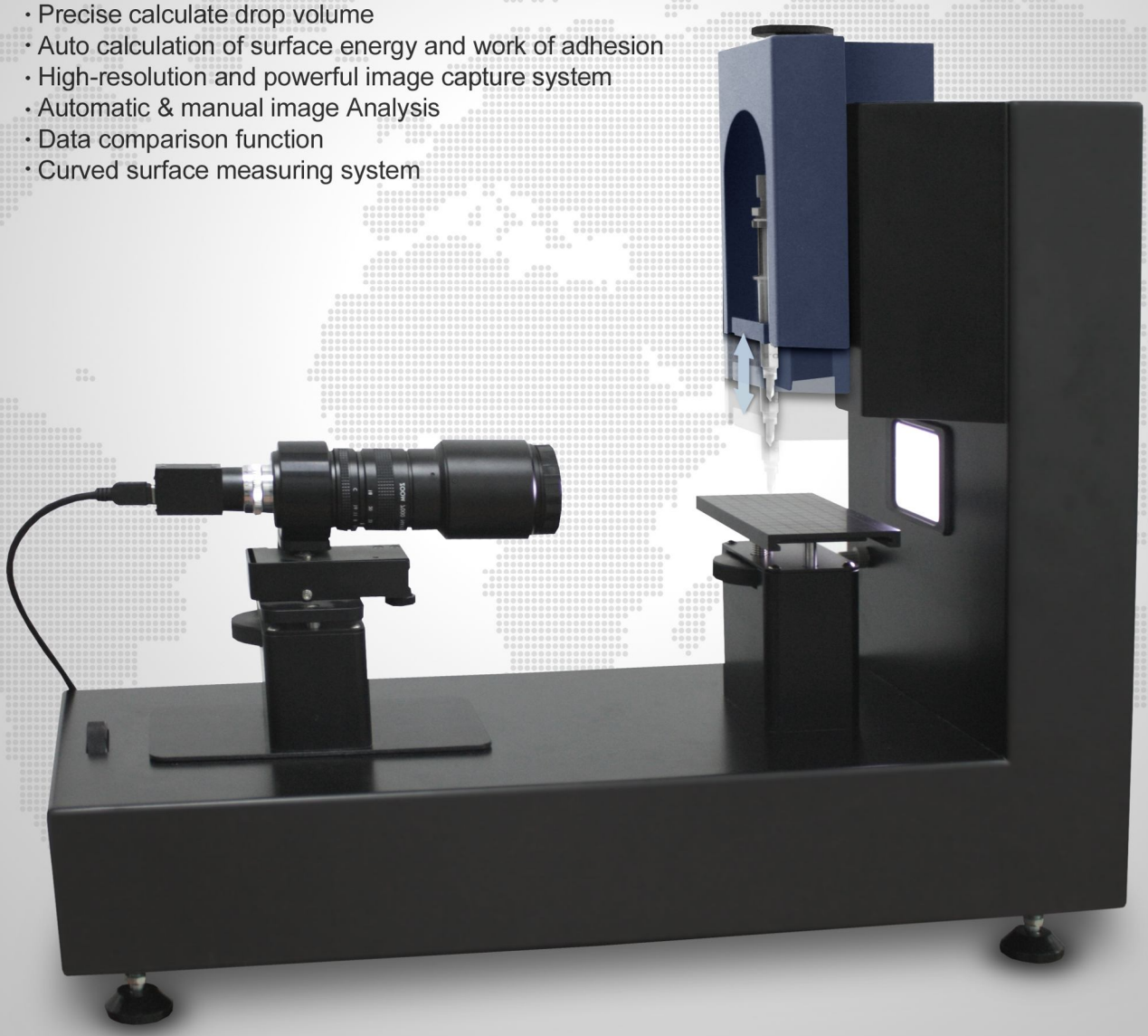
Contact Angle Analyzer

Phoenix 300 Touch & Plus/Touch

The Phoenix series is designed to offer the flexibility required for Q.A, R&D and engineering process development.
The Phoenix series has a specially designed optical system for reducing the light scattering and is mounted with a camera easily adjusted in all-directions.The fluid is dispensed from a manually controlled syringe system or semi-auto / automatically by embeded a stepping motor system. The position of the sample stage can be precisely adjusted along the X-, Y-, Z-axis for fine image analysis.

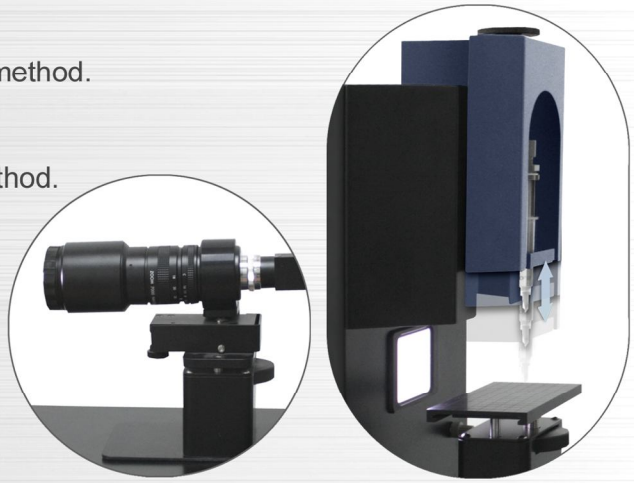
Features

- Head module up and down automatically
- Data checking instantly without open analysis window by preview result function
- Automatically drop volume control by software
- Smart capture for super hydrophilic material
- Sessile drop method and automated drop to touch-off
- Automatic and rapid sample analysis and high-speed dynamic image capture
- Improved precision and reproducibility by the elimination of operator error
- Available to connect to Notebook or Desktop PC via USB port
- Precise calculate drop volume
- Auto calculation of surface energy and work of adhesion
- High-resolution and powerful image capture system
- Automatic & manual image Analysis
- Data comparison function
- Curved surface measuring system



Capabilities

- Data checking instantly without open analysis window by preview result function.
- Precise calculate drop volume.
- Position memory function.
- Static / dynamic contact angles.
- Advancing and receding contact angle by captive method.
- Sequence image captures by time basis.
- Surface energy.
- Sessile drop / surface tension by pendent drop method.
- Real time contact angle display.
- Drop volume adjust per 1 microliter.
- Smart capture for hydrophilic material.
- Data comparison function.
- Curved surface measuring system.

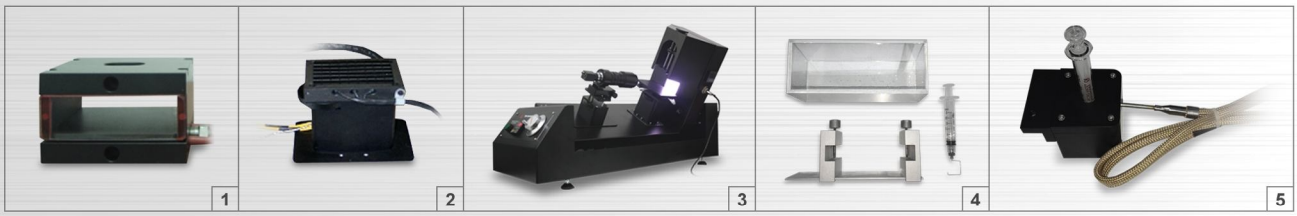


Typical Application

- Semiconductor applications.
- Detection of organic contamination on PCB and electronic components.
- Evaluation of cleanliness / treatment / coating processing.
- Hydrophobicity and hydrophilicity of solid surfaces.
- Biological application such as the detection and characterization of proteins.
- Adsorption / wettability of powder and pharmacy.
- Analysis of plasma treatments to increase the wettability on polymers surfaces.

Options

① Thermal chamber (RT to 250˚C)
② Thermal pad (RT to 250˚C)
③ Entire tilting stage for tilt method
④ Captive bubble method kit
⑤ Syringe heater



Technical Data

· Model	Phoenix 300 Touch	Phoenix 300 Touch / Plus
· Max.Sample size (mm)	200 (D) x 70 (H) x ∞ (L)	300 x 300 (mm) 12' wafer
· Sample stage	X, Y Axis	X, Y Axis turning table
· Dimension (L x W x H, in / mm)	24.4 x 10.2 x 19.7 (620 x 260 x 500 mm)	33.4 x 11.8 x 19.7 (850 x 300 x 500 mm)
· Head Control	Z Axis	
· Lens	High resolution Zoom & focusing	
· Max.Measuring speed	70 / 84 frames / sec	
· Drop Control	Precisely adjust drop volume per 1micro liter by software essile drop method and touch to surface using in parallel	
· Contact Angle range	0˚~180˚ deg	
· Accuracy	± 0.1˚ deg (standard Calibration)	
· Connecting type	1394 fireware or USB	
· Operating system	Windows XP, Window 7, Window 8	
· Power	110 / 220 volt, 50 / 60Hz	

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