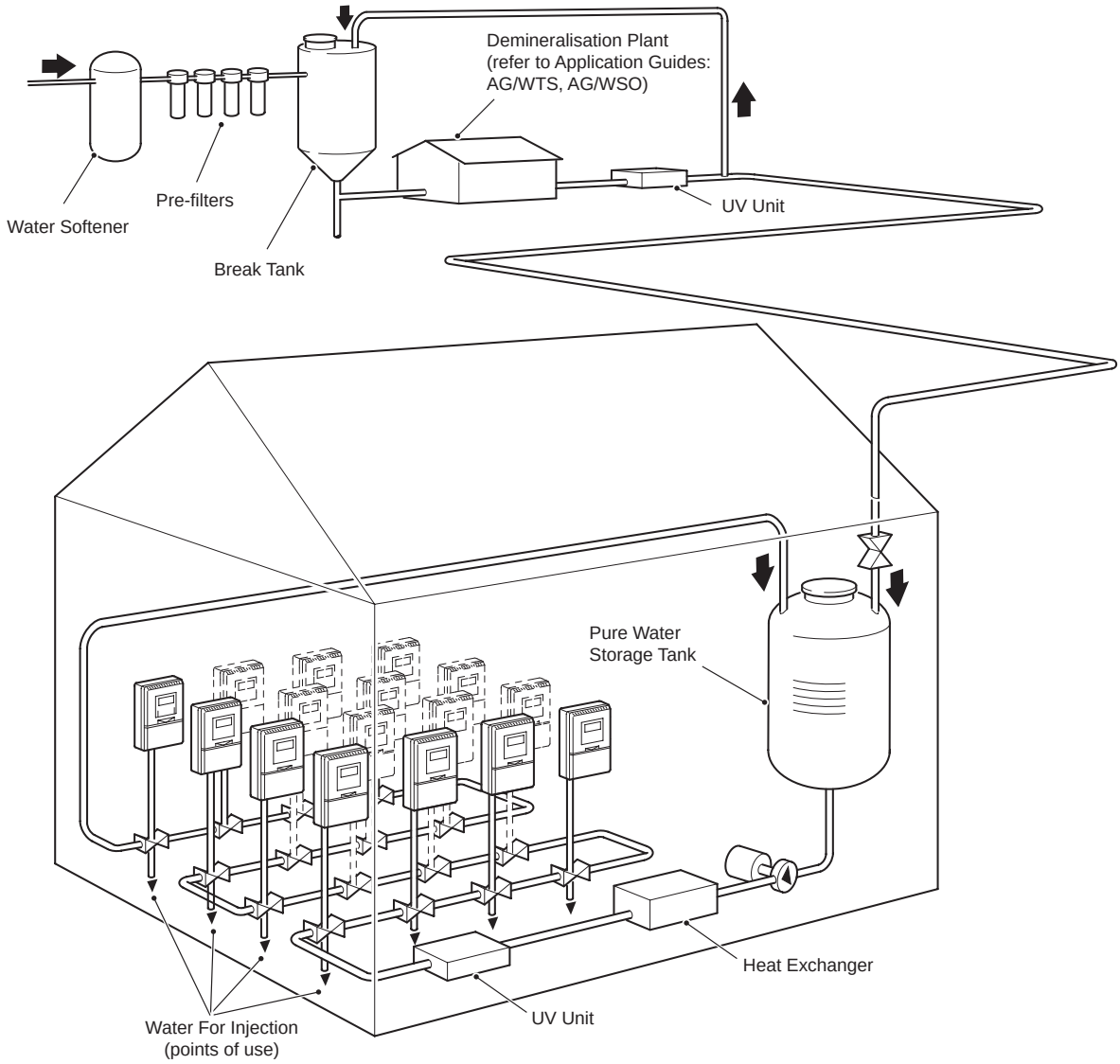
Application Guide

Conductivity Monitoring Systems to meet United States Pharmacopeia (USP 23) Regulations in the Pharmaceutical Industry



In the above illustration, a number of 4623 or 4628 transmitters connected to 2278/305 stainless steel cells are used to monitor the purified water at each outlet. Monitoring points are typically located throughout the entire site, including the Water Treatment Plant to ensure the water quality meets the standards set by the USP 23 regulations. Alternatively, some sites only monitor for conductivity at carefully selected points to minimise cost.

ABB Instrumentation

Why use On-line conductivity monitoring on Water for Injection (WFI) ?

- To monitor the effectiveness of the water treatment plant.
- To ensure that the water for injection complies with USP 23.
- To safeguard the product.
- To enable the end product to be sold in the American market.
- To reduce the number of laboratory tests required.

Why use ABB Instrumentation ?

- The 4623/28 analyzers are fully compliant with USP 23:
  - supplied with traceable certificate of test,
  - validation certificates supplied to provide assurance of performance,
- Easy to use system requires no calibration on set-up.
- Simple no-fuss programming to display non-temperature compensated or compensated conductivity values.
- Simple convenient revalidation of the analyzer – no need to use external company for validation.
- NEMA4X/IP66 code (case), IP65 (electronics) – continues to operate in the most demanding environments.
- Inherent cell accuracy provided by proprietary manufacturing technique, ensures long-term high accuracy performance.
- Two current outputs facility – to enable both conductivity **and** temperature to be retransmitted.
- Integral PT100 temperature element – enables a temperature compensation to be applied and temperature values to be displayed.

What ABB products are suitable ?

- **Model 4623/500 (wall-mount) and 4628/500 (panel mount) Conductivity Analyzers**
- **Model 2278/305 Stainless Steel Cell**
- **Connector Cables type 0233–811/0233–819**

Other ABB monitoring capabilities suitable for such plants

- pH monitoring (4630/35–500).
- Silica monitoring (8061, Multi-stream version also available).
- Flow monitoring (MagMaster).
- Chart recorders.

Installation

- Where possible, ensure that the cell can be easily removed for testing.
- When installing, ensure the measuring electrodes remain in contact with flowing sample and there is no risk of air bubbles.



The Company's policy is one of continuous product improvement and the right is reserved to modify the information contained herein without notice.

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ABB Kent-Taylor Ltd.
St. Neots
Cambs.
England, PE19 3EU
Tel: +44 (0) 1480 475321
Fax: +44 (0) 1480 217948

ABB Kent-Taylor Ltd.
Analytical & Flow Group
Stonehouse, Glos.
England, GL10 3TA
Tel: +44 (0) 1453 826661
Fax: +44 (0) 1453 826358

ABB Instrumentation Inc.
PO Box 20550, Rochester
New York 14602-0550
USA
Tel: +1 716 292 6050
Fax: +1 716 273 6207

ABB Kent-Taylor SpA
22016 Lenno
Como
Italy
Tel: +39 (0) 344 58111
Fax: +39 (0) 344 56278

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