

BC Automation

Edge-Deployed MetaLoop for Intelligent Field Device Control

Tech Primer - 04/04/25



Bring Adaptive Intelligence to the Asset Level:

Manufacturers are facing mounting pressure to modernize-yet many remain tied to legacy control systems that limit agility, insight, and innovation. At BC Automation, we bridge that gap with adaptive AI/ML overlays that deliver intelligence from edge to cloud. Our modular solutions enhance existing infrastructure, reduce manual intervention, and unlock new levels of control and performance.

PROBLEM: Limited Intelligence at the Edge Increases Risk

- Industrial assets-motors, conveyors, sensors-generate valuable signals often left underutilized
- Legacy systems miss signs of actuator wear, energy inefficiency, or quality drift
- Critical blind spots at the field level reduce visibility, responsiveness, and efficiency
- Manual monitoring increases operational risk and limits proactive action
- These gaps constrain your journey toward digital and autonomous manufacturing

SOLUTION: Adaptive AI at the Edge with MetaLoop

- **MetaLoop modules** analyze high-resolution signals at the edge-from spectrometry, motion control, power, and IIoT sensors
- Augment existing control systems to deliver intelligent response and insight at the asset level
- Enable fast, predictive diagnostics that improve control, uptime, and quality
- Implement using a **modular, scalable strategy** adaptable to diverse environments and control architectures-designed for neutral integration with your technology stack
- Accelerate intelligent automation by augmenting existing infrastructure

OUR IMPACT: Real Solutions. Real ROI.

- ✓ Reveal real-time conditions where legacy systems fall short
- ✓ Deploy adaptive models at the edge for faster, smarter process control
- ✓ Improve equipment performance and energy efficiency
- ✓ Enable diagnostics, alerts, and visualization via MIP or ERP/cloud integrations
- ✓ Lay the foundation for scalable, digital manufacturing intelligence

89+

clients served

610+

unique processes automated

\$2.9B+

client dollars saved


“A huge asset to any company looking to improve their cost and reliability.”


Chris Whitehair
SVP Global Operations at SunOpta


“[BC Automation’s] solutions are most thorough and comprehensive.”

Ned Mitenius
Founder & Sr Consultant at Periscope Consulting

Let’s Transform Your Manufacturing Together.

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