



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

Water Flow Innovations LLC

Flow Conditioning Device (FCD)
waterflowinnovations.com

Your beam house drums, retanning vessels, and finishing wash systems all draw from the same supply — but your meter counts more than arrives. **Drum fill surges, liquor bath cycling, and washdown 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. Process chemistry and every hide treatment 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 TANNERY WATER METERS OVER-READ

The Core Problem: Tannery Drum Fills Are Among the Largest Single-Event Demand Draws of Any Wet Processing Industry

Beam house and retanning drums draw hundreds of gallons per fill — maximum open-valve demand that generates air, gas, and turbulence in the line at the meter. Multiple drums filling across shifts compound that over-reading. Float ratios, pH targets, and tanning parameters are unaffected — all controlled inside the drum, downstream of the meter.

THE THREE OVER-READING SOURCES UNIQUE TO LEATHER TANNERIES



Beam House Drum Fills

Large drum fills for soaking, liming, and bating create the most intense single-event demand of any tannery water use — generating maximum air, gas, and turbulence at the supply meter on every fill.



Retanning Liquor Cycling

Retanning and dyeing vessel water additions cycle throughout production — creating variable high-volume demand events that compound drum fill over-reading across every production run.



Finishing Washdown

Hide washing and finishing area washdown creates large, high-velocity demand events — exactly the open-valve conditions that generate significant meter over-reading on every shift washdown cycle.



Your Water Intensity Per Hide Is Better Than Your Meter Shows — and It Matters for LWG Certification

Leather Working Group (LWG) audits track water intensity per square foot of finished leather. When the supply meter over-reads drum fills, your LWG water score and ZDHC wastewater gate rating are both impacted. After FCD installation, metered intake more accurately reflects actual use — improving the accuracy of your LWG audit score, brand customer scorecards, and HIGG Index water intensity data.

BEFORE & AFTER THE FCD

WITHOUT FCD

- ✗ Air, gas & turbulence billed as water volume
- ✗ Drum fills inflate meter on every batch
- ✗ Liquor cycling compounds over-reading
- ✗ LWG water intensity score overstated
- ✗ Sewer charge tied to inflated meter



WITH FCD INSTALLED

- ✓ Metered volume reflects water actually delivered
- ✓ Drum fills read accurately
- ✓ Liquor cycling measured correctly
- ✓ LWG water intensity score improves
- ✓ 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 drum float ratio, liquor pH, tanning parameter, and finishing protocol is effectively unchanged.

FREE SAVINGS ESTIMATE

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

waterflowinnovations.com/
[water-bill-savings-calculator](#)

Water Flow Innovations LLC

2651 Route 412
Coopersburg, PA 18036
Info@WaterFlowInnovations.com
1-(844)-934-8258

CERTIFICATIONS

IAPMO NSF/ANSI/CAN 61 KIWA GMP SQF

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