



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

Water Flow Innovations LLC

Flow Conditioning Device (FCD)
waterflowinnovations.com

Your part cleaning, autoclave cooling, and HVAC all draw from the same supply — but your meter counts more than arrives. **DI water system cycling, autoclave steam demand, and cooling tower makeup 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 process specs and every AS9100 quality 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 AEROSPACE WATER METERS OVER-READ

The Core Problem: The FCD Corrects the Flow at the Municipal Meter — Ahead of Every Validated Cleaning and Process System

Aerospace part cleaning, NDT immersion systems, and autoclave processes are all validated downstream of the municipal supply meter. The FCD installs at the raw municipal meter before water enters any process system — correcting total intake without touching any AS9100, NADCAP, or Mil-Spec parameter. Only billing accuracy changes.

THE THREE OVER-READING SOURCES UNIQUE TO AEROSPACE & DEFENSE MANUFACTURING



DI Water System Cycling

Deionized water system pump startups and pressure cycling for parts cleaning and NDT immersion create sudden high-velocity demand events — generating air, gas, and turbulence at the supply meter on every DI activation.



Autoclave Steam Demand

Autoclave and composite cure oven steam generation creates high-velocity boiler feedwater demand events — generating air, gas, and turbulence at the supply meter on every cure cycle throughout every production shift.



HVAC Cooling Tower Makeup

Facility HVAC cooling tower makeup cycling with cleanroom and production area load creates continuous variable demand — compounding DI and autoclave over-reading throughout every operating day.

Your NADCAP Audit Water Data & AS9100 Environmental Records Are Better Than Your Meter Shows



Aerospace facilities reference metered municipal intake for NADCAP environmental compliance audits, AS9100 environmental management records, and DFARS sustainability reporting. When the meter over-reads DI and autoclave demand, those records overstate intake. After FCD installation, metered intake reflects true use — improving the accuracy of NADCAP audit and AS9100 environmental data for Boeing, Lockheed Martin, Raytheon, and GE Aviation supply chain requirements.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ DI system cycling inflates meter each shift
- ✗ Autoclave demand compounds over-reading
- ✗ NADCAP water records overstate intake
- ✗ Sewer charge tied to inflated meter



WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ DI system demand reads accurately
- ✓ Autoclave demand measured correctly
- ✓ NADCAP water records reflect true use
- ✓ 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 AS9100 process parameter, NADCAP specification, parts cleaning protocol, and Mil-Spec requirement 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