

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 DuNouy 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

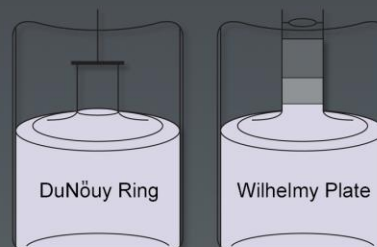


www.s-eo.com

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.
- Adsorption 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.



Technical Data ● : Available ○ : Optional

Model	DCA 200S (Standard)	DCA 200A (All-in-one)
Basis Specifications		
Contact angle range (0-180)	●	●
Resolution (100 ug)	●	●
Surface Tension Measurement range (1-2000 mN / m)	●	●
Resolution (0.01 mN / m)	●	●
Max.Load (250 gram)	●	●

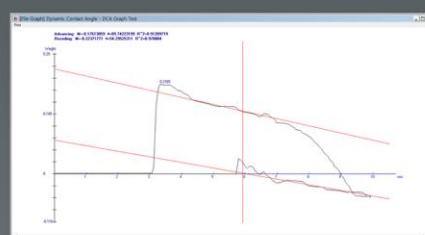
Measurement	DCA 200S	DCA 200A
Dynamic Contact angle	●	●
Surface Tension (Wilhelmy / DuNouy Ring)	●	●
Interfacial Tension	●	●
Surface Free energy	●	●
Zisman Plot	●	●
Data Export to Excel	●	●
Calibration (automatic)	●	●
Adsorption	●	●
Density (0.001~2.2 g/cm ³)	○	●
Fiber measurement (≥ 100 μm)	○	●
Powder Wettability / Washburn method	○	●
CMC / Critical Micelle Concentration (Option - Auto / Manual)	○	○

Measuring Assistance Unit	DCA 200S	DCA 200A
Sample stage Travel Distance	110mm	110mm
Speed	0.01~500 mm/min	0.01~500 mm/min
Stirrer	○	●

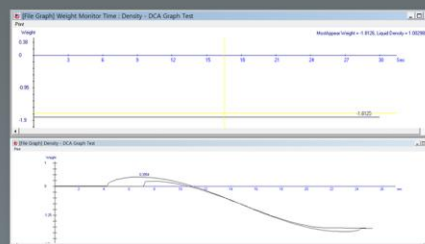
Temperature Control	DCA 200S	DCA 200A
Internal circulation Chamber	●	●
Max control Temp. range (-35 °C to 150 °C)	●	●
Heat / Cool Water bath	○	○

Others
Size - 320 (L) x 230 (D) x 560 (H) mm - 13 (L) x 9 (D) x 22 (H) inch
Weight (23 kg / 50 lbs)
Electric Power (110V / 220V / 50Hz / 60Hz)

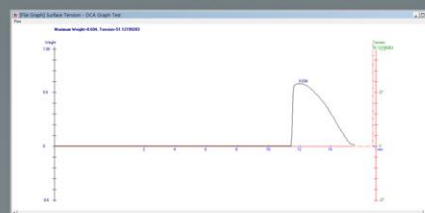
Specifications are subject to change without notice



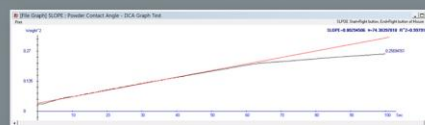
Dynamic Contact Angle (Advancing / Receding)



Two separate display areas show acquisition data and analysis data



Surface Tension by DuNouy Ring (ASTM)



Washburn Method for powder measurement



www.s-eo.com

SEO (Surface Electro Optics)

#946, Kosekdong, Suwon City, Kyunggido, 441-813, Korea

Phone : +82.31.298.9561 Fax : +82.31.298.9565 E-mail : seo@s-eo.com