



FOOD INDUSTRY

Dairy Heat Exchanger Scale Treatment

Buckinghamshire, UK

HydroFLOW® treatment halved milk-line cleaning frequency and reduced phosphoric acid use per clean by 50% at Tims Dairy.

50%

Fewer Milk-Line Cleans

50%

Less Acid Per Clean

2→1/wk

Cleaning Frequency Halved



Lost Production Reduced



BEFORE & AFTER

BEFORE

- Milk line cleaned twice every week
- Full acid dose needed for each clean
- Scale caused time and production losses

AFTER

- ✓ Milk line cleaned once every week
- ✓ Half the phosphoric acid used per clean
- ✓ Less cleaning time and lost production



OVERVIEW

Tims Dairy in Chalfont St Peter produces cultured milk products, including yoghurt and crème fraîche. Hard local water caused limescale, while milk scale affected the plate-pack heat exchanger. Twice-weekly milk-line cleaning required phosphoric acid, operator time and production shutdowns.



CHALLENGE

Hard water and milk scale increased cleaning demands and production downtime.

- Milk line required acid cleaning twice weekly
- Milk scale accumulated on the heat exchanger



SOLUTION

HydroFLOW® units were installed across factory, including 1x C45 on milk line before plate-pack heat exchanger.

UNITS INSTALLED

4x HydroFLOW® units

MILK-LINE UNIT

1x HydroFLOW® C45

INSTALLATION POINTS

Three water feeds and one milk line

EQUIPMENT TREATED

Plate-pack heat exchanger



RESULTS



50% Fewer Cleans

Milk-line cleaning frequency fell from twice weekly to weekly.



50% Less Acid Per Clean

Each weekly clean required half the previous amount of phosphoric acid.



Lower Chemical Costs

Reduced cleaning frequency and acid use delivered chemical savings.



Less Cleaning Time

Operators spent less time shutting down and cleaning the milk line.



Less Lost Production

Fewer cleaning shutdowns reduced production time lost to maintenance.



Reduced Scale Problems

Treatment reduced the scale-related cleaning burden on the system.



TESTIMONIAL

"HydroFLOW® has proved effective protection against our biggest production headache. I was so impressed with it that I've had the domestic version fitted to my water system at home."

— Peter Timotheou, Director, Tims Dairy

KEY TAKEAWAY

Summary

HydroFLOW® treatment reduced the milk-line cleaning burden at Tims Dairy. Cleaning fell from twice weekly to once weekly, while each clean used half the previous phosphoric acid dose, reducing chemical use, operator time and lost production.

50%

FEWER MILK-LINE CLEANS

50%

LESS ACID PER CLEAN

2→1/wk

CLEANING FREQUENCY HALVED

HYDROPATH

The Forefront of Sustainable Water Treatment

Hydropath Technology is a world leader in sustainable water treatment solutions, providing chemical-free alternatives for industrial and commercial applications across more than 50 countries.

50+

COUNTRIES

30+

YEARS EXPERIENCE

1M+

UNITS INSTALLED

HYDROPATH 

Ready to reduce scale-related cleaning?

Speak to Hydropath about water treatment for your food production facility.

✉ sales@hydropath.com

☎ +44 (0)115 986 9966

🌐 hydropath.com

✓ ISO 14001:2015

✓ ISO 9001:2015

✓ GREENPRO

✓ SOLAR IMPULSE