

Why Your Dairy Plant Pays More for Water Than It Should — and How to Fix It

Your pasteurization, CIP systems, and cooling towers all draw from the same supply — but your meter counts more than arrives. **Pasteurizer demand surges, CIP startups, and cooling water cycling create the conditions for air, gas, and turbulence to form in the line at your meter — and you're billed for it.** The FCD (Flow Conditioning Device) corrects the measurement. HTST parameters and every food safety requirement stay the same. Your water bill drops — and so does your sewer bill, because sewer charges are calculated from the same inflated meter reading. One device. Two bills fixed.

WHY DAIRY PLANT WATER METERS OVER-READ

The Core Problem: The FCD Corrects the Flow at the Municipal Meter — Not Your HTST, CIP, or PMO-Required Water Volumes

Your pasteurization temperatures, CIP chemical concentrations, and Pasteurized Milk Ordinance compliance parameters are all controlled downstream of the municipal supply meter. The FCD installs immediately after the meter — ahead of every process system. It corrects total intake measurement without touching a single validated process parameter, PMO compliance requirement, or FDA food safety control.

THE THREE OVER-READING SOURCES UNIQUE TO DAIRY PLANTS



Pasteurizer Water Demand

HTST pasteurizer cooling and heating water demand creates high-velocity demand events throughout every production run — generating air, gas, and turbulence at the supply meter on each pasteurizer cycle.



CIP Cycle Startups

Clean-in-place system startups between production runs create high-velocity on/off demand events — each one generating air, gas, and turbulence at the supply meter throughout every production cycle.



Cooling & Refrigeration Water

Product cooling and refrigeration condenser water cycling creates continuous variable demand — compounding pasteurizer and CIP over-reading across every production shift and every billing cycle.



Your Water Intensity Per Gallon of Dairy Product Is Better Than Your Meter Shows

Dairy processor sustainability reporting tracks water intensity per gallon for IDFA environmental benchmarking, Walmart and Kroger supplier scorecards, and CDP water disclosure. When the meter over-reads, every figure is inflated. After FCD installation, metered intake reflects true use — improving the accuracy of all reported metrics without changing any PMO, HTST, or food safety parameter.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ Pasteurizer demand inflates meter each run
- ✗ CIP startups compound over-reading
- ✗ Water intensity per gallon of product overstated
- ✗ Sewer charge tied to inflated meter



WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ Pasteurizer demand reads accurately
- ✓ CIP cycles measured correctly
- ✓ True water intensity per gallon revealed
- ✓ Sewer charge based on real usage

5–30%

Average water & sewer bill reduction

46%

Highest documented single-site reduction

~1 Hour

Install time — water off about 1 hour

6-Mo

Money-back, no questions asked · install non-refundable

How the FCD Works — Four Steps

1

Installs between two pipe joints right after your water meter — water off about one hour

2

Creates a slight back-pressure that extends back through the meter, reducing air, gas, and turbulence

3

Delivers a laminar-like flow profile through the meter — the condition it was calibrated to read

4

Meter reads accurately. Bill drops. Every HTST parameter, CIP protocol, PMO requirement, and food safety control is effectively unchanged.

FREE SAVINGS ESTIMATE

Instant estimate — takes 30 seconds, no contact info required.

waterflowinnovations.com/water-bill-savings-calculator

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CERTIFICATIONS

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Under 0.8 psi pressure loss
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