

# B11 LMSS<sup>TM</sup>

**FORTRESS**  
SAFETY

B11 LMSS<sup>TM</sup>



Following the successful completion of training  
this license is issued by B11 Standards, Inc. to

## Eric Vasinda

as a

**B11 LMSS<sup>TM</sup>**  
**Licensed Machinery Safety Specialist**

License No.: AA311265271  
Valid from: 12<sup>th</sup> October 2023  
Valid to: 11<sup>th</sup> October 2026



David Felinski, President



**B11 Standards, Inc.**  
**Houston, Texas (USA)**  
[www.b11standards.org](http://www.b11standards.org)



**B11 Licensed Machinery Safety Specialist**



## Course Modules Outlined

### Module 1 - Risk Assessment

#### Introduction to Standards and Regulations

- What is Safety?
- OSHA Regulations
- Lock Out Tag Out
- B11 Machinery Safety Standards
- Other Machinery Safety Standards

#### B11.0 Safety of Machinery

- Overview
- Responsibilities
- Life cycle Requirements
- The Risk Assessment Process
  - Identify Tasks & Hazards
  - Assess Risk
  - Reduce Risk
  - Assess Residual Risk
  - Achieve Acceptable Risk
  - Validate & Verify
  - Document the Process
- General Requirements

### Module 4 - Integrating Machines & Robotics

#### B11.20 Safety Requirements for the Integration of Machinery into a System

- Overview
- Responsibilities
- Risk Assessment Process
- Design, Construction, Re-Construction & Modification
- Risk Reduction Measures
- Set-up, Operation & Maintenance
- Decommissioning Process

#### ANSI / RIA R15.06.2012 Industrial Robots and Robot Systems - Safety Requirements

- Overview
- Safety Requirements & Protective Measures
- Limiting Robot Motion
- Operational Mode Application
- Pendants
- Safeguarding
- Verification & Validation of Protective Equipment

### Module 2 - Risk Reduction

#### B11.19 Performance Requirements for Risk Reduction Measures: Safeguarding and other Means of Reducing Risk

- Overview
- Responsibilities
- Risk Reduction Measures
- Inherently Safe by Design
- Engineering Controls
  - Guards
  - Control Functions
  - Control Reliability
  - Devices
- Administrative Controls

### Module 5 - LOTO & Electrical Safety

#### ANSI / ASSP Z244.1.2016 The Control of Hazardous Energy Lockout, Tagout and Alternative Methods

- Overview
- Responsibilities
- Risk Assessment Process
- Design of Machinery for the Control of Hazardous Energy
- Hazardous Energy Control Program
- Control of Hazardous Energy
- Alternative Methods of Hazardous Energy Control

#### NFPA 79: Electrical Standard for Industrial Machinery

- Overview
- General Requirements
- Disconnecting Means
- Protection from Electrical Hazard
- Control Circuits
- Control Equipment
- Electrical Motors
- Testing & Verification

### Module 3 - Functional Safety

#### B11.26 Functional Safety for Equipment (Electrical / Fluid Power Control Systems) - Application of ISO 13849 - General Principles for Design

- Overview
- Identify Risk Reduction Measures that involve the SRP/CS
- Define the Safety Function
- Performance Level Methodology
- Category Methodology
- Control Reliability Methodology
- General Design Requirements
  - Integration of SRP/CS into the Machine Controls
  - Pneumatics & Hydraulics
- Fault Consideration
- Diagnostic Coverage
- Design Requirements
  - Input Devices
  - Logic Devices
  - Output Devices
- Validation

### Examination

#### 90 Minute Online Open Book Test

- 50 Multiple Choice Questions
- 10 Questions per Module
- Pass Mark: 80%

\*All modules are 5 hours sessions.