

# People and Asset Safety Services

Comply with Standards. Reduce Risk. Optimize Production.



LISTEN.  
THINK.  
SOLVE.®

## Tap Into Safety's Potential

How does your organization view industrial safety? Do you see it as an opportunity not only to meet compliance requirements, but also to reduce risk and maximize productivity?

Safety no longer needs to be a burden on productivity or a mere cost of doing business. Instead, bolstered by the emergence of seamless connectivity and modern control technologies, it can be a powerful tool that benefits your workers, your operations and your bottom line.

Our People and Asset Safety Services meet these needs. We can help you protect employees and comply with the latest standards. And we can work with you to find ways to improve safety and reduce risk while optimizing worker and asset productivity.

### Comprehensive Safety Services

Our safety services address hazardous-energy control, electrical safety and machine safety. These offerings can help protect your safety investments and ongoing program integrity:

**Hazardous energy control services** provide you with lockout/tagout (LOTO) solutions in a variety of environments to help you manage employee safety without compromising productivity

**Electrical safety services** help you proactively plan for routine maintenance and identify and mitigate potential conditions that could lead to arc flash or blast

**Machine safety services** are focused on helping you assess risks, achieve compliance, and improve productivity

## Hazardous Energy Control

Our comprehensive LOTO support can help you efficiently perform routine maintenance and meet compliance requirements for all electrical, mechanical, pneumatic, chemical, hydraulic or thermal equipment.

**LOTO** audits, services and training help you proactively manage employee safety while optimizing productivity.

- **Annual audit** support can help you confirm that equipment has not changed, and that every procedure in your LOTO process is both readily available and accurate
- **LOTO services** include the development of graphical safety procedures, which can be faster and easier to use than text-based procedures
- **LOTO training** for authorized and affected employees helps you maintain compliance

**Electronic LOTO** programs digitize part or all of your LOTO program to keep it current and help improve productivity.

Eliminating paper-based procedures, for example, can help you improve document control. And the ability to view procedures on smartphones or tablets can be faster and easier for workers, especially in remote or extended applications.

LOTO software allows you to store information about maintenance activities and LOTO-procedure usage across sites. This can help you verify that workers are properly using LOTO and potentially improve productivity. It also can help you reduce annual audit times by up to 85 percent.

One company modernized its LOTO program and reduced its average LOTO time from **30 minutes to 8 minutes.**

This led to an additional 12 hours of uptime per month and annual savings of **more than \$500,000.**

### Benefits

**↑ 18%**  
INCREASE  
in employee  
efficiency

**↑ 13%**  
IMPROVEMENT  
in asset  
optimization

**↓ 80%**  
REDUCTION  
in auditing  
time

**↓ \$\$\$**  
REDUCTION  
in cost of machine  
maintenance, design  
and add-on  
safety solutions

“Failure to control hazardous energy accounts for nearly **10 percent** of the serious accidents in many industries.”

# Electrical Safety

Our exhaustive **Arc Flash** analysis and services aim to give you visibility into hazard exposures so you can make informed decisions on protecting employees. More than that, our services can help you keep your equipment running as intended.

## Analysis

We can conduct an arc flash study of your existing systems, modified equipment, or new equipment.<sup>1</sup> This can help you:

### Reduce Risk

- Our engineers provide a detailed analysis report, including a Protective Device Coordination (PDC) study and a short circuit current study
- We give you recommendations to help reduce arc flash hazards and correct over-duty equipment, and data to help improve protective-device coordination

### Increase Competency

- We can provide safety training and energized work permits for employees or contractors

### Improve Documentation

- We develop line drawings to give you an accurate, up-to-date model of your electrical system

### Achieve Compliance

- Our services are designed to meet or exceed the requirements of CSA Z462, IEEE-1584 and NFPA 70E

## Refurbish

We can perform a service update on an existing arc flash study or a comprehensive review on an outdated study.

## Maintain

An annual maintenance agreement for a new or existing arc flash study can help you monitor and maintain any system changes that impact the study.

## Remediate

To help you reach an acceptable risk level, we offer mitigation solutions for equipment requiring modifications.

About 2,000 workers are annually admitted to burn centers for extended-injury treatment for arc flash.

Arc Flash Prospectus, IEEE, 2017

# Machine Safety

Our machine safety services address your needs across the entire functional safety lifecycle. We can help you protect workers and achieve regulatory compliance, and also improve productivity.

**Scalable Safety** assessments identify and evaluate risks at any level, whether it's one machine, or a complex plant. This can help you make well-informed decisions around protecting workers.

- **Conformity audits** provide a high-level safety analysis of machines, and can show compliance or noncompliance of predefined attributes
- **Guarding evaluations** identify hazard and guarding recommendations for immediate actions
- **Basic safety assessments** are conducted by one of our safety engineers or consultants, and include safety-improvement recommendations
- **Team-based risk assessments** offer the features of basic safety assessments but also include in-depth analysis for special or critical machines, and an opportunity for the team to increase its knowledge

**Design** services support the development of comprehensive safety systems. We can review your safety-circuit design for compliance to a specified performance level, and help make sure that your safety devices are properly applied to protect personnel. We can also conduct a design review to help reduce hazards.

**Installation and Validation** services help certify that your machine safety system is properly installed, and performing within defined parameters and standards. We can also support your installation and validation processes with the appropriate safety products, standards and training for your employees.

**58 percent** of our designs recommend a **lower-cost approach**

## The Safety Lifecycle Approach



- 1** Assessment
- 2** Safety Functional Requirements Specification (SFRS)
- 3** Design and Verification
- 4** Installation and Validation
- 5** Maintain and Improve



Comply with Standards



Reduce Risk



Optimize Production

<sup>1</sup> A limited fixed scope service is also available on low and medium voltage Motor Control Center (MCC) lineups.



**Integration and Start-Up** support is designed to help you enhance machine productivity while maintaining workplace safety. These services can include the following:

- Circuit/logic design
- Installation
- Arc flash remediation
- MCC arc flash upgrades

**Compliance** consulting can help you comply with industry and global standards, and design systems for functional safety. Such expertise can be crucial during risk assessments, standards identification, system engineering, evaluation and self-certification.

Specific areas of compliance we can help you with include:

- Functional safety (ISO 13849-1 and IEC 62061)
- ISO, ANSI, IEC, CE, OSHA, NFPA and CSA compliance
- CE conformance

**Training** that is provided by our industry-leading experts can familiarize your workers with current and emerging industry standards, and provide them with examples for when to apply safety components. Training programs are customized to your exact needs, and can be provided either on-site or in a convenient Rockwell Automation location.

- **Safety product training** educates workers about safety-product fundamentals and applications
- **Safety standards training** can help familiarize workers with global, regional and local standards
- **TÜV certification training** is certified by TÜV Rheinland and designed to educate workers on current best practices for functional safety

“Rockwell Automation provides the most complete offering of machine safety products, services and e-tools ... and employs more TÜV Rheinland-certified professionals than any other company.”

ARC Advisory Group: Machine Safeguarding Solutions  
Global Market 2015-2020 Report

## CUSTOMER SUCCESS STORY

### Global Battery Manufacturer

#### Challenges

- Unknown safety status on 200+ machines
- Budgetary/prioritization

#### Rockwell Automation Delivered Solution

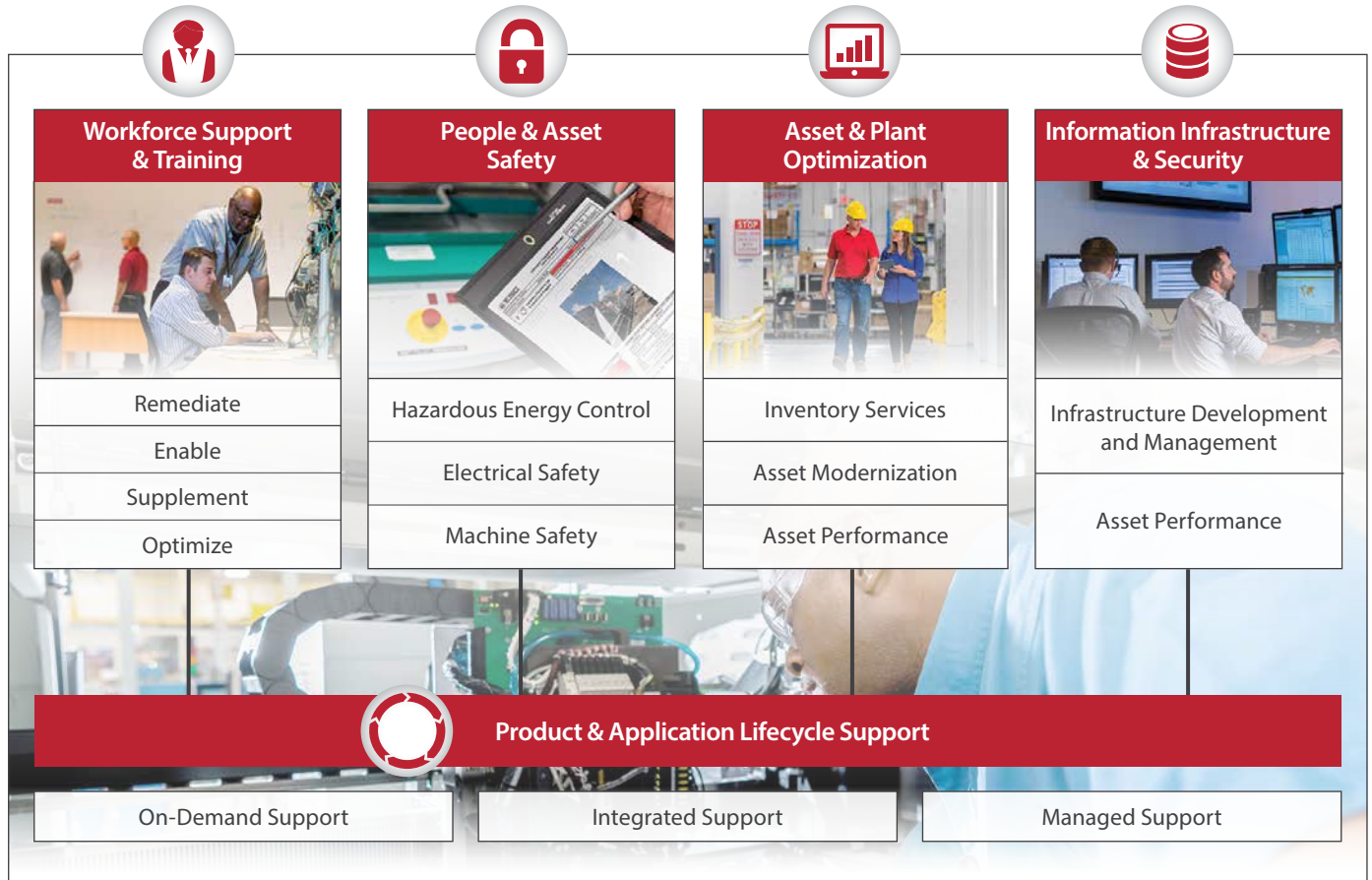
- Safety audit
- Team-based risk assessment/Hazard assessments
- Safety Functional Requirements Specification (SFRS)

#### Results

- All machines assessed
- Mitigation specifications developed
- Customer timeline met

Best-in-class manufacturers who invest in safety achieve 5-7% higher OEE, 2-4% less unscheduled downtime and **less than half the injury rate** of average performers.





For more information about how we can help you solve your unique business challenges, contact your local authorized Allen-Bradley distributor or Rockwell Automation sales office, or visit: [rok.auto/services](http://rok.auto/services)

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