

Dairy Products, Creameries

milk processing: milk products, cream, curd, jogurt

measurements for fabrication of liquid and pasty products



evaluation unit HK4



milk products



NIR-sensor / halogen lamp

fat-, protein-, H²O-measuring for milk processing



HK4



latest NIR-technology with diode array.
wherever organic constituents in milk
products are relevant issues

The origin of every milk product is the milk. Independent if the milk is from cows, goats or sheep. With the value of the total solids (TS) all constituents (like protein, fat, lactose, mineral materials, trace elements, vitamins etc.) of the milk or of a milk product are summarised, except water.

The absorption of all molecules in the CH-, NH- and OH-compounds enables the ONLINE-measuring of fat, free fat, protein, H²O etc.

cream: From the rich part of the milk different products like cream or butter are fabricated. A big portion will be processed industrially.

butter: The cream is affected as long as the shells of the small fat bullets are mechanically destroyed and butter grains are emerged. Sour-, Standardbutter.

buttermilk: In the butter process the rich butter grains are mechanically kneaded and the rest of the cream constituents are fluxional refined.

consumption milk: Generic term for all kinds of milk in the stability levels *fresh milk, UHT milk, pasteurised milk* and the different fat content levels

skimmed milk 0,3%, defatted milk 1,5%, fresh full cream milk 3,8%
evaporated milk: The water of the milk is revoked by evaporation.

cream cheese: Acidification of the milk with lactobacilli. In accordance to the consistency its divided in curd-, cream- and cottage cheese.

jogurt: The milk acidulates by lactobacilli and the milk protein coagulates. gerinnt. Heating until the required degree of oxygen is achieved. Belated fruit preparations. *Standard jogurt, preserved und stirred jogurt.*

milk soft drinks: Intermixtures of e.g. cocoa- and strawberry powder.

For quality assurance the continuous ONLINE-measurement of the required organic constituents fat, protein and water is performed.

The measurement is effected by a NIR-sensor online in a flow cell directly in the pipe or in a measuring cell directly at the tank. The NIR-measurement is performed with the reflection principle. Chemometric calibration software SPECTER.

Basic calibration at delivery, simple start-up with one-point calibration. Rugged industrial design.

Maintenance free. Quick connection. RS232 / RS485.

Softkeys. -20 bis +85°C. Protection IP65

1200nm - 1700nm, 5 analogue outputs 0/4-20mA.

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25 years experience

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