



● GLOBULYSER for Analyzing Homogenizer Efficiency

The GLOBULYSER has been developed in close cooperation with the dairy industry to create an easy-to-use “stand alone” analyzer for the determination of the mean fat globule size in milk and liquid milk products as well as in dissolved milk and cream powders.

- Control of homogenization degree and efficiency regarding product specification
- Secure and adjust shelf life of products
- Save energy by controlling the homogenization performance of industrial homogenizers
- Easy-to-use
- Results are independent of operator
- Fast measurement time
- Excellent cost/performance-ratio

Raw milk is inhomogeneous and contains relatively big globules which tend to aggregate leading to creaming effects. During the homogenization process, the particle size is adjusted to a required level. The GLOBULYSER is able to measure the mean size of fat globules in milk, liquid and powdered milk products within minutes and helps to efficiently operate dairy process plants.

Solutions for the Dairy industry

The GLOBULYSER has been developed for analyzing and determining the homogenizer efficiency for all long shelf life products, like UHT milk, condensed milk, pasteurized milk, a mixture of milk fat with vegetable fat, milk powder and cream powder.

Measurement Principle

The GLOBULYSER is based on measuring the intensity of transmitted and forward scattered light interacting with fat globules present in the sample cell. The forward scattering is directly depending on the size of the fat globules. The measured values are compared with the values of clean water and the difference is used to determine the mean size of the fat globules.



The GLOBULYSER measures the homogenizer efficiency for various types of milk and liquid milk products.

The GLOBULYSER works automatically and provides zero setting control and cleaning after each measurement.

Measurement of Free Fat in Milk Powder

Free fat in milk powder is a fundamental parameter desired by the industry depending on the application. The manufacturer of milk powder for baby food for example does not desire any free fat in the product, since the free fat can form a fat layer on the prepared baby milk.

With the help of the GLOBULYSER, the amount of free fat in milk powder can be determined with high accuracy by analyzing the dissolved milk powder.

Save Energy Costs for Homogenization

The pressure in an industrial homogenizer is directly correlated to its energy consumption, i.e. running at lower pressure can save considerable amounts of energy in production. With the help of precise results generated by the GLOBULYSER, the energy costs for industrial homogenization can be significantly reduced by optimizing the pressure. Moreover, by running at lower pressure, the run time between service intervals of the homogenizer can be increased.

Hassle-Free Maintenance

Since the GLOBULYSER only contains few moving parts, it can be easily maintained and requires a minimum of spare parts.



The easy-to-use operating panel guides you step by step through the measurement.

Software

The GLOBULYSER is operated by an built-in controller with a panel which allows an easy use for analyzing, cleaning and other tasks like service operations.

Proven Quality

More than 25 years of experience in designing solutions for the dairy industry were combined with the high quality standards of Bruker Optics. Our systems run hassle-free worldwide in companies producing milk and milk products as well as central milk laboratories.

Service and Support

If you need us, we are here to help! Bruker Optics is staffed with a large group of scientists and engineers to respond to your needs:

- Application support
- Comprehensive training
- Local service

Bruker Optics is ISO 9001 and ISO 13485 certified.

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