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Results

Results after the installation of 3 MIVI sensors in a melted cheese manufacturing site that produces 40 tons of product per day:

Customer complaints	Maintain 0 customer claim regarding product consistency
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Benefits

Sofraser MIVI process viscometers:

- facilitate reaching consistency and homogeneity that is required for quality melted cheese
- determine the optimal operation characteristics for ultimate production efficiency
- ensure consistent end product quality
- increase safety by preventing contamination

Return on Investment

Installations in melted cheese manufacturing applications indicate dairy ingredients savings of 0.5%.

For example: a melted cheese production site producing 40 tons of melted cheese per day can expect dairy products savings of:

Quantity produced /day (tons)	40 t
Cost (EUR / ton)	285 EUR
Dairy ingredients saving	0.5%
Saving / day	57 EUR

In this example, using Sofraser MIVI viscometers provided **ROI within 6 months.**

Dairy industry end-users:

Gervais, Danone, Yeo, Bel, Sodiaal, Dairy Crest Foods, Waterford Co-op, Norske Meierier's, Générale Ultra Frais, Valio Ltd., 3A S.A. Emmi Fondue AG Suisse...

Guide for identifying viscosity measurement needs

Topics and Key Points

Are customer complaints at a high level or have they increased?

The majority of customer complaints stems from issues with the end product. If a packaged product is delivered to a store, customers return it and complain about quality, there are enormous consequences on sales, store loyalty, and brand reputation. Using an inline viscosity control during the manufacturing process assures a constant texture quality.

How many dairy ingredients are wasted in the cleaning process?

Consider how many cleaning processes take place within the pipes and the amount of dairy products rejected during each cleaning phase. Take into account how much the product costs and then how much is wasted. The installation of a MIVI viscometer can differentiate dairy products from cleaning solutions for the recycling cycle and save incredible amounts of money.

Is the product consistency optimal after the mixing step?

Consistency – the end result – depends on how much time the product spends in the mixing step. Time-linked consistency variations can be eliminated by using a MIVI sensor and electronics, which give operators real-time process control.

Is the product's consistency stable and ideal before conditioning?

This will stabilize consistency during the conditioning, delivery and sales of the end-product.

How much maintenance is performed? What is the cost of each maintenance episode?

Frequent maintenance intervenes with production. Maintenance itself costs money, and production lapses generate loss.

Amongst the various suppliers, are there noticeable variations in the ingredients?

Even a minute difference in the ingredients must be detected and corrected and the MIVI is the ideal tool that provides such control.

Is density control used exclusively to verify product consistency?

Many fluids present similar densities so density as the sole parameter is not reliable. Viscosity control is the most reliable due to the great differences in products' viscosities.

Is the emulsifying salt quantity fixed in the process?

Batch to batch quantities should be exactly proportioned to achieve the desired consistency. The MIVI provides real-time process control.

Sofraser recommended solution

MIVI 9510 with sanitary design	Possibility to set up relays and alarms Can be combined with external controller
MIVI 9100 with sanitary design	Low price positioning Can be combined with external controller

Contact Sofraser for detailed sensor configuration

Competitors in this area:

- Other technologies than viscometry (consistency meters), but much less precise.

This system is also efficient in:

- additional dairy processes like cream cheese and yogurt
- food & beverage
- emulsion mixing processes
- cleaning

