

# Dynamic contact angle measurement, Powder wettability analysis

## DyneMaster DY-700/500

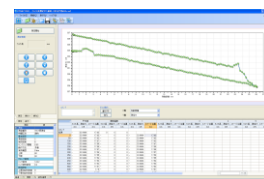
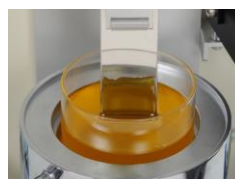


**Surface Tensiometer DY-700**

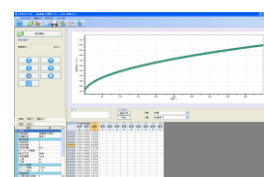


The DY-500 and DY-700 feature the same body design

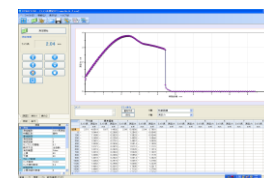
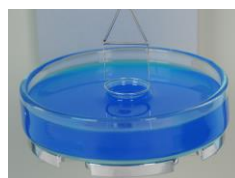
High-end surface tensiometers for the measurement of dynamic contact angle and powder contact angle, in addition to surface tension and interfacial tension, lamella length, liquid and solid density, evaporation rate and sedimentation behavior.



**Dynamic Contact Angle Measurement**



**Powder Contact Angle Measurement**



**Lamella Length Measurement**

### Features:

- ◆ One-click fully automated operation
- ◆ Jacket-type sample stage with built-in stirrer function
- ◆ Built-in temperature sensor

### Measuring methods:

- ◆ Surface/interfacial tension using the plate and ring method
- ◆ Dynamic contact angle of solids using the plate method
- ◆ Powder contact angle using the Washburn method
- ◆ Lamella length using the ring method
- ◆ Liquid and solid density
- ◆ Sedimentation behavior
- ◆ Evaporation rate

### Typical applications:

- ◆ **Dynamic contact angle:** Wetting and adhesion properties of coatings
- ◆ **Powder contact angle:** Wetting properties of powders, inks and paints
- ◆ **Lamella length:** Foaming stability of coating agents

### Specifications:

	DY-700	DY-500
Measurement methods	<ul style="list-style-type: none"> <li>• Surface/interfacial tension</li> <li>• Dynamic contact angle</li> <li>• Powder contact angle &amp; wetting speed</li> <li>• Lamella length</li> <li>• Liquid and solid density</li> <li>• Sedimentation behavior</li> <li>• Evaporation rate</li> </ul>	<ul style="list-style-type: none"> <li>• Surface/interfacial tension</li> <li>• Powder contact angle &amp; wetting speed</li> <li>• Lamella length</li> <li>• Liquid and solid density</li> <li>• Sedimentation behavior</li> <li>• Evaporation rate</li> </ul>
Measurement range of surface tension	0~100 mN/m	
Measurement accuracy*	0.02 mN/m	0.2 mN/m
Calibration method	By built-in calibration system	By external calibration weight
Resolution	0.01 mN/m	
Stage speed and stroke	0.002~50 mm/s, 50mm	
Optional measurement probes	Platinum (Wilhelmy) plate, Platinum (Du Noüy) ring	
Optional measurement kits	Dynamic contact angle, Powder contact angle, Sedimentation behavior, Liquid density, Solid density, Evaporation rate	
Measurement temperature	Ambient~150°C (Heater type), 10~70°C (Jacket type)	
External dimensions	295(W) × 415(D) × 452(H)mm	295(W) × 415(D) × 452(H)mm
Weight	About 23kg	About 20kg
Electric power	AC100-240~50/60Hz	

\*standard deviation of repeatability

The specifications are subject to change without notice.

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