



Machine Safety Solutions

Design Group is a premier supplier of new and retrofitted machine safety system solutions for equipment across a broad range of industrial manufacturing industries. For over 30 years, Design Group has delivered successful engineering solutions to the industry's leading companies.

As the industry trend increases focus and capital prioritization on the safety of the manufacturing environment, Design Group can provide a custom solution to meet your safety needs, putting the safety of your people first. We have an experienced team and a nationally supported program with a robust set of standards for compliance and consistency for our clients across all regions and industries.

Complete Safety Solution

- Overall Program Management
- Client Safety Standard Creation
- Safety Functional Requirement Specification Creation
- Risk Assessment
- Machine Guarding/Controls Evaluation
- Safety Circuit Design Verification
- Detailed Electrical Safety System Design
- Detailed Mechanical Guarding Design
- Safety System Hardware Procurement & Integration
- Safety System Validation
- Site Installation Management & Startup Support
- Vendor & Contractor Coordination

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Safety Program Approach

Phase 1: Assessment

- Hazard Based Risk Assessment
- Machine Guarding/Controls Evaluation
- Conceptual Design for Remediation
- Budgetary Capital Estimating
- Define Risk vs Cost for Prioritization

Phase 2: Design

- Machine Guarding & Safety System Detailed Design
- Safety Circuit Design Verification
- Safety Hardware Procurement

Phase 3: Execution & Validation

- Contractor/Project Management
- Safety System Integration
- Functional & Induced Failure Validation
- Installation & Commissioning

Safety Expertise

- Safety Standards Knowledge (ISO, IEC, ANSI, OSHA, etc.)
- Functional Requirement Safety Specifications
- Standard Operating Procedures
- Alternative Means to Lock Out Tag Out
- Safety Category, Performance Level and/or Safety Integrity Level
- Safety Solutions Partnerships with Safety Hardware Industry Leaders
- Safety Platform Solutions (Allen-Bradley, Siemens, SICK FlexiSoft, PILZ, etc.)
- Small Single Function Safety Relay Systems
- Medium Semi-Complex Configurable Safety Relay Systems
- Large Multi Zone/Machine Safety Control Systems utilizing a Safety PLC
- Custom Machine Guarding Design
- In-House Control Panel Fabrication
- Safety Compliant Machine Replacement for Risk Mitigation

Safety System Design

Safety System Control

- Layered Above Existing Machine Controls
- Integrated Safety & Machine Controls
- Safe Limiting Speed Monitoring
- Electric, Pneumatic & Hydraulic Isolation
- HMI Integration for Status/Troubleshooting
- Safe Torque Off VFD

Safety System Hardware

- Non-Contact & Locking Gate Switches
- Light Curtains, Safety Mats & Area Scanners
- Multifunctional Access Safeguards
- Trapped Key Solutions
- Emergency Stops
- 2-Handed Jog Control

Our Professionals

- 45+ Design Group Offices
- CMSE® Certified Machinery Safety Experts
- TÜV Rheinland FS Technician
- Machine Safety Project Managers
- Machine Safety SME's
- Machine Safety Controls Professionals
- Machine Safety Site Execution Professionals

Industries

- Beverage
- Dairy
- Food
- Household & Personal Care
- Life Sciences
- Industrial
- Semiconductor
- Chemical

Design Group operates from 45+ offices in the US and India providing engineering, consulting, and technical services to the world's leading companies in the Food & Beverage, Life Sciences, Advanced Technology, Industrial, and other market sectors. Our nearly 1500 technical and engineering experts have direct industry experience in industrial automation, control system integration, facility and process engineering, architecture, construction management, regulatory compliance, enterprise technology, and other consulting services.