

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



Water Flow Innovations LLC

Flow Conditioning Device (FCD)
waterflowinnovations.com

Your processing lines, CIP systems, and cooling towers all draw from the same supply — but your meter counts more than arrives. **CIP cycle surges, process line washdowns, and cooling water demand 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. Your food safety protocols and every process parameter 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 FOOD WATER METERS OVER-READ

The Core Problem: CIP Systems and Process Line Washdowns Are the Highest-Intensity Open-Valve Events in Any Food Plant

Clean-in-place system startups and process line washdowns create sudden high-velocity demand — exactly the open-valve events that generate the most significant meter over-reading. Multiple CIP circuits running across shifts compound that over-reading continuously. Your food safety water volumes are accurate. Your municipal bill is not. The FCD corrects that at the meter without changing any SQF, FSMA, or GFSI food safety parameter.

THE THREE OVER-READING SOURCES UNIQUE TO FOOD & BEVERAGE PROCESSING



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 and shift change.



Process Line Washdowns

Production line washdowns between product changeovers create large, high-velocity demand events — exactly the open-valve conditions that generate the most significant meter over-reading per event in any food plant.



Cooling Tower & Refrigeration Makeup

Cooling tower and refrigeration system makeup water cycling with production load creates continuous variable demand — compounding CIP and washdown over-reading throughout every operating day.



Your Water Intensity Per Unit of Production Is Better Than Your Meter Shows

SQF certification, GFSI food safety benchmarking, and retailer sustainability scorecards (Walmart, Kroger, Costco, Target) track water intensity per unit of food produced. When the meter over-reads CIP and washdown demand, every figure is inflated. After FCD installation, metered intake reflects true use — improving the accuracy of all metrics without changing any food safety parameter or FSMA compliance requirement.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ CIP startups inflate meter every cycle
- ✗ Washdowns compound over-reading
- ✗ Water intensity per unit overstated
- ✗ Sewer charge tied to inflated meter



WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ CIP demand reads accurately
- ✓ Washdown demand measured correctly
- ✓ True water intensity per unit 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 CIP protocol, FSMA requirement, food safety control, and SQF certification parameter 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

IAPMO NSF/ANSI/CAN 61 KIWA GMP SQF

316L Stainless Steel · Made in USA
Under 0.8 psi pressure loss
Lifetime Transferable Warranty