

# **Application Brochure**

## Industrial Surface energy Measuring instrument

**LOW PRICE**  
**PRECISE**  
**EASY TO USE**  
**RUGGED**

This replaces Expensive R&D instruments on the Market to do the specific task of industrial adhesion measurements

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we sell performance"



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Similar to above picture

### Introduction:

Surface energy quantitation is a powerful tool in determining the behavior at the solid liquid interface.

### Method:

Using a dual liquid probe, the surface is characterized for its polar and dispersive component. The polar component characterizes the physical forces while the dispersive characterizes the chemical forces.

### Benefit:

The operator will know if the liquid surface interface will perform for his application.

### Specifications

- USB camera with lens assembly
- Variable height stand
- Illuminator
- Semi automatic curve fitting algorithm
- Price: \$ 5,999.00 CAN

### Options

- Surface tension by pendant drop and Automated contact angle analysis software  
Price: \$ 2,750.00 CAN
- Upgrade to Variable x-y-z table  
Price: \$ 650.00 CAN
- Syringe holder above sample  
Price: \$ 400.00

## Why is surface energy important?

The polar component of a surface will manifest itself differently with different liquids.

For example: A liquid such as a dyne pen solution could show the same contact angle on two different surfaces.

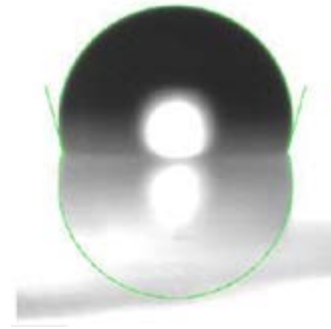
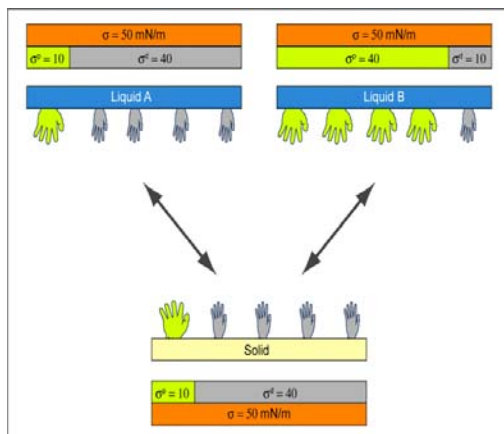
But the liquid used would show different contact angles on the same surface.

Surface energy measurement properly characterizes the two dimensional nature of solid surfaces.

Example:

Sample	Surface energy	Dispersive	Polar
1	50	10	40
2	50	40	10

Both have the same surface energy but sample 1 is more active chemically than sample 2



LB ADSA method above and Drop snake method below



Pendant drop surface tension calculation below

