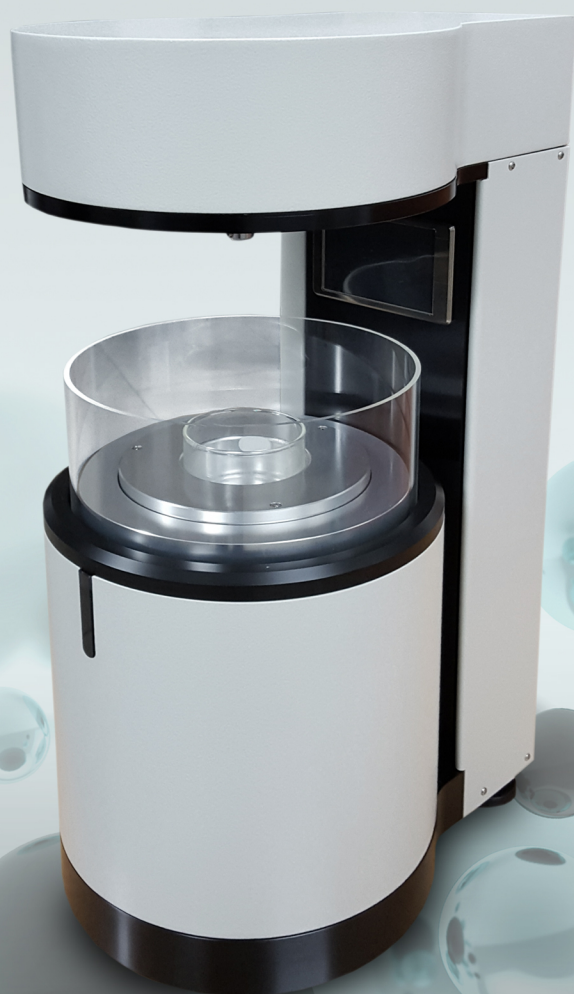
www.s-eo.com

SEO Quantum-S offers the best flexibility

The Quantum-S software is designed for all SEO DCA systems operated under the Quantum-S software. The DCA software allows method storage, development, real time, buoyancy correction and a complete range of analyses, including an automatic run mode. The SEO DCA software expands your analysis capabilities even further by offering like these;

· Critical Surface Tension - Zisman Plot.
· Surface Energies. (Geometric ,Harmonic, Lewis Acid/Base)
· Washburn Method.
· Density Measurement.
· Liquid Surface Tension components.
· Wicking rate measurement.
· Data can be exported as an Excel file, offering the highest flexibility.
· Data acquisition and data analysis can be performed automatically and / or manually according to method and setting.
· User can test CMC doser and stirrer and temperature accessory separately.

DuNöuy Ring   Wilhelmy Plate
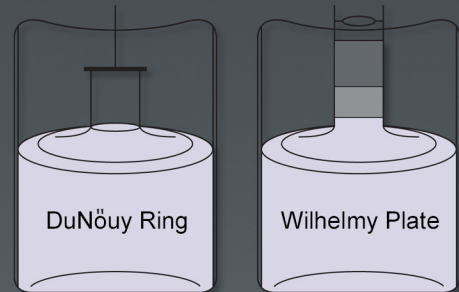
Technical Data

| Model	DCA 200S	DCA 200A
Specifications		
Contact angle range	1- 180	O
Resolution (ug)	100 ug	O
Surface Tension Range (mN / m)	1-1000	O
Resolution (mN / m)	0.01	O
Max.Capacity (gram)	250	O
Measurement		
Dynamic Contact angle	O	O
Surface Tension (Wilhelmy / DuNöuy Ring)	O	O
Interfacial Tension	O	O
Surface free Energy	O	O
Powder Wettability (Washbun method)	Option	O
Zisman Plot	O	O
Density	Option	O
Wicking rate	O	O
CMC (Critical Micelle Concentration)	Option (Auto / Manual)	Option (Auto / Manual)
Fiber measurement	≥ 100 μm	≥ 100 μm
Data Output (Excell)	O	O
Calibration (automatic)	O	O
Measuring Unit		
Sample stage range	110mm	O
Speed	1mm / min ~20mm / min	O
Temperature Control		
Internal circulation Chamber	O	O
Tem. range	-35˚C to 150˚C	O
Stir	Option	O
Heat / Cool Water bath	Option	Option
Others		
Size (mm / inch)	320 (L) x 230 (D)x 560 (H)	O
	13 (L) x 9 (D) x 22 (H)	O
Weight (kg / lbs)	23 kg / 50 lbs	O
Electric Power	110V / 220V / 50Hz / 60Hz	O

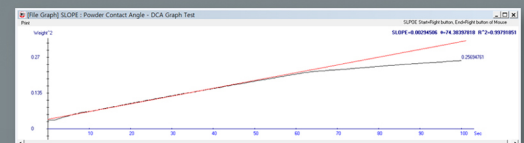Specifications are subject to change without notice
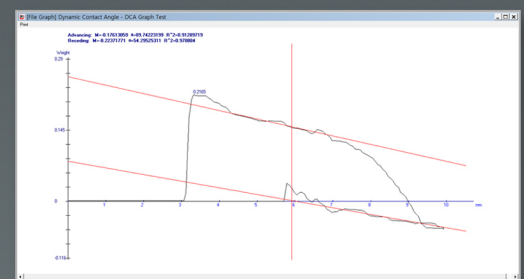
Dynamic Contact Angle (Advancing / Receding)
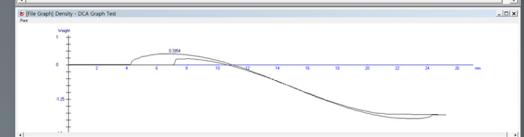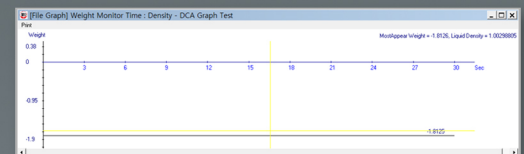
Two separate display areas show acquisition data and analysis data
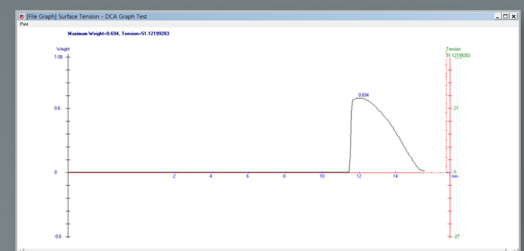
Surface Tension by DuNöuy Ring (ASTM)

Washbun Method for powder measurement

SEO
Surface Electro Optics