

# ANNOUNCEMENT

## BC Automation & Secured2 Launch First-Ever Quantum Secure OT/IloT Manufacturing Networks — Pioneering the Era of Industry 5.0

Tucson, AZ – May 13, 2025 —

**BC Automation** and **Secured2** proudly announce the **first deployment of quantum-secure OT/IloT manufacturing networks**, marking a historic leap in the evolution of industrial automation and cybersecurity.

This strategic partnership is more than a security upgrade—it **pioneers the foundation of Industry 5.0**, where **intelligent automation**, **human-machine collaboration**, and **verifiable digital trust** converge. By embedding **post-quantum encryption** into adaptive edge control systems and cloud-native intelligence platforms, BC Automation and Secured2 are shaping the future of resilient, autonomous, and ethically governed industrial ecosystems.

“This isn’t just about cybersecurity. It’s about foundational trust in autonomous manufacturing, resilience in the face of threats, and integrity in every insight,” said **Thomas Schwieters**, Chief Technologist at BC Automation.

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### Quantum Security at the Core

Built on **Secured2’s QuantaMorphic® encryption** and **BC Automation’s Manufacturing Intelligence Platform (MIP)**, this secure-by-design architecture fuses next-generation cryptography with intelligent control capabilities. Key features include:

- **Encrypted Edge-to-Cloud Data Flow**  
All IloT signals, MetaLoop decisions, and SPA™-parameterized data are protected using **quantum-resilient encryption** across the entire signal path.
  - **Immutable Process Records**  
Integrated **blockchain audit trails** and **real-time digital twins** ensure transparency, traceability, and compliance-readiness.
  - **Distributed, Containerized Resilience**  
Modular Docker-based deployment maintains **high availability and zero-trust enforcement** at every edge node—without introducing centralized vulnerabilities.
  - **Mathematically Native Integration**  
Built on **vector math and graph-based orchestration**, MetaLoops and SPA™ naturally align with the computational principles underpinning **quantum and AI-native automation**.
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## From Sensor to Space: Quantum Security Across IIoT and Orbital AI

Secured2's post-quantum encryption isn't just protecting control systems on the factory floor—it's now securing **data and AI models in orbit**. In partnership with **Phantom Space** and **Ubotica**, Secured2 is enabling **quantum-resilient data payloads** and **AI inference engines** aboard satellites.

The same encryption technology protecting BC Automation's **MetaLoop™** and **SPA™** platforms on the ground is now deployed in **space-based compute nodes**—ushering in a unified security model from **sensor to space**, and from **IIoT networks to orbital datacenters**.

This convergence represents a seamless extension of BC Automation's **edge-to-cloud control architecture**, now scaling **beyond the atmosphere** to power secure, distributed intelligence across Earth and orbit.

"Quantum-secure infrastructure isn't a feature—it's a foundation," said **Daren Klum**, CEO of Secured2. "Together with BC Automation, we're delivering data protection and trust at the core of the intelligent industrial future."

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## Quantum OT Networks for Industry 5.0

This is the **first practical framework for Industry 5.0-grade Quantum OT Networks**, and it supports:

- **Autonomous Mobile Robotics (AMRs)**
- **Real-Time Digital Twin Synchronization**
- **Dynamic Generative Dashboards (Vizionary™)**

More than dashboards—**Vizionary™** dynamically generates the full control interface across **fixed screens, portable devices, HIDs**, and **augmentative interfaces**. It bridges legacy systems with adaptive, operator-ready intelligence.

- **Fractional Historization and Edge Diagnostics**
- **ESG-Ready Blockchain Anchoring for Process Records**

This stack enables **human-centered automation**, **AI-guided resilience**, and **digitally verifiable trust**—the core tenets of Industry 5.0.

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## Join the Industry 5.0 Movement

BC Automation and Secured2 are actively onboarding select clients and partners across manufacturing, aerospace, and mission-critical infrastructure. If you're ready to **secure your edge**, elevate your intelligence, and lead in Industry 5.0, we invite you to join us.

✉ Contact: [Admin@bcautomation.io](mailto:Admin@bcautomation.io)

✉ Contact: [Info@secured2.com](mailto:Info@secured2.com)

🌐 Learn more: [www.secured2.com](http://www.secured2.com) | [www.bcautomation.io](http://www.bcautomation.io)

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#SensorToSpace #QuantumOT #MetaLoop #SPA #Vizionary #Secured2 #EdgeToCloud

#Industry5\_0 #DigitalTrust #IndustrialCybersecurity

#Industry4\_0 #FactoryAutomation #MachineLearning #AI #DigitalManufacturing

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