

Machine and Power Tool Safety Checklist

Version 1.3
September 2023

Machine and Power Tool Safety Checklist

Overview

The purpose of this checklist is to provide the auditor with a guide to ensure thorough and consistent machinery and power tool safety audits.

Facility and Contact Information

Facility Name				Location	
Facility Manager or Contact:					
Description of Area:					
Number of individuals in this work area:					
Is this facility used by students?					
Air handler that serves the area:		Location of air handler:			
Does the air handler serve other areas in addition to this facility?					
Is dust or fume extraction system exist in the facility?		Describe			
Is there an emergency shower unit in the facility?		Is inspection current?			
Is there an emergency eyewash unit in the facility?		Is inspection current?			
Date of audit:					
Auditor(s)					

Work Area Evaluation

Program Area	OK	Needs Attention	Not Applicable	Comments
Administrative				
<i>Clothing:</i> No loose cuffs, gloves, neckties, drawstrings etc. while operating machinery with rotating parts.				
<i>Hair:</i> Tied back or otherwise secured.				
<i>Jewelry:</i> Not worn while operating machinery or tools.				
<i>Training:</i> Operators have received training on safe use of machinery or tools. Training is documented.				
<i>Noise:</i> EHRS contacted for noise survey.				
<i>Lockout/Tagout:</i> Used for service adjustment and maintenance of machinery.				
<i>Machines</i> must be attached to the floor or work surface.				
<i>Personal Protective Equipment</i> – Required equipment is supplied and properly stored.				
<i>Emergency Irrigation Equipment</i> – Eyewash and safety shower in place and routinely tested.				
<i>Safety policy</i> – Facility has a safety policy that covers required supervision, access to tools & machines, safe work practices and personal protective equipment requirements.				
Electrical				
<i>Machines & equipment</i> directly connected to a receptacle.				
<i>Extension cords</i> – Not used as a substitute for permanent wiring. Not connected in series. Not used in conjunction with a power strip.				
<i>Anti-Restart Switch</i> - machines that could injure the operator upon unexpected restart after a power interruption must be equipped with a reset switch that prevents unexpected starting.				
<i>Clearance</i> of 36-inches maintained in front of electrical equipment requiring service.				

Program Area	OK	Needs Attention	Not Applicable	Comments
Power control for the machine must be easily accessible from the operator's work position.				
Hazardous Energy Isolation - Machines that require service or adjustment must be provided with a means to be locked out while the work is performed.				
Grounding - Ensure machines and tools are double insulated or properly grounded. Grounding prongs on cords.				
Power cords - Jackets are not cracked or otherwise damaged.				
Labeling – ensure all breakers and disconnects are labeled indicating machinery and equipment operated by the circuit.				
Light bulbs located within eight feet of the floor are protected by a cage or other means to prevent breakage.				
Machine Guarding				
Table saw – Ensure blade guards, splitter and non-kickback fingers are installed. Drive belts & pulleys are enclosed. Push sticks & feather boards provided.				
Radial arm saw – Ensure blade guard, and non-kickback fingers are in place. Saw must return to start position when released. Saw must have a stop to prevent blade from extending beyond front of table.				
Hand circular saw – Blade guard in place.				
Band saw – Ensure blade is guarded. Only the blade at point of operation should be exposed. Drive pulleys & belts covered.				
Drill press – Drive belts & pulleys enclosed. Guard for bit and chuck. Spring loaded chuck key.				
Jointers – Self adjusting guard over cutter head. Push blocks provided.				
Planers/Moulders - Barriers prevent contact with point of operation.				

Program Area	OK	Needs Attention	Not Applicable	Comments
Lathes – Drive belts & pulleys enclosed. Guard chuck and use spring-loaded keys. Guards provided to protect operators from chips and cutting oils. Lead screw guarded to prevent entanglement of hair or clothing. Easily accessible stop switch.				
Sanders – Unused portion of belts & discs enclosed. Nip points at roller/belt interface enclosed. Sanding belts replaced when they become worn.				
Power shears – Point of operation guarded. Foot treadle enclosed.				
CNC machines – Machine fully enclosed with interlocking doors. Polycarbonate panels are in good condition. Lockout tagout procedure for service or maintenance.				
Grinders - Only the point of operation of the grinding wheel is exposed (25%) the remainder is enclosed. Tool rest positioned within 1/8-inch of the wheel, tongue guard positioned within 1/4-inch of the wheel. Wheels ring tested prior to use. Speed rating of wheel matches grinder.				
Pneumatic nailers/staplers – Equipped with device that only allows operation when pressed against work surface.				
Compressed air for cleaning – Limited to 30 psi. Safety cleaning nozzles used.				
Mechanical Power Transmission Equipment – All belts and pulleys enclosed.				
Fans – When within seven feet of the floor, fan blades must be enclosed with no openings greater than 1/2-inch.				

Program Area	OK	Needs Attention	Not Applicable	Comments
Chain saws – Proper PPE including eye protection, mesh face shield, hearing protection, hard hat chaps, hearing protection, safety toe boots. Functional saw chain brake. Sharpened blade. Spark arrestor on exhaust.				
Power Take Offs (PTO) – Ensure master guards and drive shaft guards in place.				
Lawn mowers – All drive belts and pulleys enclosed. Blade is fully enclosed. Roll over protection system on riding mowers. Mower must be used with either a catcher system or guard covering discharge opening in place. Deadman control that interrupts power to drive when released. Blade stops within 15-seconds of shut down.				
Agricultural machinery – Ensure all point of operation and drive system guards are in place. Follow specific procedures listed in the FARMHAT checklist.				
Hydraulics – Any hydraulically operated parts that could cause injury if the hydraulics fail or controls activate, must have safety support bars that physically lock the hydraulic cylinders in the open position.				
Welding				
PPE - Ensure proper shielding and eye protection is used by employee or student performing welding.				
Setup -Workers within adjacent area are protected by welding curtains.				
Setup -Welding area is isolated from other areas of the shop.				
Fire Safety -Fire and combustible hazards are removed from the welding area.				
Fire Safety -Appropriate fire extinguisher is accessible.				

Program Area	OK	Needs Attention	Not Applicable	Comments
<i>Fire Safety-</i> A hot work permit must be attained from Fire and Emergency Services (FES) prior to using equipment within the designated area.				
<i>Equipment-</i> Welding cables/tube are free from damage.				
<i>Equipment-</i> Welding gas cylinders are free from damage.				
<i>Equipment-</i> Color coded hoses for oxygen (green) and fuel gases (red).				

Summary of Findings

Summary of findings and action taken:

Report submitted by:		Date:	
Report recipient:			
Work request or third-party involvement – Describe:			

Notes: