SITA Lab Solutions

NEW

SITA FoamTester

Analysing foam parameters
Controlling surfactant effects

- ✓ Innovative optical measuring methods
- ✓ Fully-automated foam analysis
- ✓ Precise reproducible foaming
- ✓ Measuring foam and liquid volume
- ✓ Analysing foam structure
- ✓ Recording drainage

The SITA FoamTester analyses the characteristics of surfactant-containing liquids easy, fast and precise with automated measuring sequences. The measuring device uses innovative optical measuring methods to determine foam characteristics such as foam volume, stability, drainage as well as foam structure.

- Fast contact-free and high-resolution optical scan of the foam surface with structured light
- Reliable and continuous detection of the foam-liquid interface even with opaque liquids
- Fast and high-resolution measurement of the foam structure for the entire foam level, analysis of the different bubble sizes and other parameters
- Fully-automated measuring process including sample conditioning and cleaning
- Individually programmable sequences for generating and analysing foam
- Reproducible foam generation with reliable SITA stirring method and flexible test parameters
- Individually programmable sequences for generating and analysing foam as well as easy operation with pre-set or customised experiments

The foam testing system consists of a removable measuring vessel with stirring unit, an integrated sample reservoir with magnetic stirrer, a cleaning system with external water source, an automatic optical measuring system and a touch display for operation directly at the device as well as the software SITA-FoamLab.

Applications

Cosmetics, cleaning agents, inks, paints and coatings, cooling lubricants, pharmacy, plastics manufacturing, paper manufacturing, textile chemistry, beverage production

Technical data

Foaming of the sample

Recommended sample volume	200 … 500 ml
Usable measuring vessel volume	1,500 ml (incl. foam)
Capacity of storage vessel	2,000 ml
Sample tempering of measuring and storage vessel	0 … 60°C optional thermostat
Stirring speed	0 … 2,000 U/min (bidirectional)
Adjustable stirring programs	Speed, duration, direction, acceleration

Analysis of foam structure

Evaluation area	height 130 mm width 50 mm
Resolution	3,200 dpi
Results	bubble number and size distribution, other characteristic values

in standard measuring vessel with SITA-FoamLab Expert

Measurment of foam volume

Foam volume	0 ... 1,500 ml; resolution 1 ml
Liquid volume & drainage	0 ... 500 ml; resolution 1 ml

General data

Rinse connection	3/4" 2 ... 6 bar
Power supply	100 ... 240 V / 50 ... 60 Hz, 300 W
Dimensions (HxWxD)	770 x 450 x 305 mm
Weight	ca. 35 kg

Software SITA-FoamLab

- Convenient programming and evaluation on PCs in the laboratory or office (LAN)
- User-defined compilation of measurement sequences (stirring, measuring, tempering, dosing)
- Automated evaluation of characteristic parameters
- Detailed and clear display of characteristic parameters over the measuring sequence and sample properties
- Controlling external accessories for dosing and sample conditioning

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