

# Safety

The Professional Safety staff of ESI is trained and experienced in a wide range of safety related issues. Capabilities encompass accident prevention and forensic assignments for both products and environments; including analysis of the man/machine interface and System Safety analyses, to reduce and control hazards and demonstrate compliance with federal, state, local, and voluntary codes and standards. We also conduct evaluations of safety signs and the safety information on the product and in product literature.

## Areas of Specialty

- Accident Prevention Analyses
- Accident Investigation/Reconstruction
- Human Factors Ergonomics
- Instructions and Warnings
- Safety Regulation Compliance
- Product Safety Investigations
- Consensus Safety Standards
- Safety Audits
- Job Safety Analysis
- Risk Analysis
- Human Performance/ Capabilities
- Perception Reaction Analysis
- Field Safety Campaigns



## Guarding

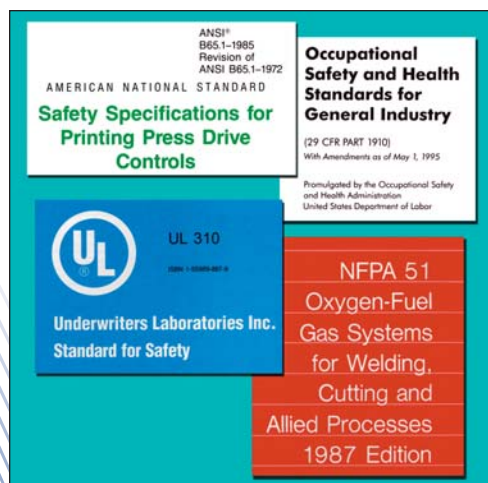
- Fixed
- Moveable
- Interlocked
- Light Curtains
- Trip Cords
- Presence Sensing
- Restraints

## Documentation

- Sales Literature
- Sales Letters
- Contracts
- Manuals
- Product Signs
- Field Campaigns

## Standards/Regulations

- Federal: OSHA
- State
- Local
- ANSI
- UL
- NFPA
- Offshore Standards



## Accident Investigation/ Reconstruction

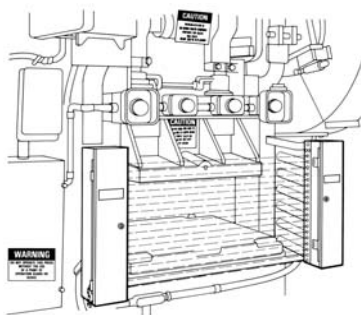
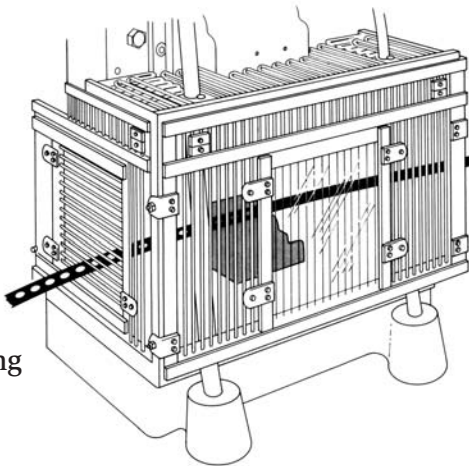
*Accidents – the unexpected random occurrence of undesired events which could result in serious injury or property damage.* Through investigation and reconstruction the information is analyzed to determine the causative factors.

## Product Safety

*Safety of a product is the control of hazards and potential hazardous conditions associated with that product throughout the life cycle.* We identify potential hazards or hazardous conditions during the design process by the use of analytical methods such as; Hazard Analysis, Failure Mode Effects and Criticality Analysis, Job Safety Analysis. A by-product of these analyses is identification of warnings for use in manuals and the safety signs for the product. Typical analyses would be of;

### Equipment

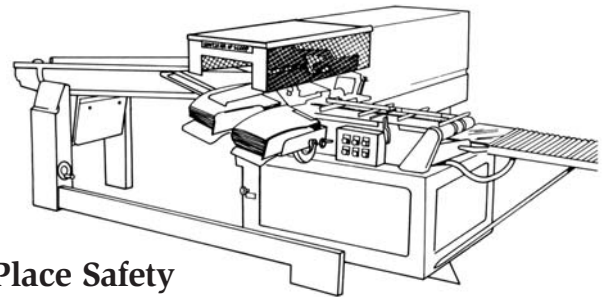
Agriculture  
Aircraft  
Construction  
Consumer  
Food Processing  
Forging  
Foundry  
Lawn Care  
Material Handling  
Metal Working  
Military  
Mining  
Packaging  
Paper Making and  
Converting



Petroleum Production  
Plant Production  
Power Tools  
Power Transmission  
Printing/Publishing  
Custom  
Transportation  
Wood Working

## Human Factors/Ergonomics

*Human factors/ergonomics is a multi-faceted technology defining the interface between the operator and the product.* ESI is experienced in the application of human factors/ergonomic principles in the design process. The result is a more productive and safer product. Human factors/ergonomics is also a part of the accident investigation and reconstruction process.

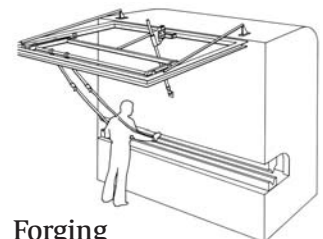


## Work Place Safety

*Employers are charged with the responsibility to provide a safe work place. Safety in the work place is a partnership in which three entities contribute to the success of the industrial safety program.*

Governmental established regulations; Employer's implementation, Management, and Overview of the industrial safety program; and of course, employees' compliance with that program are all integral factors. ESI Safety is experienced in the design, development and plant implementation of industrial safety programs in a wide variety of environments, e.g.

Material Processing  
Printing  
Paper Making and  
Converting  
Food Processing  
Mining  
Foundry  
Plastic Processing  
Construction



Forging  
Transportation  
Petroleum Production  
Assembly  
Power  
Marine

## Providing Clear Answers

### Through Insights and Multidisciplinary Excellence

Assignments vary from national disasters to simple evaluations. We address complex issues with a multidisciplinary approach and the sharing of knowledge. Add to that research specialists, laboratories, test facilities, first-class modeling and graphics, and you have the best advice and support available in this industry...right here at ESI.

Chicago/Aurora, IL (630) 851-4566  
(Corporate Headquarters)

Atlanta, GA (770) 521-4252

Baton Rouge, LA (225) 292-0525

Colorado Springs, CO (719) 535-0400

Fort Myers, FL (239) 482-0500

Houston, TX (281) 448-6060

Miami, FL (305) 779-5911

St. Louis, MO (636) 240-6095