



The Low-Code/No-Code CNC Automation Application Builder >>

Connect. Automate. Adapt.

Design and deploy custom CNC automation and process control applications using functional block programming—no traditional coding required.

Reduce automation development from months to days – or even minutes.



Accelerate automation and integration timelines



Bridge data gaps across machines, devices, and software systems

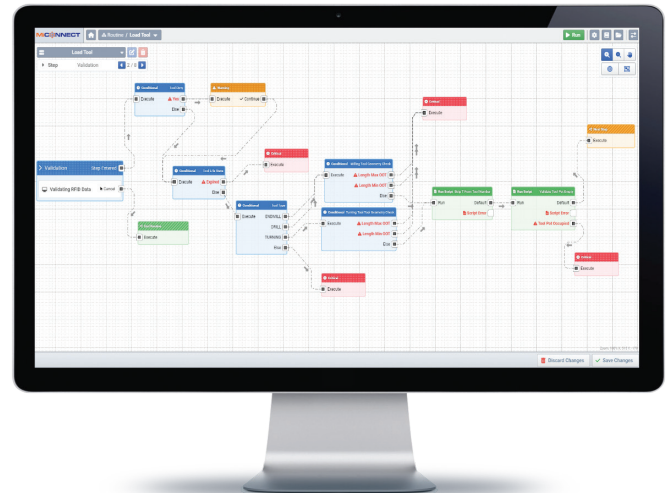


Adapt workflows instantly without redeploying software

MiConnect Editor & Run-Time Architecture

Editor - The MiConnect Editor is where applications and workflows are created using a flow chart style design builder. Engineers define logic, connect devices and software systems, and design the workflows that drive automation.

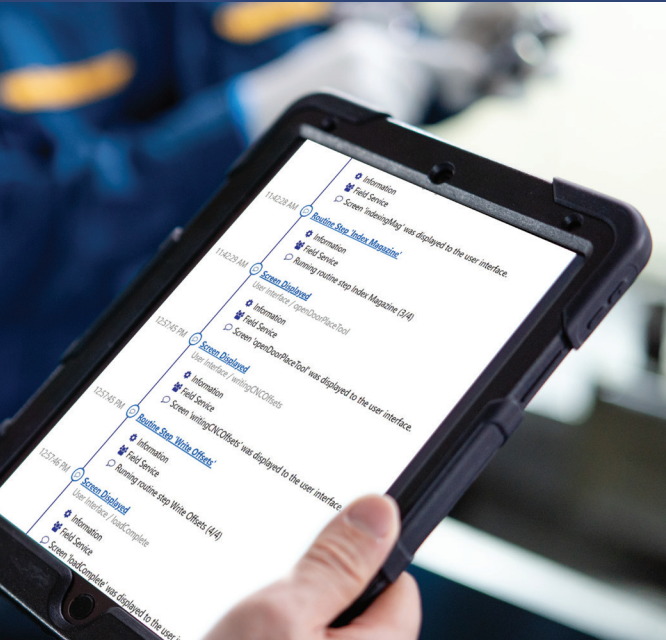
Run-Time - The MiConnect Run-Time is the shop-floor execution layer where applications come to life. Operators interact with custom screens, prompts, messages, and status displays, while MiConnect executes logic, validates steps, and coordinates systems in real time.



Manufacturing Applications

- > Bridge Data Gaps
- > Connect + Control Automation Systems
- > Operator Guidance
- > User Authentication
- > MES Integration
- > Manufacturing Cell Orchestration
- > Read + Write Control Registers
- > Auto-Load Part Programs
- > Add Systemized Securities





How MiConnect Works

- 1. Connect Physical & Software Systems**
Easily integrate and control communication between machines, automation devices, and enterprise systems within a single platform.
- 2. Build Logic with Functional Blocks**
Create workflows using **visual, flowchart-based functional blocks** that define actions, conditions, and progression – no custom coding required.
- 3. Deploy, Change, and Scale**
Run applications in production and **adapt instantly** as processes evolve – without downtime, recompiling, or system re-integration.

Key Capabilities

- **Functional Block Programming** - Build applications using pre-engineered functional blocks – with the ability to create **custom function blocks using JavaScript or TypeScript** – dramatically reducing development time and risk.
- **Pre-Built Device & Software Plugins** - Native support for CNC controls, robots, scanners, gauging systems, RFID/barcode, databases, MES, and supervisory platforms – eliminating the need for custom drivers and middleware.
- **Rapid Development & Integration** - Reduce programming and integration time from months to days – or even minutes.
- **Smart Process Control** - Conditional logic verifies each step before advancing, while custom interfaces guide operators, enforce best practices, and reduce variability.
- **Industrial Protocol Support** - Ethernet/IP • Modbus • OPC UA • TCP/IP • REST API • SQL Databases
- **Data Logging & Traceability** - All actions and data exchanges are timestamped and recorded for quality, auditing, and analytics.
- **Flexible by Design** - Modify workflows, add devices, or change logic at any time, without rewriting software or redeploying applications.

Build Automation That Evolves With Your Factory

From standalone applications to centralized control of complex machining cells, MiConnect unifies machines, automation, and systems into one adaptable manufacturing platform.

Learn More:

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