

# PocketDyne Bubble Pressure Tensiometer



- The first truly Hand Held tensiometer to measure dynamic surface tension independent of immersion depth
- Mobile use through battery operation
- Uses disposable capillaries to minimize contamination and cleaning
- Will display either true surface age or bubble frequency
- Automatically stores data
- Digital output for computer
- Very easy calibration and adjustment



## **DYNAMIC SURFACE TENSION WITH THE PocketDyne**

use.

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All data received from the measurements

A measurement can be started right

away, no introduction, no training and

no selection of parameters necessary. On

top of that, our high performance

accumulators allow for a day-long mobile

Extremely precise and inexpensive

disposable capillaries made from inert

speciality polymers minimize the effort of

calibration and guarantee a high degree

of measurement accuracy. You avoid the

time-consuming and incomplete cleaning

often required when using other

instruments. Also, the depth of immersion of the capillary does no longer

affect the measurement results- thanks to

the smart use of modern technology for

are stored automatically.

### **Applications:**

- Monitoring of the surface tension of surfactant or wetting agent containing baths in washing, detergency, degreasing and electroplating
- Development of formulations with surface-active substances .
- Mobile use in production or field service

The novel tensiometer PocketDyne is characterized by its high flexibility and mobility in use. You can measure under any conditions possible and virtually in any beaker, container or tank.

The ease of use is underlined by its robustness and ergonomic design following the long tradition of KRÜSS in this direction. The PocketDyne can be operated using one hand only. The three large function keys are easily reached by the thumb of your hand.

An ergonomic study lead to a design where the upper part is bent slightly ensuring a perfect readability of the display in any measuring situation you may encounter. This is also facilitated by the large and high-contrast display.

# **TECHNICAL DATA**

Measuring range: Resolution: Adjustable surface age: Temperature range: Resolution: Power consumption: Battary power: Input voltage: Input frequency: Temperature measurement: -10 to  $+100^{\circ}$ C;  $\pm 0.1^{\circ}$ C Data output: Display: Dimensions: Weight:

 $\pm 0.1 \text{ mN/m}$ 15-1500ms nominal 0 - 100°C 0.1 K max. 300mW 12 hours 85 - 264 VAC 40 - 60 Hz serial, RS232C and USB (optional) graphic, 64X132 PIXEL 62 x 260 x 35 mm (WxHxD) 330 g

10 - 199 mN/m

Technical specifications are subject to change without notice

- Checking surface tension as a quality assurance criterion for inks, rinses and other critical dynamic products
- Determining kinetics of solubility, diffusion and adsorption . of surface-active substances

which KRÜSS has a patent pending.

For saving measuring data – the Dynamic Surface Tension – KRÜSS has equipped the device with a flexible memory, which saves the data even when the instrument is switched off. With this it is possible to transfer the measured data to a computer afterwards – particulary simple by use of the USB interface.

The optional software module of the well-known tensiometer software LabDesk from KRÜSS turns the mobile PocketDyne into a completely computer controlled laboratory measuring instrument with graphic data output in real time. The equipment adapts to your requirements and you are not dependent on manual operation.

# **MEASURING METHOD**

Dynamic bubble pressure method, absolute determination of the pressure difference of each bubble, the true surface age or the bubble frequency

# **BASIC INSTRUMENT / ACCESSORIES**

#### **BP2100 PocketDyne**

Bubble Pressure Tensiometer, to measure the dynamic surface tension

#### PA2110 Stand,

to support the PocketDyne for high surface age measurement

SH2110, SH2120, SH2130 Precision Capillaries, consisting of PTFE (Sets of 10, 50, 100 pieces)

#### SW2110 Data-Logger-Software

#### SW2120 LabDesk<sup>™</sup> Bubble-Pressure Module



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