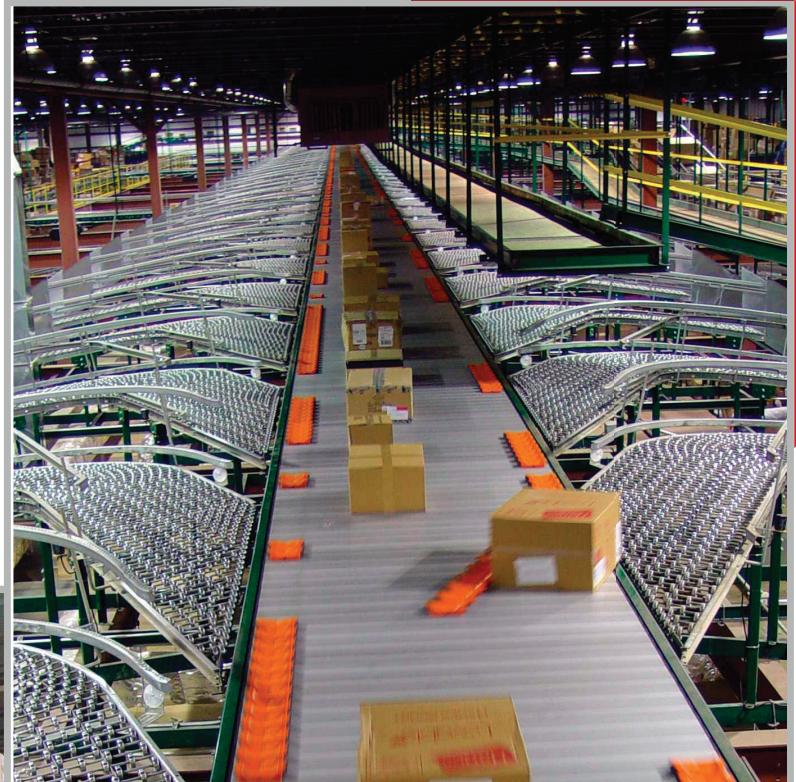


**Controls
Integration**



Expertise in Material Handling Controls

JR CONTROLS
CONTROLS INTEGRATION



Distribution Control Systems

Moving materials efficiently through a warehouse is the lifeblood of any distribution center. Our controls are designed to integrate picking conveyors that transport cartons that are placed on the conveyor by operators to move them through the rest of the process.

These systems integrate and control the order of operations through picking, sortation and palletizing, ultimately leading up to shipping. Our controls systems are generally PLC based and utilize remote control panels in each area of the distribution process.

A PC application can provide customers' WMS with information related to the case or pallet product's identity and quantity. These control systems typically have multiple system monitor screens for monitoring and troubleshooting.

Benefits:

- Easy troubleshooting, lower field wiring installation cost
- Communicate with a customer host system
- Integrate barcode reading utilizing either laser scan or image based vision systems
- Ability to integrate print and apply and other auto-id systems eliminates the need for multiple vendors to support installations, greatly simplifying start-up



Auto Assembly Control Systems

We customize automotive conveying controls that manage the movements of parts on a timely or just-in-time basis per a set production schedule while keeping track of the progress of those parts. These systems require high reliability and uptime while allowing for easy maintenance and troubleshooting using control components specified by the customer to maximize productivity and eliminate unnecessary downtime.

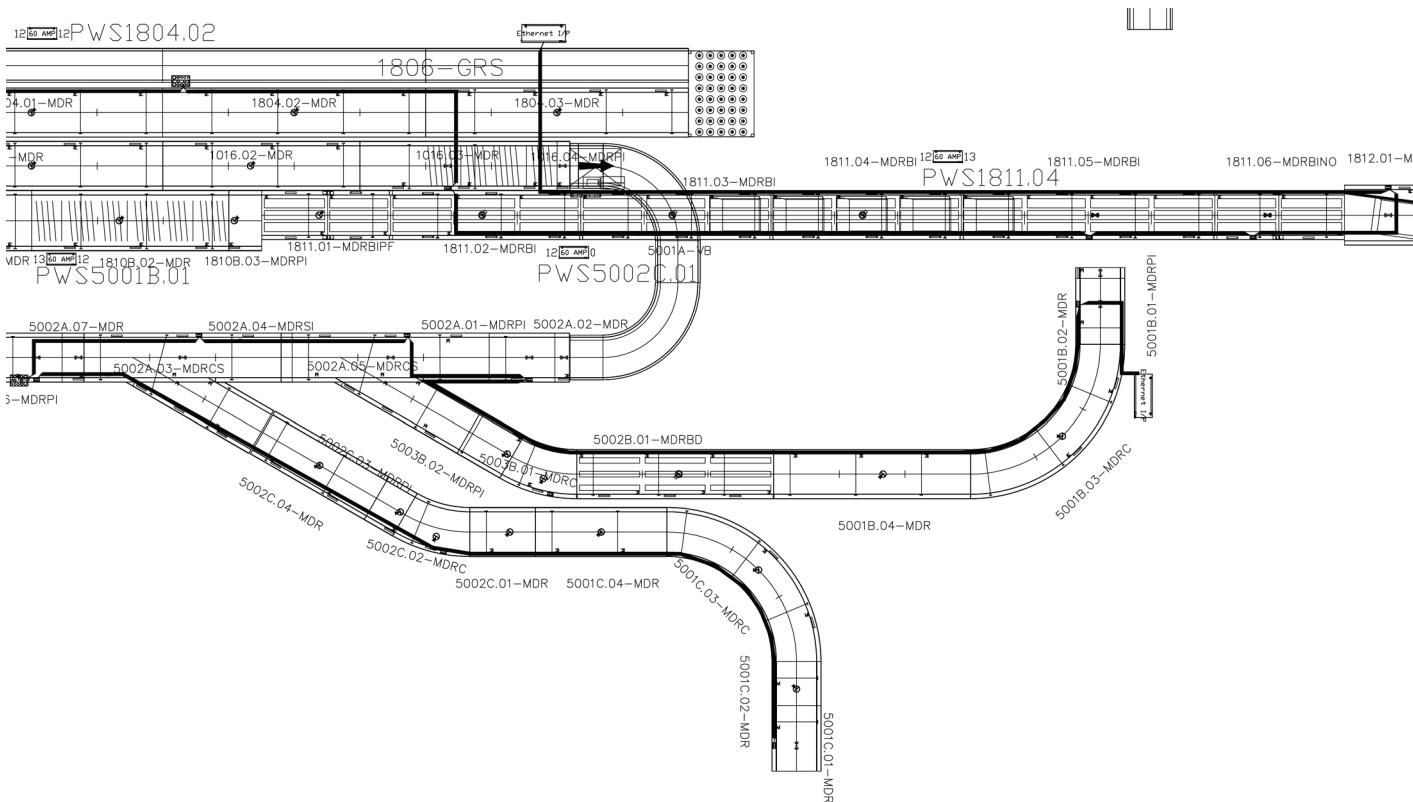
Typically modular in design, our systems allow for easy reconfiguration for future production requirements and changes. We seamlessly integrate barcoding, RFID, and many specialized devices associated with assembly including torque tools, ovens, electrical testers, tolerance checks, inspection cameras, and robots.

Benefits:

- Control systems interface with a supervisory MES system
- Highly customizable, adaptable for line changes
- Ability to seamlessly integrate a wide range of industrial protocols including, but not limited to: Ethernet/IP, DeviceNet, ControlNet and Modbus TCP
- Increased efficiency, consistency and accuracy
- Multiple system monitor screens for monitoring

We keep your business moving.

JR Controls has been specializing in turnkey material handling control systems integration since 1984. We are a full service controls integrator with an emphasis and focus on product, carton and pallet based material handling systems.

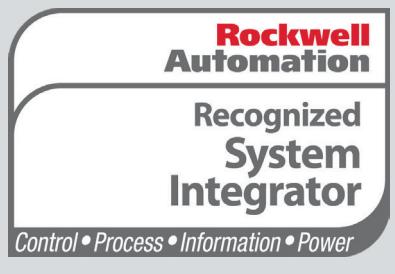


We can provide system design, hardware specifications, schematic design, PLC engineering, graphical interfaces, control panel fabrication, commission, and training.



Expertise Highlights

- + Specialize in the engineering of systems and controls that optimize operations
- + Offer system design, hardware specification, schematic design, PLC engineering, graphical interfaces, control panel fabrication, system commissioning and training



We engineer custom, user-friendly controls for your material handling needs.

With over 170 years of combined controls experience, our engineering team strives to always be at the forefront of controls technology through continuous growth and training. Our extensive experience permits us to engineer control systems with confidence.

Our focus is on all aspects of product, carton and pallet based material handling systems. These systems range from very small single conveyor projects up to very large distribution center material handling systems. We have successfully completed systems in many different industries including manufacturing, distribution, JIT assembly, automotive, food and beverage, and production environments.





Food & Beverage Control Systems

JR Controls provides electrical control systems to food and beverage customers that typically integrate conveyors that transport packages from filling or packing machines to conveyors where cases are created, sealed or shrink wrapped. The cases proceed to an accumulation and merge area where they are sent to a high speed palletizer in pallet load quantities to then be sent to order fulfillment areas.

Benefits:

- Reduced downtime and waste during handling
- Highly customizable, adaptable for line changes
- Increased efficiency, consistency and accuracy
- Control order of operations



Manufacturing Control Systems

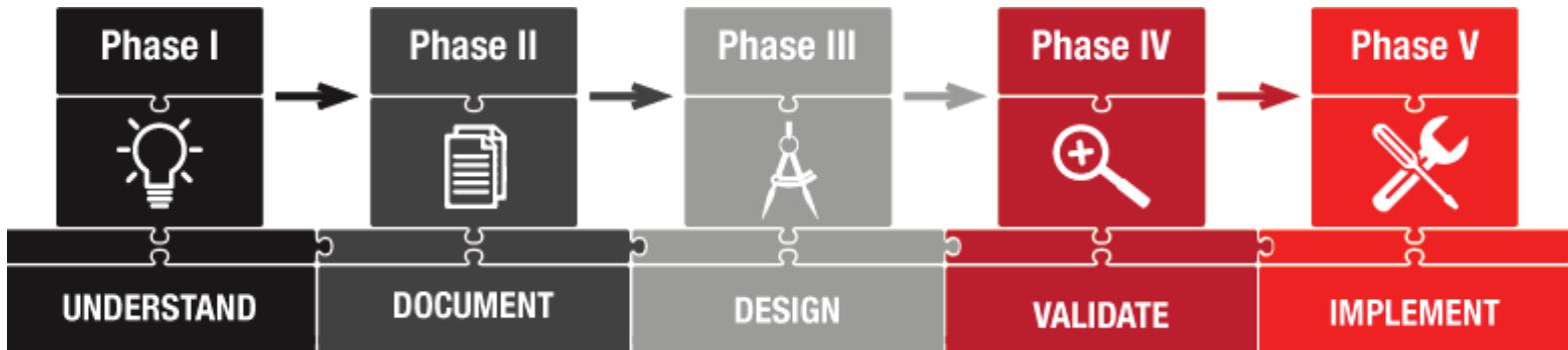
Manufacturing controls systems are one of our specialties and we have the experience to integrate and operate even your toughest lines.

These control systems are designed to monitor the progress of parts through the manufacturing and finishing processes. Our control systems are typically recipe-driven allowing the system to properly configure specific operating parameters for each item being produced and utilize multiple system monitoring screens for troubleshooting and line-by-line monitoring.

Benefits:

- Part tracking and process monitoring
- Highly customizable, adaptable for line changes
- Increased efficiency, consistency and accuracy
- Configurable for changing needs

Our Project Process



Phase I



JR Controls' primary responsibility as your control systems integration partner is to understand the components should ideally work together. By learning about the details of the customer application and environment, we are able to develop recommendations that meet the needs of the unique system.

Phase II



The next step in JR Controls' highly regimented process is to carefully document all the specifications of the project and develop a detailed written description of the work to be performed. This is carefully reviewed by all parties to ensure that all factors of the project have been taken into consideration prior to design.

Phase III



JR Controls develops the hardware and software design based on the approved specifications. Constant cross-checking to the plan is performed to ensure that the project goals and budget are being met. The electric system is commissioned, software is developed and the components are tested.

Phase IV



Our process and our dedication to excellent implementation requires final verification and validation of all hardware and software components. The original design documents that were approved in Phase II are carefully consulted to validate the outcomes from the design phase.

Phase V



As a turn key provider of system controls projects, we personally install every controls system that we design and commission. We coordinate with the end-user staff to make sure that they are properly trained in using the new or updated system and help them understand maintenance needs.

