

# **PocketDyne**

# **Bubble Pressure Tensiometer**





- 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

- 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

- 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

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.

All data received from the measurements are stored automatically.

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 use.

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

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.

#### Technical data

 $\begin{array}{ll} \mbox{Measuring range:} & \mbox{10 - 199 mN/m} \\ \mbox{Resolution:} & \mbox{\pm 0.1 mN/m} \end{array}$ 

Adjustable surface age: 15-1500 ms nominal

Temperature range: 0 - 100 °C
Resolution: 0.1 K
Power consumption: max. 300 mW
Battery power: 12 hours
Input voltage: 85 - 264 VAC
Input frequency: 40 - 60 Hz

Temperature measurement: -10 to +100 °C;  $\pm$ 0.1 °C Data output: serial, RS232C and USB (optional)

Display: graphic, 64 x 132 pixel
Dimensions: 62 x 260 x 35 mm (WxHxD)

Weight: 330 g

### 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 Precision Capillaries, consisting of PTFE

(Sets of 10 pieces)

SH2120 Precision Capillaries, consisting of PTFE

(Sets of 50 pieces)

SH2130 Precision Capillaries, consisting of PTFE

(Sets of 100 pieces)

SW2110 Data-Logger-Software

SW2120 LabDesk™ Bubble-Pressure Module

We reserve the right to make technical alterations



KRÜSS GmbH Wissenschaftliche Laborgeräte Borsteler Chaussee 85-99a D-22453 Hamburg

Tel: +49 - 40 - 51 44 01 - 0 Fax: +49 - 40 - 51 44 01 - 98 E-Mail: info@kruss.de KRÜSS GmbH 38/40 Avenue Jean Jaurès F-91120 Palaiseau

Tel: +33 - 1 - 60 14 94 94 Fax: +33 - 1 - 60 14 95 48 E-Mail: info@kruss.fr KRÜSS USA 1020 Crews Road, Suite K Matthews, NC 28105

Tel: +1 - 704 - 847 8933 Fax: +1 - 704 - 847 9416 E-Mail: info@kruss-usa.com