



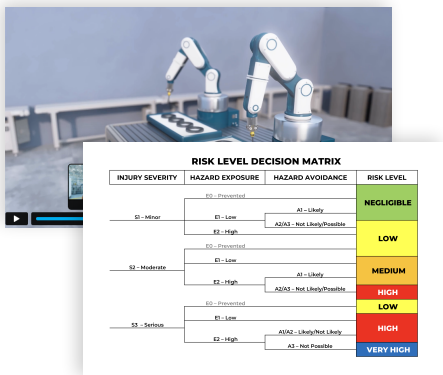
**ASSOCIATION FOR
ADVANCING AUTOMATION**

Robot Safety Award

The **A3 Robot Safety Award** is a prestigious recognition that celebrates students demonstrating an exceptional commitment to safety in robotics. By prioritizing safety in design, construction, and operation, individuals showcase not only technical skill but also a deep understanding of responsible innovation. This award highlights the importance of understanding safety standards, conducting thorough risk assessments, and fostering a culture of safety—core values that drive the future of automation and robotics.

At A3, we help robotics and automation companies, as well as robot users, navigate the complexities of safe operation. To support this effort, we pioneered the development of **ANSI R15.06** and **ANSI R15.08**, the leading industrial robot safety standards. While these standards were created for professional environments—covering stationary industrial robots (R15.06) and mobile industrial robots (R15.08)—this award challenges students to think critically about real-world safety principles and creatively apply them in a competition setting. By integrating safety into their design process, students gain valuable experience that extends beyond robotics contests and into the future of automation.

Begin by reviewing the Important Resources below and carefully using the rubric on the next page to guide your evaluation. *From all of us at A3, we wish you the best of luck!*



IMPORTANT RESOURCES

A3 Website - automate.org

A3 Risk Assessment Overview - vimeo.com/1040895850
(use password: RiskAssessment*2025)

A3 Risk Assessment Matrix - bit.ly/A3matrix

OSHA Safety Considerations - bit.ly/OSHA-ch4-5

OSHA Example Risk Assessment - bit.ly/OSHA-ch4-app2

Robot Safety Award Rubric

Instructions: Participants will be evaluated on their demonstration of safety knowledge, awareness, and implementation in a robotics environment. The rubric below will be used to assess how well teams integrate safe practices, communicate safety principles, and contribute to a culture of safety, with consideration for industry standards such as ANSI R15.06 and R15.08.



Team # _____ Grade Level MS HS Col

Judge's Name _____

PROFICIENCY LEVEL

CRITERIA	EXCEPTIONAL (4-5 POINTS)	PROFICIENT (2-3 POINTS)	EMERGING (0-1 POINTS)	POINTS
Safety Design	Strong evidence of safety considerations in design; clear application of R15.06 & R15.08 ; includes student-led risk assessment matrix .	Some safety considerations in design; limited connection to R15.06 & R15.08 ; minimal use of risk assessment matrix .	Little to no evidence of safety considerations in design; no use of risk assessment matrix .	
Safety Application	Robot demonstrates excellent safety implementation; no hazards present.	Robot has minor safety concerns but is mostly well-constructed.	Robot has significant safety risks (e.g., sharp edges, loose wires).	
Safety Knowledge	Team demonstrates deep understanding of R15.06 & R15.08 ; correctly identifies key safety terms (e.g., S1, S2, S3, A1, A2, A3).	Team has basic knowledge of R15.06 & R15.08 ; some understanding of key safety terms.	Team shows little to no knowledge of A3 safety standards.	
Safety Research	Clear evidence of thorough safety research and application of best practices.	Some evidence of research but lacks depth or real-world application.	Little to no research on safety best practices.	
NOTES & COMMENTS				/20

All judging materials are strictly confidential. They are not shared beyond the judges and judge advisor, and they shall be destroyed at the end of the event.

**TOTAL
SCORE**

Robot Safety Award Team Responses Form

Instructions: This form is a required part of the A3 Robot Safety Award evaluation. Teams must complete all responses clearly and thoroughly. Judges will assess responses based on depth of understanding, application of safety principles, and connection to industry standards.

Please bring completed forms to the A3 table by 4 PM on Friday, February 21.

Team # _____ Grade Level
MS HS Col

Identify potential safety issues encountered during your robot's design and modifications. Provide specific examples and reference any supporting documentation if applicable.

Explain how safety risk assessments, including concepts from the A3 Risk Assessment Matrix and cycle, influenced your robot design. Identify any specific applications.

Provide evidence of your knowledge of ANSI R15.06 and R15.08 and explain how these safety standards relate to your robot design and decision-making process.
