

Bubble Pressure Tensiometer BPT Mobile



Mobile quality control for cleaning and coating baths

Industrial quality assurance is about reliability, speed, and ease of use. When it comes to regular checks of the cleaner or wetting agent content in a bath, our BPT Mobile Bubble Pressure Tensiometer is prepared for these demands.

Immerse – click – read out: Capture the surfactant content of your bath within seconds using surface tension with the BPT Mobile. The quality inspector using it knows immediately whether the bath is okay thanks to an ad-hoc evaluation. Moreover, for proactive adjustment of the bath, the BPT Mobile shows how the surfactant content decreases over time. With the intuitive touch display, which speaks seven languages, working with the BPT Mobile is almost like doing quality tests with a smartphone.

Tasks and applications

Checking the content of cleaner or wetting agent in a bath is an important QC task in many industrial processes:

- Cleaning as a preparation step before coating or bonding
- Electroplating
- Coating of solar cells
- Etching, e.g. for circuit boards

Measuring methods and options

- Bubble Pressure method: SFT is measured using the internal pressure of a bubble at an immersed capillary
- Monitoring at a single surface age with evaluation based on predefined limits
- Determination of surfactant concentration based on SFT
- Continuous measurement of SFT while changing the concentration
- Determination of the SFT dependent on surface age between 10 and 30 000 ms
- Temperature measurement and documentation

Quality at a touch

With the intuitive touch display, which speaks seven languages, working with the BPT Mobile is almost like doing quality tests with a smartphone. Thanks to the large display, it is easy to tap the functions error-free – even while wearing lab gloves. Quality control is user independent due to programmed measurement templates as well as the instrument's insensitivity to changing immersion depths.



The touch display responds reliably even when using gloves.



The instrument works independently from the immersion depth.

Don't bother with subsequent cleaning

For high sample throughput in QC, we have replaced high-maintenance permanent capillaries that are customary for the bubble pressure technique with disposable ones. Inserting and ejecting them is a matter of seconds, cleaning them a matter of the past. The temperature sensor, which is read for each measured value, can also be quickly removed when testing soiling or corrosive solutions.

Specifications

Pressure measurement

Maximum pressure 1250 Pa

Temperature measurement

Range 0 to 100 °C

Surface tension

Surface tension range 10 to 100 mN/m

Resolution 0.1 mN/m

Surface age range 10 to 30 000 ms

Touch display

Integrated color IPS display 480 × 854 px, size 5"

Power supply

Battery up to 10 h operating time

Dimensions

Size 85 mm × 55 mm (W × D)

Height 220 mm

Weight 600 g