ARTISAN TECHNOLOGIES

AUTOMATION SOLUTIONS

At Artisan Technologies, we specialize in delivering cutting-edge robotics and automation solutions tailored to your needs. From custom software development for robotic systems to AI-driven machine vision and predictive analytics, we empower industries to optimize performance and streamline operations. Our expertise spans PLC programming, and the integration of IoT and smart factory solutions. Whether you need digital twins for simulation, end-to-end automation control, or robotic process automation (RPA), we provide the tools, support, and training to drive innovation and efficiency in your business.

Service Offerings

- Bridging the Gap Between Machines and IT Systems
  - Artisan Technologies empowers manufacturers to seamlessly connect shop floor machinery with enterprise IT systems—including ERP, MES, WMS, and databases—through smart automation and intelligent integration.
  - Unified Data Flow: Integrate PLCs, robots, and sensors directly with IT applications to ensure real-time visibility and synchronized workflows.
  - Low-Code Process Automation: Our Artisan Edge platform offers a visual flow engine that simplifies the connection between machines and enterprise systems, enabling rapid deployment without extensive coding.
  - ERP & Database Integration: Whether it's SAP, Oracle, Microsoft Dynamics, or a custom SQL backend, Artisan can read/write data in real time from machine-side systems to IT layers—facilitating traceability, scheduling, inventory updates, and more.
  - Modular Connectors: Prebuilt modules enable drop-in integration for systems like print-and-apply, barcode scanning, and digital twins, allowing full automation of labeling, tracking, and quality verification.
  - Smart Factory Enablement: With support for industrial protocols and cloud-based analytics, we ensure your plant floor is always in sync with business systems.
- Custom Robotics Software Development
  - Design and development of custom software for robotic systems.
  - Integration of robotic arms, mobile robots, and drones with proprietary control software.
  - Development of software for industrial automation processes.
- Machine Vision and AI Integration
  - Implementation of machine vision systems for quality control and automation.
  - Development of AI-driven algorithms for object recognition, defect detection, and pattern analysis.
  - Integration of AI and machine learning models for predictive maintenance and decision-making.
- PLC and Embedded Systems Programming
  - Development and programming of PLC (Programmable Logic Controller) systems for industrial automation.

- - - Embedded systems design and programming for robotics and IoT (Internet of Things) devices.
    - Real-time control systems development for high-precision machinery
  - Print and Apply Services
    - Automated Labeling Systems: Design and integration of automated print-and-apply systems for industrial and manufacturing environments. These systems streamline the labeling process by printing labels on-demand and applying them to products or packaging in real-time.
    - Custom Labeling Solutions: Development of custom labeling software to meet specific industry requirements such as product tracking, compliance, and serialization.
    - High-Speed and High-Volume Labeling: Implementation of high-speed print and apply solutions for large-scale production lines, ensuring accurate label placement without slowing down the manufacturing process.
    - Integration with Robotics and Automation: Integration of print-and-apply systems with existing robotic arms or conveyors for fully automated packaging and distribution.

- Barcode Scanning Services
  - Barcode Scanning System Integration: Design and implementation of barcode scanning systems for inventory management, quality control, and traceability in industrial and manufacturing settings.
  - Handheld and Fixed-Mount Scanning Solutions: Providing both handheld scanners for operators and fixed-mount barcode scanners for fully automated systems, adaptable to various industries and applications.
  - Real-Time Data Collection: Integration of barcode scanning systems with IoT and cloud-based platforms for real-time tracking and data collection, enabling better decision-making and analytics.
  - Custom Software Development for Barcode Systems: Development of custom software to interface with barcode scanners, ensuring compatibility with existing ERP (Enterprise Resource Planning) or warehouse management systems.
  - Label Verification and Quality Assurance: Implementation of barcode scanning solutions to verify label accuracy and ensure proper coding of products for compliance and inventory management.
- Robot Simulation and Digital Twin Services
  - Development of digital twins for robotic systems to simulate and optimize performance.
  - Robot simulation services for process planning, testing, and training.
  - Virtual commissioning of robotic systems to reduce deployment risks.
- Robotics and Machine Control Consulting
  - Consulting services for robotics and automation strategy development.
  - Feasibility studies and ROI (Return on Investment) analysis for automation projects.
  - Technical advisory for integrating robotics into existing production systems.
- Maintenance and Support Services
  - Ongoing support and maintenance for custom automation software and control systems.
  - Remote monitoring and diagnostics for robotic systems.
  - Upgrades and optimization of existing automation software.
- Robotic Process Automation (RPA)
  - Development of RPA solutions to automate repetitive tasks in software applications.