



ASK THE EXPERT

ABB's Trent Davis responds on the current state of the Wastewater industry



The ABB Installation Products team is advancing the future of water and wastewater treatment by tackling corrosion, supporting aging infrastructure, and enabling uptime and compliance. With a vast portfolio of field-proven solutions designed for harsh and corrosive environments, ABB empowers facilities to operate smarter, safer and longer.

1. What are the current challenges facing water and wastewater treatment facilities?

Water and wastewater treatment facilities face a unique set of challenges, including corrosion from harsh chemical exposure, aging infrastructure and the increasing demand for uptime with fewer skilled maintenance personnel. Facilities must also navigate environmental compliance, water safety regulations, and growing pressure to reduce operational and maintenance costs.

2. How is ABB helping facilities address corrosion — one of the most common and costly problems?

It is estimated that corrosion costs the W/WW market \$36B annually.* Corrosion is especially problematic in the wastewater industry, where exposure to acidity, alkalinity, salts, organic matter and high humidity is routine. This can lead to contaminated water, damaged electrical systems and expensive unplanned downtime.

ABB's Ocal® line of PVC-coated conduit systems provides a dual-layer defense with a urethane interior and PVC exterior, offering unmatched corrosion resistance. Products like the Ocal® Form 8 universal conduit body and Ocal® liquidtight connectors are engineered to withstand corrosive conditions, helping to ensure long-term system integrity and helping prevent leaks, shorts and failures.

3. How do ABB Installation Products' solutions contribute to operational longevity in aging plants?

Many facilities operate far beyond their intended life spans due to budget constraints, making reliability and equipment lifespan critical. ABB addresses this with products designed to extend the life of installations, even in harsh environments.

Durable solutions from T&B Liquidtight Systems® flexible conduit systems, including Type LTAE and LT6XE conduit and 5300/9300 series fittings, stainless steel conduit and fittings, and BlueKote® conduit bodies ensure electrical systems remain safe and functional. These systems resist corrosion, protect against liquid ingress, and reduce the need for frequent replacements, helping to minimize operational expenses over time.

4. What role does ABB products play in ensuring continuous uptime?

Downtime in treatment facilities disrupts water processing and can lead to overflow, backups or compliance issues. ABB's systems are designed to minimize downtime through quick-install solutions and reliable components.

Color-Keyed® motor lead disconnects are a great example, enabling fast and secure change-outs of motors and pumps without time-consuming disassembly. T&B Liquidtight Systems®, including UL and NEMA-rated cable protection systems, offer robust ingress protection and are rated for extreme temperature ranges — keeping operations running even in challenging conditions.

5. Are there innovations that improve installation speed and reduce labor costs?

Absolutely. ABB prioritizes both durability and installation efficiency. Several of our products are specifically designed to save time and reduce labor costs on the job site. For example:

- Pre-threaded Ocal® nipples and the Ocal® PVC-to-PVC coated adapter simplify transitions and cut down installation time, when working with PVC-coated conduit systems.
- Kindorf® modular framing systems and Trapnut® fasteners can reduce installation time compared to traditional methods.
- BlueKote® conduit outlet bodies feature smooth internal surfaces that make wire pulling easier, helping to prevent wire damage and reduce installer fatigue.
- Color-Keyed® motor lead disconnects make pump and motor replacements faster and more efficient.

These innovations help streamline installation, reduce labor hours and can ultimately lower overall project costs

6. How does ABB support safety and compliance in water/wastewater environments?

Safety is paramount focus. ABB offers a full suite of grounding and bonding solutions, including Blackburn® EZGround™ compression connectors, Blackjack® grounding bushings and stainless steel beam clamps — all designed for corrosive and hazardous environments.

7. How do ABB solutions adapt to future-proofing and evolving facility needs?

With flexible, scalable systems like T&B® Fittings, expansion/deflection couplings and Superstrut® metal framing systems, ABB products are engineered for adaptability. Whether facilities are upgrading or expanding capacity, ABB Installation Products offerings support long-term planning through modularity, compatibility across systems, and rugged durability.

8. Where do you see ABB Installation Products advancing the water and wastewater industry now and in the future?

ABB Installation Products is committed to driving innovation that addresses today's challenges while anticipating future demands. Currently, we're advancing the industry by delivering highly engineered solutions that reduce corrosion, simplify maintenance and extend equipment life — all of which are critical for aging infrastructure and budget-constrained facilities.

Our goal is to help water and wastewater treatment operators reduce total lifecycle costs, improve resiliency and ensure compliance — not just for today, but for the next generation of infrastructure demands.

*Corrosion in the Water and Wastewater Industry by AMPP
