VOLTEA WATER

ROI FEATURE

COFFEE SHOPS
ISTANBUL, TURKEY
ROI:

- **82% DECREASE IN WASTEWATER VOLUME,**
- **48% REDUCTION IN OVERALL PROJECT COSTS**





INTEGRATOR FOR GLOBAL COFFEE SHOPS REDUCES COSTS, BREWS HIGH-QUALITY COFFEE WITH NEW TECHNOLOGY

INTRODUCTION & PROCESS DESCRIPTION

Coffee is made up of 98% water, which makes consistent water quality essential for cafés and restaurants that want to be known for great-tasting coffee.

To achieve the perfect pour, water must contain a specific, controlled range of minerals. However, the only way to ensure the ideal balance of minerals from a municipal water supply is through on-site water treatment.

OSMO, an integrator in Istanbul, Turkey, knew this problem very well. It was using traditional water treatment methods such as Reverse Osmosis (RO) and water softeners for the world's largest coffee shop chain, but these methods were very costly and inefficient.

Fortunately, OSMO wasn't out of options. The integrator wanted something different—a disruptive technology that would not only deliver consistent, high-quality water, but also reduce maintenance and operating costs.

THE CHALLENGE: INEFFICIENCIES LEAD TO RISING COSTS

Hard water and an imbalance of minerals can cause coffee to take on flavors ranging from sharp and sour to flat and chalky—none of which baristas would want to use to describe their ideal cup. That's why high-quality water is the lifeblood of the coffee industry, making it possible for cafés and restaurants to deliver coffee within the much-desired Ideal Brew Zone.

OSMO relied on RO units, under-the-sink softeners, and other traditional technologies to try to achieve water quality within the Ideal Brew Zone. However, this approach presented several challenges that caused operating expenses to skyrocket.

Because water quality varied at each coffee shop location, every unit required constant monitoring to ensure consistent quality and taste for every cup of coffee, cappuccino, and espresso. OSMO staff had to regularly visit locations to test water, service the units, and make sure everything was running properly—efforts that cost significant time and money.

THE SOLUTION: TUNABLE WATER TREATMENT FOR THE PERFECT POUR

Voltea's point-of-use (PoU) system, DiUse, delivered a solution that checked every box for OSMO. The system runs on patented, salt-free CapDI technology, which removes salt ions and total dissolved solids (TDS) via an electrical current rather than relying on chemicals. This allows unrecovered water to safely return to the ecosystem while significantly reducing waste.

What truly set DiUse apart was its tunability. Once a desired reduction rate is set, DiUse self-monitors and automatically adjusts to account for any fluctuations in incoming water quality. This reduced service calls and associated costs, while freeing OSMO from the burden of constant monitoring. Each location could now rely on the same consistent, high-quality water to produce the perfect cup of coffee.

Even the coffee machines themselves benefited from CapDI technology. Reduced scaling meant fewer filter replacements, lower service costs, and less downtime for descaling. With Voltea's technology in place, OSMO could finally rely on both a consistent product and the long-term protection of its equipment.

VOLTEA'S POU SYSTEM, DIUSE

"Voltea provided a solution that was years ahead of other traditional PoE and PoU treatment methods, and helped us significantly cut back on water waste and overall costs while delivering the perfect cup of coffee to our customers, every time."
– Mehmet Beycan, OSMO



THE RESULTS: DECREASED MAINTENANCE ; REDUCED COST

Voltea's DiUse system delivered an impressive ROI, proving the technology to be a smart investment that would continue to provide value over the long term.
With the technology in place, OSMO saw:

- 82% decrease in wastewater volume
- 81% decrease in electrical costs
- 50% reduction in incoming water costs
- 48% reduction in overall project costs

"We believe in giving our customers the very best, so we're always on the lookout for the newest, most cutting-edge technology available," said Mehmet Beycan, Operations Manager at OSMO. "Voltea provided a solution that was years ahead of other traditional PoE and PoU treatment methods, and helped us significantly cut back on water waste and overall costs while delivering the perfect cup of coffee to our customers, every time."

WASTE WATERVOLUME	ELECTRICAL COSTS	INCOMING WATERCOSTS	OVERALL PROJECTCOSTS
-82%	-81%	-50%	-48%

VOLTEA'S DIUSE SYSTEM PRODUCED AN IMPRESSIVE ROI, PROVING THE TECHNOLOGY TO BE A SMART INVESTMENT THAT WILL CONTINUE TO DELIVER VALUE OVER THE LONG TERM.

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