

# Metal Working MACHINE GUARDING CHECKLIST

## Requirements for All Safeguards

Questions	Yes	No
1a. What form(s) of machine guarding are in place? (circle as applicable) a. Fixed b. Interlocked c. Adjustable d. Self-adjusting		
1b. Methods of Safeguarding? (circle as applicable) a. Presence-sensing devices (light curtains) b. Pullback or restraint straps c. Safety trip controls d. Two-hand controls e. Gates		
2. Are the safeguards firmly secured and not easily removable?		
3. Do the safeguards ensure that no objects will fall into the moving parts?		
4. Do the safeguards permit safe, comfortable, and relatively easy operation of the machine?		
5. Can the machine be serviced or adjusted without removing the safeguards?		
6. Is there a system for shutting down the machinery before safeguards are removed?		

### Mechanical Hazards

<b>The point of operation:</b>		
7. Is there a point-of-operation safeguard provided for the machine?		
8. Does it keep the operator's hands, fingers, body out of the danger area?		
9. Is there evidence that the safeguards have been tampered with or removed?		
10. Is there a better way to safeguard point-of-operation?		
11. Could changes be made on the machine to eliminate the point-of-operation hazard entirely?		
<b>Power transmission apparatus:</b>		
12. Are there any unguarded gears, sprockets, pulleys, or flywheels on the apparatus?		
13. Are there any exposed belts or chain drives?		
14. Are there any exposed set screws, key ways, collars, etc.?		
15. Are starting and stopping controls within easy reach of the operator?		
16. If there is more than one operator, are separate controls provided?		
<b>Other moving parts:</b>		
17. Are safeguards provided for all hazardous moving parts of the machine, including the front, rear, and sides?		

### Nonmechanical Hazards

18. Have appropriate measures been taken to safeguard workers against noise hazards?		
19. Have special guards or enclosures been provided, where necessary, to protect workers from exposure to harmful substances used in machine operation?		

### Electric Hazards

20. Is the machine installed in accordance with the National Electrical Code requirements, specifically, NFPA 79 Electrical Standard for Industrial Machinery?		
21. Are there loose conduit fittings?		
22. Is the machine properly grounded?		
23. Is the power supply correctly hard wired with no temporary wiring?		
24. Do workers occasionally receive minor shocks while operating any of the machines?		

### Training

25. Do operators and maintenance workers have the necessary training in how to use the safeguards and why?		
26. Are disciplinary protocols in place for not following established safeguards?		
27. Have operators and maintenance workers been trained in where the safeguards are located, how they provide protection, and what hazards they protect against?		
28. Have operators and maintenance workers been trained in how and under what circumstances guards can be removed? Machine shut down until repaired?		
29. Have workers been trained in the procedures to follow if they notice guards that are damaged, missing or inadequate?		

### Protective Equipment and Proper Clothing

30. Is personal protective equipment required? Safety glasses, protective face shields, steel toe shoes, etc.?		
31. Are operators trained on proper selection, usage, care and control of personal protective equipment?		
32. Is the operator dressed safely for the job (i.e., no loose-fitting clothing or jewelry)?		

### Machinery Maintenance and Repair

33. Have maintenance workers received up-to-date instruction on the machines they service?		
34. Do maintenance workers lock out the machine from its power sources before beginning repairs?		
35. Where several maintenance persons work on the same machine, are multiple lockout devices used?		
36. Do maintenance persons use appropriate and safe equipment in their repair work?		
37. Have hazardous energy assessments been completed on all machinery?		
38. Are maintenance and servicing workers trained in the requirements of 29 CFR 1910.147, lockout/tagout, and do the procedures for lockout/tagout exist before they attempt their tasks?		

Completed by: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_