

Why Your Textile Mill Pays More for Water Than It Should — and How to Fix It

Your dyeing vessels, washing ranges, and finishing systems all draw from the same supply — but your meter counts more than arrives. **Dye vessel fills, washing range surges, 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 dye formulations 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 TEXTILE MILLS WATER METERS OVER-READ

The Core Problem: Textile Dyeing Vessel Fills Are Among the Largest Single-Event Demand Draws in Any Wet Processing Industry
Large dye vessel fills draw water at high flow rates on every batch — creating maximum open-valve demand that generates air, gas, and turbulence in the line at the meter. Washing range surges add high-volume on/off demand on top. Your dye formulations, liquor ratios, and color fastness parameters are unaffected — all controlled inside the vessel, downstream of the meter.

THE THREE OVER-READING SOURCES UNIQUE TO TEXTILE MILLS & DYEING FACILITIES



Dye Vessel Fill Events
Large dye vessel fills create the most intense open-valve demand events of any textile water use — generating maximum air, gas, and turbulence at the supply meter on every batch fill across every production shift.



Washing Range Surges
Continuous washing range water demand and inter-batch surge events create high-velocity demand events — compounding dye vessel over-reading throughout every production run and shift change.



Cooling & Heat Exchange Water
Dye vessel cooling and heat exchanger water cycling with production load creates variable demand events — adding a third compounding over-reading source on top of vessel fills and washing range demand.

Your Water Intensity Per Kg of Fabric Is Better Than Your Meter Shows
ZDHC wastewater program metrics, bluesign system certification, and brand customer scorecards (H&M, Nike, PVH) track water intensity per kg of processed fabric. When the meter over-reads vessel fills and washing range demand, every reported figure is inflated. After FCD installation, metered intake reflects true use — improving the accuracy of ZDHC metrics, bluesign water scores, and HIGG Facility Environmental Module data.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ Dye vessel fills inflate meter each batch
- ✗ Washing range surges compound over-reading
- ✗ Water intensity per kg overstated
- ✗ Sewer charge tied to inflated meter

→

WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ Dye vessel fills read accurately
- ✓ Washing range measured correctly
- ✓ True water intensity per kg 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. Dye formulations, liquor ratios, color fastness specs, and every process parameter are effectively unchanged.