
BUILDING AUTOMATION FOR FLEXIBILITY AND SPEED TO MARKET



JR AUTOMATION™
A Hitachi Group Company

Craig Fahrnbach

Operations Manager, JR Automation

- Expert in controls and mechanical engineering, operations leadership, corporate strategy, and automation
- 35 years industry experience in Automotive, Industrial Automation and Medical industries
- Leads organization's market focus with medical customers and validation efforts





Customers Concerns Today

- Supply chain issues
- Labor shortages
 - Available candidates
 - Skilled candidates
- Quality issues
- Remaining competitive

Remaining Competitive

- Quicker to market
 - Our Supply Chain is “stocking” high volume components where possible to help mitigate
- More flexibility
 - Standard products help reduce delivery time and allow us to offer lower price
- Higher volume
- Higher quality
 - Focusing on Continuous Improvement of our internal processes and procedures help minimize and/or eliminate quality concerns
 - We focus on total product solutions and value add for our customers



Choices for Automation

Pre-Designed System



OR



Custom Automation

Turnkey Solutions for Automation

Pre-Designed
System Foundation



Custom Automation
Expansions



**Turnkey
Solutions**

Why Use Turnkey Solutions?

Get Into Production Fast

- Pre-designed modules cut initial concepting, design and build time
- Standardized components for lower risk and reduced cost implementation
- Predesigned assembly and process stations
- Easily scalable from pilot line to commercial production



Turnkey Solutions Work for Many Industries



MEDICAL &
LIFE SCIENCES



CONSUMER GOODS



ELECTRONICS



FOOD AND BEVERAGE



AEROSPACE



E-MOBILITY



BATTERIES AND ENERGY



INDUSTRIAL



AUTOMOTIVE

Case Study

FlexChassis™ Modular Automation Platform

A proven system based on standardized, pre-designed modules that can be configured to meet a very wide range of manufacturing objectives for assembly and process applications.



Features & Benefits

Modular Design and Operational Flexibility

- Chassis accommodates a very wide range of assembly and process stations
- Full digital control and process monitoring
- Linear motors for speed, accuracy and operational flexibility
- Maintains very high OEE

FlexChassis™
Modular Automation Platform

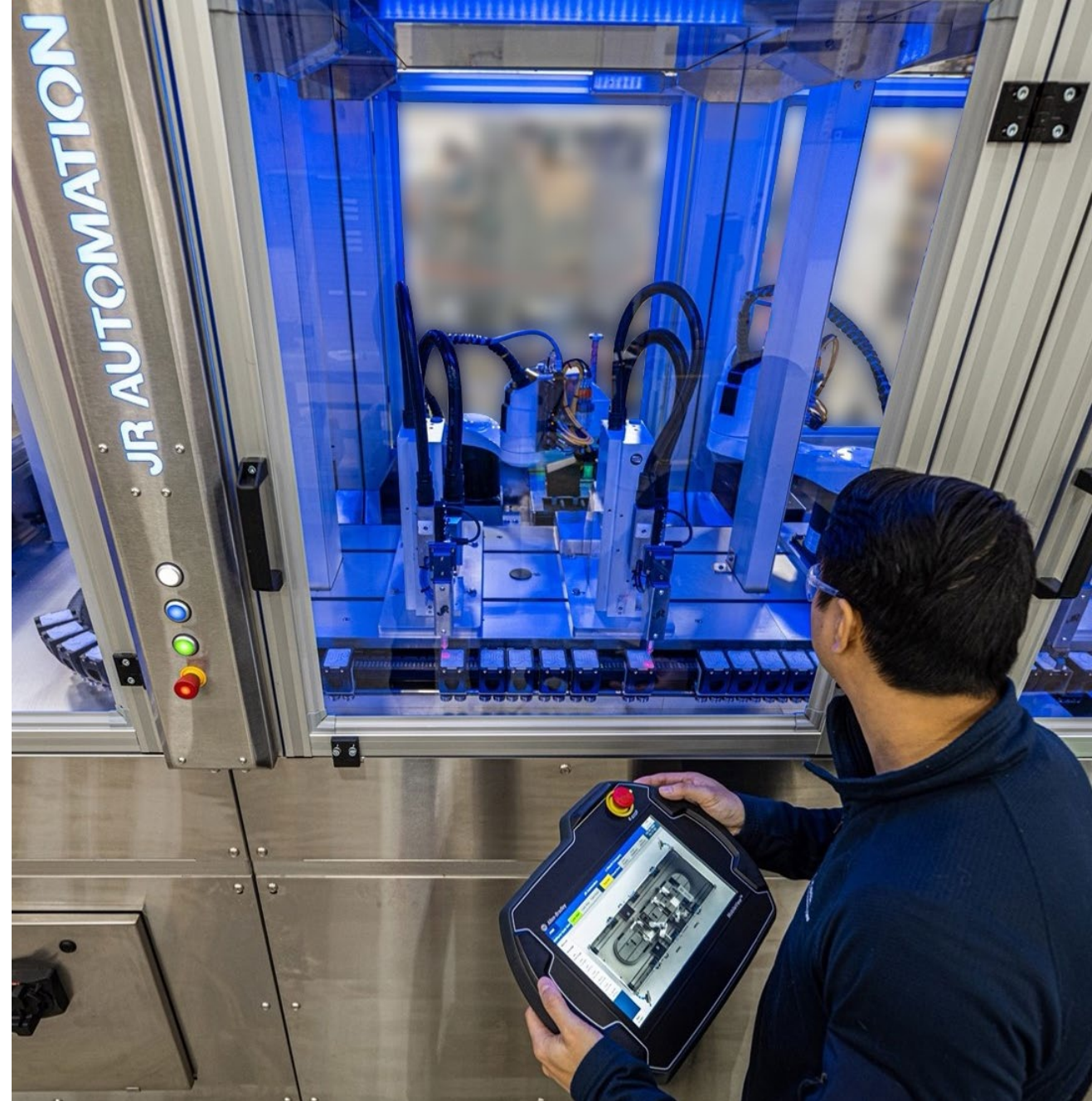


FLEXCHASSIS

Features & Benefits

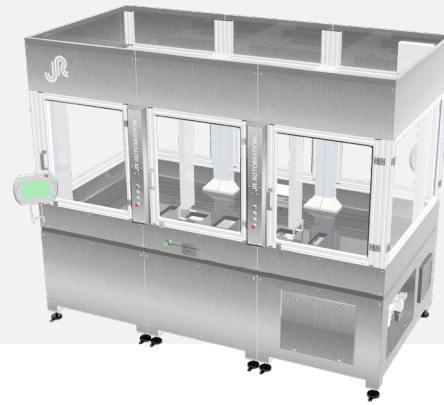
Optimal Fast Production Changeovers

- Accommodates mixed manufacturing, product updates, emergency orders
- Standardized modular components are easy to reconfigure and reconnect
- Linear motors allow for multiple configurations through human machine interface (HMI) recipe selection



FLEXCHASSIS

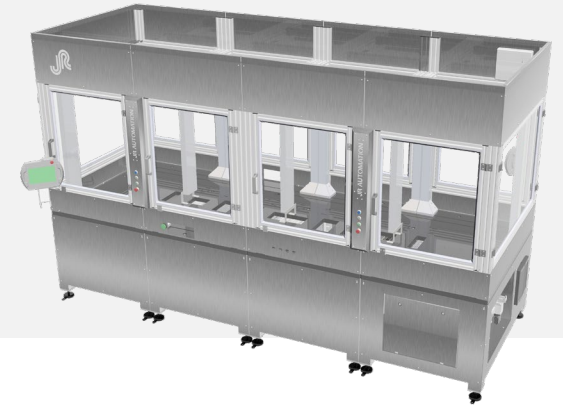
Modular System Components



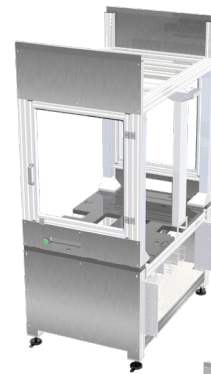
3 Module System



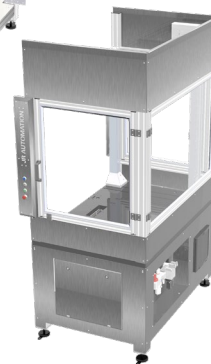
Insert New Module



4 Module System



Center Module



End Module

Easily reconfigurable to desired length and geometric complexity by assembling multiple modules

- Custom configurable top plate allows use of multiple prime movers
- T-tracks capable for infinite geometric adjustability
- The module "roof" area can be used to house station process controls or be used for installing overhead air purity hardware

FLEXCHASSIS

Manufacturing Operational Capabilities



POSSIBLE PROCESS STATIONS

ULTRASONIC WELDING

SNAP FIT

ADHESIVE APPLICATION

DECORATING

HEAT SEALING

HEAT OR ULTRASONIC FOIL SEALING

LASER TACKING

JOINING MATERIALS

LASER ABLATION

LASER OR ULTRASONIC CUTTING

REAGENT FILL/SEAL

DRUG HANDLING



FLEXCHASSIS

Compliance, Industry Benchmarks and Certification Information

Clean Manufacturing Capabilities

- Meets various ISO Classes based on configuration required
- HEPA filtration
- Stainless steel construction for washdown or wipe down (for aseptic and hygienic applications)



Questions?

Connect with us to learn about our modular automation platforms for your operations.

Craig Fahrnbach

craig.fahrnbach@jrautomation.com

+1 (615) 365-2635