

Measurement of contact angle with Supra – Hydrophilic Surfaces

CAPTIVE BUBBLE



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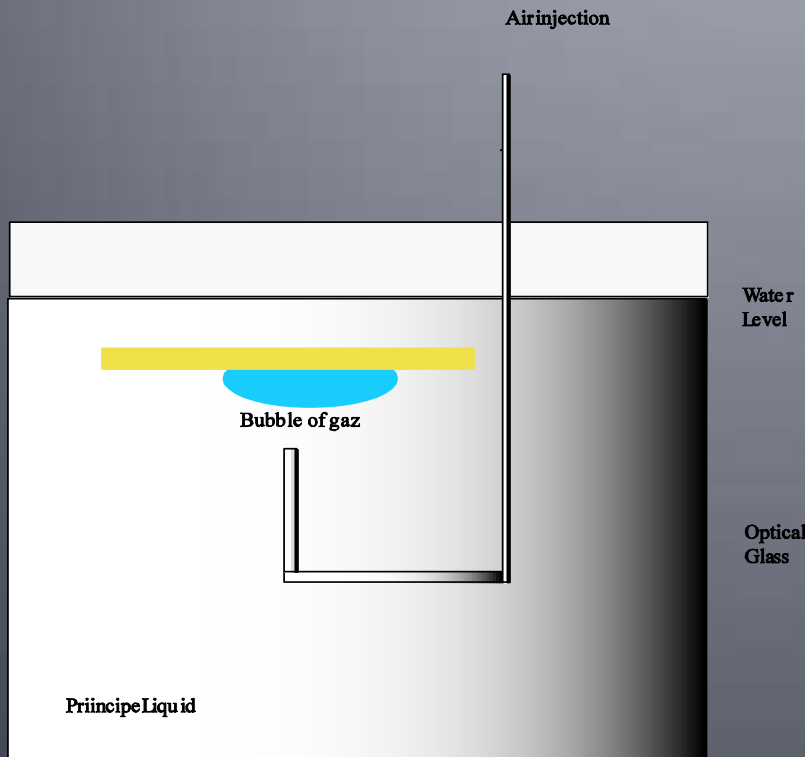
Principle of Captive Bubble

Put a droplet of air (surface is aerophobe) on a surface.
We measure the angle between the surface and the bubble of air

The contact angle of a droplet on a surface is deducted from this angle by the following equation: $180^\circ - 110^\circ (\text{Angle measured}) = 70^\circ$

In the old days.... Method.....

Captive Bubble



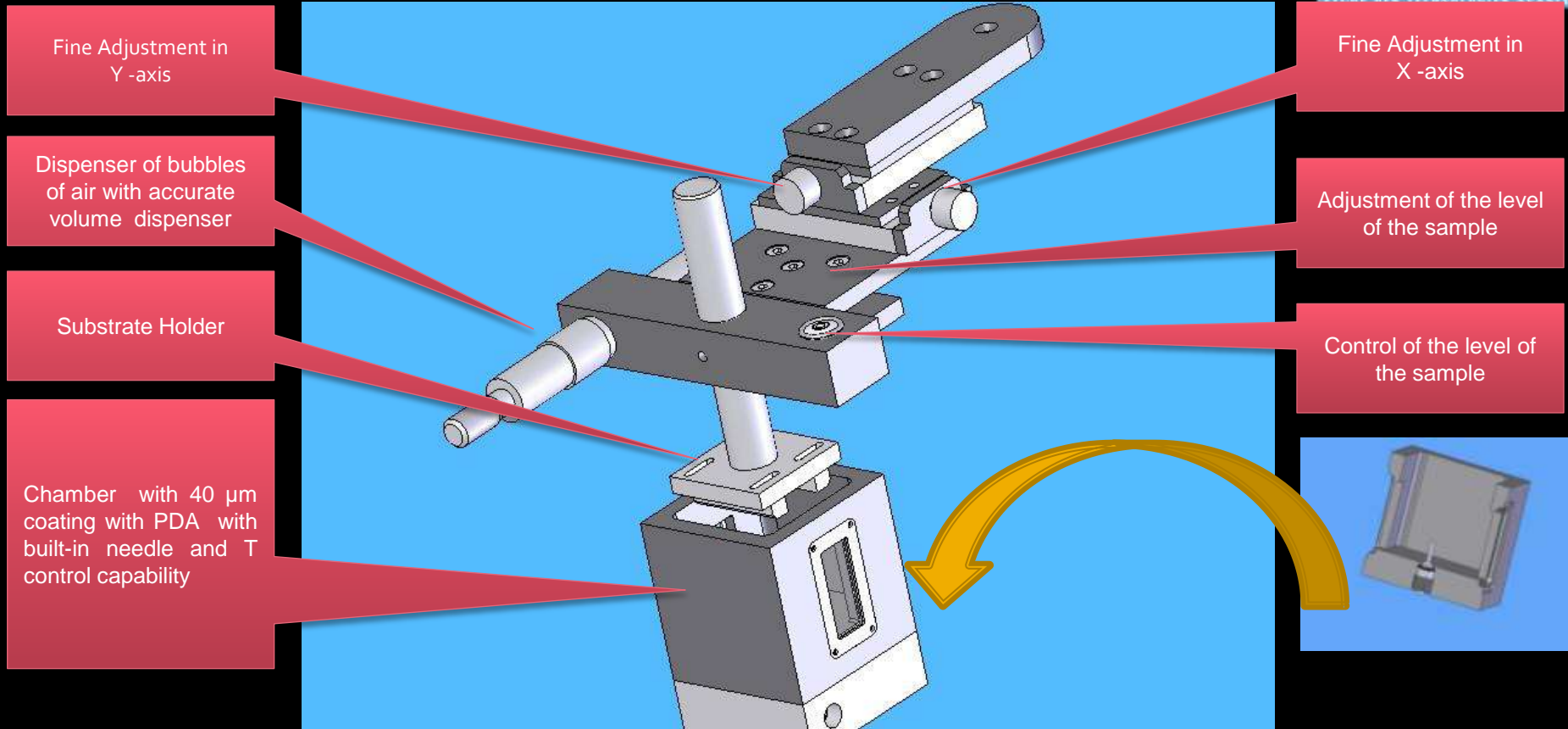
Main disadvantages:

Very very difficult to manipulate

Deposition of the bubble very tough

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Principle of the captive bubble kit developed by GBX



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DIGIDROP

Digitizer of Droplets

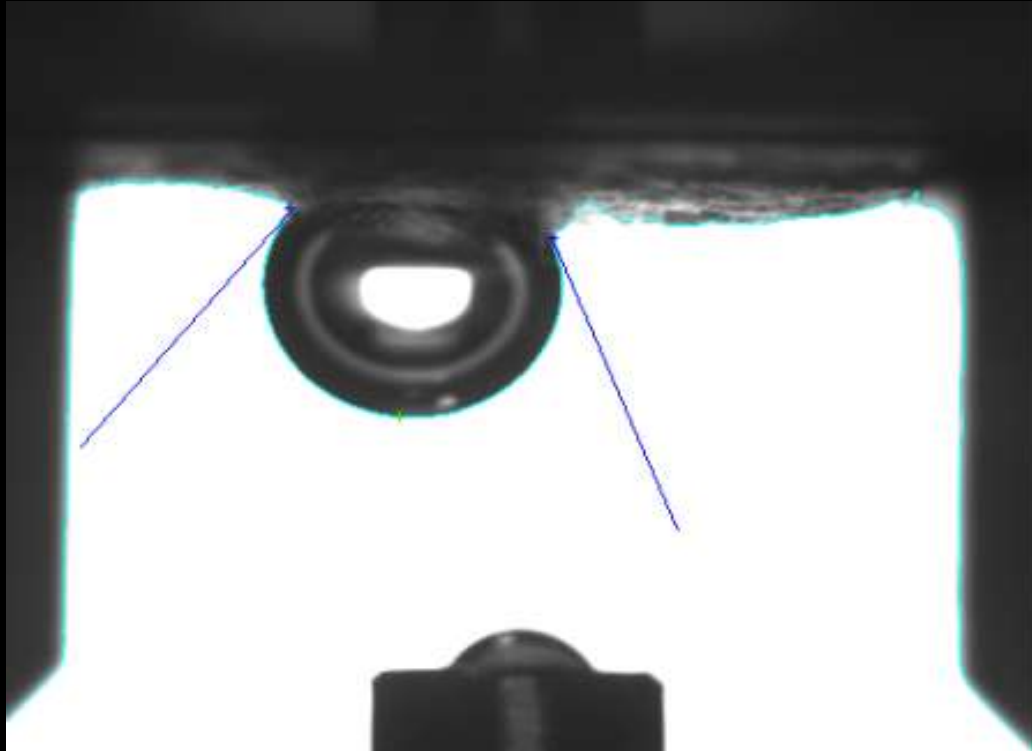


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Liquid: Water
Surface: BlowMelt

The software Visiodrop is supplied with a algorithm to analyse very easily and automatically the captive bubble angle.

The contact angle of a droplet on a surface is deducted from this angle by the following equation: $180^\circ - 110^\circ$ (Angle measured) = 70°

The surface here was coated with Polyethylen (complimentary contact angle)