Food / OQ-05

Dairy plants: milk intake, temperature and cleaning-in-place (CIP)

Cheese production is growing by 35%, while imports compete at zero duty. Competition is on cost and consistent quality.

Milk is the most perishable raw material.

In January–February 2026, cheese and tvorog (cottage cheese) production rose by 35%. The zero import duty rate on dairy products has been extended until 2027. Under these conditions, a local plant needs to manage intake, cooling and cleaning processes with data.

Conceptual architecture. No operating results are shown.

01 Intake	Supplier · Volume · Fat content
02 Storage	Tank · Temperature · Time
03 Production	Batch · CIP · Resources
04 Warehouse	Shelf life · FEFO · Shipment

At a glance

+35% — Growth in cheese and cottage cheese production in January–February 2026. [1]

01.01.2027 — Expiry date of the zero import duty on dairy products. [2]

EU — Overview of mandatory EU requirements for meat and dairy products — Standardisation Agency. [3]

November 2026

01 Evidence and context

Who it is for

Plant owner	Cost.
Intake	Milk quality.
Process technologist	Process.
Quality	Laboratory.

Facts and global practice

National Statistics Committee

January–February 2026: 831.2 t of cheese and cottage cheese, +35%. [1]

uza.uz (dairynews.today)

The zero import duty rate on dairy products has been extended until 01.01.2027. [2]

gov.uz/standart

The Uzbek Agency for Standardisation has published the mandatory EU requirements for meat and dairy products. [3]

This indicator for Uzbek enterprises was not found in open sources — it is measured during the audit.

02 Where the losses occur

Intake

Milk volume and fat content are recorded by hand.

Cooling

Tank temperature is not recorded continuously.

CIP

Cleaning duration and chemical consumption are not measured.

Batch

It is unknown which milk the finished product was made from.

How the loss is calculated

Spoiled milk	litres spoiled × price per litre
Fat content deviation	fat deviation (percentage points) × litres × price per litre per percentage point
CIP	CIP hours per period × number of lines × cost per line-hour + chemicals cost + water cost
Returns	returned batches × cost per batch

Illustrative calculations; establish the baseline, units and rates during the site assessment. Avoid counting the same loss twice.

From intake to finished product

Volume and quality are entered into the system at intake, tank temperature is recorded continuously, CIP cycles and resource consumption are logged, and batch traceability is maintained.

01 Intake

Supplier · Volume · Fat content

02 Storage

Tank · Temperature · Time

03 Production

Batch · CIP · Resources

04 Warehouse

Shelf life · FEFO · Shipment

Modules

Intake and supplier records	Scale/flow meter	Engineering capability
Tank temperature	Sensor	Engineering capability
CIP monitoring	Time, water, chemicals	Engineering capability
Finished goods warehouse (FEFO)	WMS	Commercially available

Each module has a readiness status. Third-party results are not a forecast for your site.

04 Implementation and measurement

01 Audit

Intake and tanks.

Output: gaps.

02 Pilot

1 month.

Output: temperature and CIP baseline.

03 Scale-up

Entire plant.

Output: batch traceability.

04 Subscription

Monthly.

Output: trends.

What is measured

Temperature deviation	Hours	Sensor
CIP time	Minutes	Monitoring
Fat content deviation	%	Intake
Expired	Batch	WMS

What is needed to start

- Plant owner
- Intake process
- List of tanks
- CIP diagram

05 Readiness checklist and next step

01 Is volume recorded automatically at intake?	Yes / No / Unknown
02 Is there a quality history for each supplier?	Yes / No / Unknown
03 Is tank temperature recorded continuously?	Yes / No / Unknown
04 Is CIP duration measured?	Yes / No / Unknown
05 Are chemical and water consumption known?	Yes / No / Unknown
06 Is it visible which milk each batch was made from?	Yes / No / Unknown
07 Is finished product managed by FEFO?	Yes / No / Unknown
08 Are laboratory results recorded in the system?	Yes / No / Unknown
09 Have export requirements been reviewed?	Yes / No / Unknown
10 Is there a designated responsible person?	Yes / No / Unknown

What we do not promise

- Exact timeline and price without an audit
- Certificate or inspection outcome
- Guarantee of export approval
- Unmeasured results

Dairy plant audit

We review milk intake, temperature and the CIP process.

- Map of break points
- Pilot plan
- Implementation fee and monthly subscription

Scope, price and schedule are agreed after reviewing the site and its data.

06 Sources and scope

[1] National Statistics Committee: 831.2 t of cheese and cottage cheese in January–February 2026 (+35%). stat.uz, 23.04.2026.

stat.uz

[2] The zero import duty rate on dairy products has been extended until 01.01.2027 (decree of 30.12.2025). uza.uz (via dairynews.today).

uza.uz

dairynews.today

[3] Uzbek Agency for Standardisation: mandatory EU requirements for meat and dairy products. gov.uz/standart.

gov.uz/standart.

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