

A TURNKEY SOLUTION FOR USP QUALITY WATER

THE CONTEXT PHARMACEUTICAL PROJECT

Client name : KABS Laboratory

Sector of activity : Pharmaceutical

Facility type : Pharmaceutical products production plant

Location : Val-des-Sources

Project date : Installation in December 2025 and commissioned in winter 2026

Meeting Strict Requirements for Water Quality

As part of the construction of its new production plant in Val-des-Sources (Quebec), KABS Laboratory had to put in place a water purification installation capable of producing water meeting the quality requirements of the United States Pharmacopeia (USP), when supplied by the municipal network.

To meet the requirements associated with USP quality water and obtain the necessary government authorizations, each step of the project must be documented. The client therefore wished to reproduce the installation already used and validated at its Saint-Hubert plant in order to facilitate the approval process of its new installation. The project also included a special need regarding supply security: providing a municipal water reserve allowing operations to be temporarily maintained in case of a problem with the municipal water feed.

A USP Water Treatment Solution Designed and Installed by Puribec

Puribec supplied and installed a water purification installation adapted to the needs of the new plant by reproducing the process already in place in Saint-Hubert.



This turnkey solution brings together the design, supply, and installation of the different technologies needed for water treatment:

- Kinetico CP softeners to significantly reduce water hardness;
- Carbon filtration with Kinetico Hydrus systems to significantly reduce chlorine and chloramines;
- An Altum direct feed reverse osmosis system, manufactured by Puribec, allowing total dissolved solids to be reduced by more than 95%;
- A sterilization step by ultraviolet radiation and ultrafiltration;
- A chemical injection system for membrane cleaning.

Unused and returning water is returned to the contingency tank in order to optimize facility operation.

Thanks to its expertise and experience in specialty piping, Puribec was also the supplier and installer of the pure water network. This expertise quite uncommon in the overall market offers peace of mind and a single purchasing point for the customer.

The Results of a Solution Adapted to Pharmaceutical Requirements

With more than 50 years of experience in water purification, Puribec combines system design, manufacturing, installation, and specialized plumbing. For KABS Laboratory, this expertise allowed the realization of a complex project to be centralized with a single supplier and to deploy a solution adapted to the specific requirements of the pharmaceutical industry.

- Production of water meeting the USP quality requirements targeted by the client.
- 99% efficiency in reducing impurities, notably dissolved minerals and organic matter.
- PureRince purified water rinsing contributing to promoting a superior lifespan for the reverse osmosis membrane.
- Up to 70% less salt consumed by non-electric Kinetico softeners thanks to their counter-current regeneration, contributing to reducing the system's environmental footprint.
- Setup of a municipal water reserve allowing operations to be supported temporarily in case of a problem on the incoming water feed.
- Integrated solution including the treatment chain and specialized plumbing to points of use.



Do you have specific water quality requirements for your process operations?

Contact our water treatment system experts to obtain a turnkey solution tailored to your facilities and operational requirements at [puribectechnologies.com](https://www.puribectechnologies.com)