



OFFICE OF ENGINEERING SAFETY

Dwight Look College of Engineering • Texas Engineering Experiment Station
A safe and healthful environment for scholarship and research



Machine Guarding

Download additional self-inspection checklists at <http://engineering.tamu.edu/safety/>

Date _____
Inspector _____
Faculty/PI _____

Room No. _____
Location _____
Dept. _____

Items for evaluation	Yes	No	Comments	Action to be taken
Is there a training program to instruct employees on safe methods of machine operation?				
Is there adequate supervision to ensure that employees are following safe machine operating procedures?				
Is there a regular program of safety inspection of machinery and equipment?				
Is all machinery and equipment kept clean and properly maintained?				
Is sufficient clearance provided around and between machines to allow for safe operations, set up and servicing, material handling, and waste removal?				
Is equipment and machinery securely placed and anchored, when necessary to prevent tipping or other movement that could result in personal injury?				
Is there a power shut-off switch within reach of the operator's position at each machine?				
Can electric power to each machine be locked out for maintenance, repair or security?				
Are the noncurrent-carrying metal parts of electrically operated machines bonded and grounded?				
Are foot-operated switches guarded or arranged to prevent accidental actuation by personnel or falling objects?				
Are manually operated valves and switches, controlling the operation of equipment and machines, clearly identified and readily accessible?				
Are all emergency stop buttons colored red?				

Items for evaluation	Yes	No	Comments	Action to be taken
Are all pulleys and belts, that are within 7 feet of the floor or working level, properly guarded?				
Are all moving chains and gears properly guarded?				
Are splash guards mounted on machines that use coolant, to prevent the coolant from reaching employees?				
Are methods provided to protect the operator, and other employees in the machine area, from hazards created at the point of operation, in-going nip points, rotating parts, flying chips and sparks?				
Are machinery guards secure and arranged so that they do not offer a hazard in their use?				
If special hand tools are used for placing and removing material, do they protect the operator's hands?				
Are revolving drums, barrels and containers required to be guarded by an enclosure that is interlocked with the drive mechanism, so that revolution cannot occur unless the guard enclosure is in place?				
Do arbors and mandrels have firm and secure bearings, and are they free from play?				
Are provisions made to prevent machines from automatically starting when power is restored after a power failure or shutdown?				
Are machines constructed so as to be free from excessive vibration when the largest size tool is mounted and run at full speed?				
If machinery is cleaned with compressed air, is air pressure controlled, and personal protective equipment or other safeguards utilized, to protect operators and other workers from eye and body injury?				
Are fan blades protected with a guard having openings no larger than 1/2 inch, when operating within 7 feet of the floor?				
Are saws used for ripping equipped with anti-kickback devices and spreaders?				
Are radial arm saws so arranged that the cutting head will gently return to the back of the table when released?				