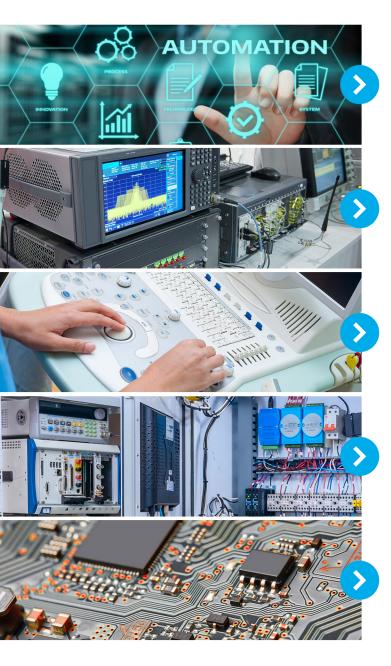
# CUSTOM VALIDATED TEST SYSTEMS

# You. At home. On time. That's Good Automation.



### **Medical Device Test Systems**

FDA Regulatory Compliance 21CFR820.70, 21CFR820.72 Part 11 Compliance Quality Management System Validation Planning Protocol Development Software Validation Process Validation Test Method Validation Test System Integration Obsolete System Updates Measurement System Analysis Requirements Traceability Risk Management LabVIEW LabWindows CVI TestStand C, C#, C++ Python Electrical Circuit Design Data Acquisition High Speed Control Automatic Test Equipment FPGA development Mass Interconnects with ITA's Custom Validated Fixtures Mechanical Design Gage R&R

UTOMATION

## **Successful Deployments**

#### Vision Inspection System

- Detected all defects on a translucent plastic surface
- Captured and processed images with NI Vision software
- Developed algorithms that detected scratches, pitting, and flow lines
- Integrated motion controller to move DUT relative to the camera

#### **Robotic Arm Test System**

- Designed, built, and validated custom fixture for robotic arm
- Built and optimized robotic arm controls with LabVIEW software, allowing interaction with DUT.
- Fully automated dynamical loads test steps, eliminating data entry

#### Programming and Test Systems

- Developed software requirements
- Wrote and performed dry-run of Software Validation Protocol
- Improved and added new features to the software
- Combined two processes into one to improve efficiency

#### **Electromechanical Test System**

- Developed LabVIEW software for electrosurgery device testing
- Built controls for pneumatics, camera, and process indicators
- Wrote custom serial commands for communication with DUT
- Logged data to a remote database with Part 11 compliance