

Machine Safeguarding, OSHA 29 CFR 1910.147

OSHA Checklist from Liberty Mutual Insurance

This checklist will assist you with assessing areas of risk, existing controls, and the key elements of the OSHA Machine Safeguarding standard. This standard contains requirements that must be captured in a written program and it provides an overview of those requirements. You must tailor it to meet your own specific organizational processes/operations.

When the checklist is complete, refer to your existing program or Liberty Mutual's customizable program to determine if any modifications are necessary. Also, review your related written procedures, controls (engineering, training, and behavior), safety metrics, etc., to ensure they are in alignment.

This checklist may not address all potential situations that may cause injury, property, or environmental losses.

Company Name:

Location:

Assessment by:

Date:

This safety program and accompanying information does not identify all possible hazards and we cannot be responsible on your behalf for your obligations under any law, rule or regulations. The principles contained in the material are general in scope and, to the best of our knowledge, current at the time of publication. Liberty Mutual specifically disclaims all liability for damages or personal injury alleged to arise from reliance on the information contained in this document.

OK	No	N/A	Key Elements	Assessment/Comments
			Best Practices	
			One key individual is responsible for overseeing the Machine Safeguarding program that can make decisions and take action to audit and improve the program.	
			Copies of the company policies and guidelines regarding the program are available at the facility that supports the various program elements.	
			There is adequate communication about program requirements among facility personnel.	
			Program team members receive adequate training and education about the requirements to understand the goals and policies of the site-specific program.	
			Managers, supervisors and employees are evaluated on their support of compliance programs during personnel performance reviews.	
			Machine Safeguarding	
			1910.212(a)(1) Safeguards prevent workers' hands, arms and other body parts from making contact with dangerous moving parts. One or more methods of machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by point of operation, ingoing nip points, rotating parts, flying chips and sparks. Examples of guarding methods are-barrier guards, two-hand tripping devices, electronic safety devices, etc.	
			Help Note: Fixed or interlocked barrier guards must be designed to keep workers from reaching over, under, around or through to access the point-of-operation. If safety distance is used as a primary control for this machine, all exposed workers have been adequately trained. There must be sufficient clearance around and between machines to allow for safe operation, setup, servicing, material handling and waste removal.	
			1910.212(a)(2) Safeguards are firmly secured and not easily removable. There is no evidence that the safeguards have been tampered with or removed.	
			1910.217(b)(6)(i) Safeguarding devices (two-hand controls, light curtains, etc.) are adjusted and positioned appropriately.	
			1910.147 A defined process is set for locking/tagging out a machine.	
			Help Note: There should be written procedures for shutting down the machine before safeguards are removed. During set up and maintenance activities, all power sources for the machine must be identified and locked out. Multiple lockout devices should be used when several people operate the same machine.	

OK	No	N/A	Key Elements	Assessment/Comments
			Machine Safeguarding (Cont'd.)	
			<p>1910.212(a)(3)(ii) Point-of-operation safeguarding is provided for machines. No additional changes can be made to eliminate the point-of-operation hazards entirely.</p> <p>The guarding device shall be in conformity with any appropriate standards therefor, or, in the absence of applicable specific standards, shall be so designed and constructed as to prevent the operator from having any part of his body in the danger zone during the operating cycle.</p>	
			<p>1910.219 Setscrews, keyways, and collars should be not exposed on rotating parts. There are no unguarded gears, sprockets, pulleys or flywheels. There are no exposed belts or chain drives. There are no exposed setscrews, keyways, collars, etc. on rotating parts.</p>	
			<p>1910 Subpart H</p> <p>Appropriate measures have been taken to safeguard workers against exposure to harmful substances used in operating the machine.</p>	
			Help Note: Effective systems to keep coolant and oils from reaching the floor should also be in place.	
			<p>1910.95 Appropriate measures have been taken to safeguard workers against excessive noise and low illumination levels.</p>	
			Help Note: Illumination levels should be adequate for the task. For more information, see Liberty Mutual Insurance Reference Notes <i>Lighting for Safety and Performance</i> , RC 628; and <i>Noise</i> , RC 6103.	
			Electrical Hazards	
			<p>1910.217(b)(8) The machine is installed in accordance with National Fire Protection Association (NFPA) 79 requirements.</p>	
			<p>1910.217(b)(8)(vi) The machine is properly grounded, and power supply is provided with circuit overload protection. The machine requires a manual restart in the event of an electrical power supply interruption.</p>	
			<p>1910.335(a)(1)(i) Work permits are used to control shock and arc flash hazards for all work that involve exposed live electrical parts.</p>	

OK	No	N/A	Key Elements	Assessment/Comments
			Training	
			1910.217 Operators and maintenance workers have the necessary training in how and why to use safeguards.	
			Help Note: Training should include where the guards are located, how they provide protection, and the hazards they protect against.	
			1910.217 Operators and maintenance workers are trained in how, and under what circumstances, guards may be removed.	
			Help Note: Training should include the procedures to follow if workers notice guards are damaged, missing or inadequate.	
			1910.147 Maintenance and service workers are trained in lockout/tagout requirements.	
			Protective Equipment and Proper Clothing	
			1910.132 Personal protective equipment is required, including minimum standards for clothing.	
			Help Note: PPE is appropriate for the job, in good condition, kept clean and sanitary, and stored carefully when not in use. Clothing must not be loose-fitting. Jewelry and loose long hair are prohibited.	

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