

# Complete Automation™ Solutions for the Automotive Industry

Automotive manufacturers and their suppliers have persistent process requirements throughout their facilities - from corporate functions to shipping completed assemblies. Rockwell Automation has the knowledge and expertise to provide complete solutions to integrate the Automotive Enterprise, including:

- Standard products and networks configured to meet each manufacturing area's needs
- Application solutions that support agile and lean manufacturing goals of quicker response, lower life cycle costs and increased quality
- Open information connectivity that allows for easy harvest of plant floor data
- A wide range of engineering, integration and project management services to deliver the right solutions

Together we can meet the challenge of reducing time to market, optimizing manufacturing, improving plant uptime and driving regulatory compliance across your enterprise. Our experts offer solutions for your:

- Press Room
- Body Shop
- Paint Shop
- Assembly
- Powertrain Lines
- Components Lines
- Material Handling
- Facilities
- and other critical operations including your supply chains

## Knowledge and Experience

With the collective knowledge of our team of over 700 engineering specialist located across the globe, we enable clients to take advantage of our proven project methodologies and leverage our engineering best practices that result from years of successful automotive experience.

## Applications

### Automotive Enterprise Manufacturing Information Management Systems

Rockwell Automation experts apply knowledge of automotive operations with information management technology to integrate



the enterprise. Key operations and subsystems integrated by our manufacturing information management systems include:

- Production Control
- Supervisory Control
- Production Monitoring
- Andon Systems
- Process Monitoring
- Quality Systems
- Material Management
- Parts Call Systems
- Part Pick Systems
- Error Proofing Systems
- Tracking Systems
- Asset Management
- Energy Management

## Integration Management Services

Rockwell Automation Integration Management Services improve manufacturing processes, productivity, throughput and implementation of new product lines for automotive manufacturers and suppliers. Our five-phase process clearly defines roles and assigns responsibilities for the various stakeholders on complex programs. It defines a process whereby requirements are identified and an audit process is established to ensure the desired outcome will be achieved.

These scalable, flexible Integration Management Services provide a methodology to monitor the controls and information integration process, make certain client requirements are met and increase the deployment team's effectiveness. As a result our clients can

**Rockwell  
Automation**

**Global Manufacturing Solutions**

improve their ability to get their product to market faster with lower costs, higher quality and improved reliability of their process.

## **Burner Management**

A Burner Management System (BMS) is a safety system that permits safe start-up, operation and shutdown of boilers, furnaces, ovens and similar devices that are used throughout the automotive facility. The safety system's primary purpose is to prevent conditions from developing in a unit that could lead to an explosion or a fire. The BMS accomplishes this task by executing a sequential program which checks to ensure the proper permissives are satisfied before allowing the system to take a specified action (e.g., light-off of a burner). During normal operations, the BMS continuously monitors field limit switches and flame scanners to ensure the boiler, furnace, kiln or oven is operating safely. Upon receiving a burner shutdown command from the operator or upon detection of an unsafe operating condition via a field switch, the BMS sequentially shuts down a burner or series of burners by stopping the fuel flow to the burner(s).

## **Metalfforming Automation Control Solutions**

Rockwell Automation offers experience, process knowledge, products, services and solutions to meet the demanding and growing requirements in manufacturing specifically involved in stamping, forming and fabricating of metals. For over 60 years, Rockwell Automation has been helping automotive manufacturers with their metalfforming automation control needs. Allen-Bradley first introduced its relay clutch/brake controller in 1940. Today we use the reliable Allen-Bradley Logix to safely control presses and the surrounding manufacturing process found in some of the most modern manufacturing facilities in the world. Rockwell Automation offers a complete line of standard and custom press and automation control solutions for the pressroom. These controls are designed for mechanical and hydraulic stamping presses (gap, straight side, transfer), tandem lines, forging, die casting and motion control applications, including STFPro (for servo transfer feeds), FeederPro (for coil feeds) and AxisPro (for interpress automation).



## **Power and Energy Management Solutions**

A Power and Energy Management Solution (PEMS) helps monitor, log and manage the use of electrical power and other plant utilities (e.g., steam, natural gas, compressed air, water) in your facilities. PEMS applications include:

- Load Profiling
- Cost Allocation
- Power Quality Monitoring
- Distribution System Monitoring
- Demand Management
- Emergency Load Shedding
- Power System Control

## **Industrial Network Services**

Studies have shown that approximately 90% of all network problems are related to physical media which is caused by poor network design, installation or choice of products. Rockwell Automation specialists deliver a suite of Industrial Network Services from strategic planning to proof of concept, design, installation, maintenance and troubleshooting to help avoid problems and maximize network performance for reliable data integration.

- Network Consulting
- Network Design
- Network Installation Management
- Network Media Certification
- Security Assessment
- Maintenance
- Troubleshooting
- Baseline Documentation
- Network Training

For more information about our automotive industry expertise, contact us at [projects@ra.rockwell.com](mailto:projects@ra.rockwell.com).