

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

Your RO systems, bottle rinsing, and CIP all draw from the same supply — but your meter counts more than arrives. **RO pump startups, bottle rinser demand, and CIP surges 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 at the municipal meter — ahead of every purification stage. Product water quality stays 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 BOTTLED WATER WATER METERS OVER-READ

The Core Problem: The FCD Corrects the Flow at the Municipal Meter — Ahead of Every Purification and Bottling System

Your RO train, ozonation, UV, and bottling lines are all controlled downstream of the municipal supply meter. The FCD installs at the raw municipal meter before water enters any purification stage — correcting total intake without touching any NSF 61, FDA 21 CFR, or IBWA quality parameter. Product water quality is unaffected. Only billing accuracy changes.

THE THREE OVER-READING SOURCES UNIQUE TO BOTTLED WATER & BEVERAGE PRODUCTION



RO System Pump Startups

RO system pump startups and high-pressure cycling create sudden high-velocity demand events — generating air, gas, and turbulence at the supply meter on every RO activation throughout every production shift.



Bottle Rinser Demand

High-speed bottle rinsing systems cycling continuously with line speed create sustained high-velocity demand — one of the most consistent over-reading sources in any bottling plant, running throughout every production run.



CIP Cycle Surges

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.



Your Water Intensity Per Liter of Product Is Better Than Your Meter Shows

IBWA sustainability reporting, FDA 21 CFR water balance documentation, and retailer scorecards (Nestlé Waters, PepsiCo, Coca-Cola bottler programs) track water intensity per liter of finished product. When the municipal meter over-reads RO and rinser demand, every figure is inflated. After FCD installation, metered intake reflects true use — improving the accuracy of all reported metrics and water balance.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ RO startups inflate meter each shift
- ✗ Bottle rinser demand compounds over-reading
- ✗ Water intensity per liter overstated
- ✗ Sewer charge tied to inflated meter

→

WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ RO system demand reads accurately
- ✓ Bottle rinser measured correctly
- ✓ True water intensity per liter 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. RO water quality, NSF 61 compliance, FDA 21 CFR parameters, and every bottling specification are effectively unchanged.