

U-M OSEH MACHINE SHOP INSPECTION FORM

Room _____ Building _____ Date _____
 Supervisor _____ Inspected by _____

GENERAL SAFETY	YES	NO	NA	COMMENTS
Administrative responsibility for shop safety has been clearly defined.				
Employees and students have completed machine tool and facility safety training				
Where necessary, lock-out/tag-out procedures are documented for each piece of equipment, and training has been provided				
Protective eyewear worn at all times				
Safety training documented and posted in a central location				
Student access limited to regular hours of operation				
Mandatory student "buddy system" enforced				
Long, loose hair must be contained in a scarf, cap or other appropriate fashion				
Loose clothing, loose neck wear and jewelry not being worn while operating, or in proximity to, machinery				
Leather shoes are required				
Long sleeves on shirts must be rolled up snugly above the elbows				
Compressed air is reduced to 30 psi and is not used to clean person or clothes				
GENERAL MACHINE SAFETY	YES	NO	NA	COMMENTS
Machinery installed to prevent unintentional movement or tipping				
A brush is available to remove stock shavings and chips				
Machinery located so that operator and others tending the machine do not stand in an aisle				
Powered electrical equipment has an on-off switch				
When unexpected motion would cause injury, actuating controls are guarded or located to prevent accidental actuation, and precautions have been taken to prevent a machine from automatically restarting upon the restoration of power after a power failure				
A red emergency stop device is provided where the machine workstation is remotely located from the machine controls				
Actuation of the controls requires continuous depressions during the hazardous portion of the machine cycle where the machine workstation is remotely located from the machine controls				
ELECTRICAL SAFETY	YES	NO	NA	COMMENTS
All electrical service cords are in good condition				
Electrically powered machines are grounded				
Proper use of extension cords				

All electrical receptacles within 36" of sinks have GFCI				
Extension cords are not used as a permanent source of electricity				
HOUSEKEEPING/HAZARD COMMUNICATION	YES	NO	NA	COMMENTS
Materials, including scrap and debris, are contained in a manner that does not create a hazard				
The floor of the work area is free of hazardous accumulations of debris, oil and water and other slip/trip hazards				
Storage areas are free of accumulations of materials that constitute a hazard from fire, explosion or pest harborage				
All safety cans are red in color				
All emergency stop devices on machines (except cables) are red in color				
Physical hazards are marked with yellow or yellow with black stripes				
Unobstructed 3-foot aisle maintained between machines				
Good general housekeeping (floor swept and clean), maintenance schedule in place				
LATHE	YES	NO	NA	COMMENTS
T-Handle removed from the chuck and stored in designated area				
Lathe chuck removed manually, not by powering the lathe				
Lathe chuck key counterweighted to return to storage position				
Lathe chuck key spring loaded to eject it from the chuck				
Lathe chuck key interlocked to prevent chuck being powered by key				
All tools removed from the lathe carriage or lathe bed				
Metal and plastic chips/shavings removed by tool, not hands				
Cutting tools and bits in good condition				
Lathe preventative maintenance schedule in place				
MILL	YES	NO	NA	COMMENTS
Machine torque not used to loosen cutting tools or nuts				
Chip guard installed between point of operation and operator/other employees in range				
Work piece secured properly with clamps before mill movement				
Mill bed kept clear of excess tools and stock				
Manual adjustments of operation performed after work piece has stopped				
DRILL PRESS	YES	NO	NA	COMMENTS
Securely anchored to the floor preventing inadvertent tipping/moving				
All work being drilled is securely clamped to drill bed				
Drill speed appropriate for stock being worked				
Sharp tool bits and countersinks used accordingly				
Chuck key counterweighted, interlocked or spring loaded for ejection				
SHEET METAL SHEAR	YES	NO	NA	COMMENTS
Blade and hold down clamp guarded by a fixed barrier or automatic clamps set within 1/4" of the table/stock				

Pusher stick being used prior to shearing small pieces of stock				
Point of operation guard is in place				
Employee tending the backside is separated from the moving parts				
Operator's area clean of shear scrap eliminating slip or trip fall hazard				
GRINDER	YES	NO	NA	COMMENTS
Work rest positioned within 1/8" of the wheel				
Adjustable tang guard not more than 1/4" from the top of wheel				
Guard in place covering the spindle end, nut, and flange projections				
Proper eye protection is available				
If particles are a hazard to nearby employees, an enclosure is present				
Spindle speed permanently marked on grinding machine and legible				
Cracked or broken wheels not being used and wheels are inspected and ring tested before mounting				
BUFFER	YES	NO	NA	COMMENTS
Guard positioned 180 degrees from the wheel				
Adjustable deflector, of at least 16 gauge metal or equal material, 1/4" from the wheel face				
BELT/DISC SANDER	YES	NO	NA	COMMENTS
All pulleys enclosed including sides and periphery				
Operating controls are guarded to prevent accidental actuation				
Edges of unused run of the belt guarded				
Guards in place preventing hands or fingers from contact with nip point				
Belt in good condition, not ripped or torn				
JOINTER	YES	NO	NA	COMMENTS
Opening between edge of rear table and cutter head not more than 1/8"				
Push blocks used when jointing short or narrow stock				
Automatic guard covering all sections of the cutting head on the working side				
Guard effective in keeping fingers/hands from the revolving knives				
BAND SAW	YES	NO	NA	COMMENTS
All portions of saw blade shall be enclosed except working portion of blade				
Sliding blade guide within 1/4" of work piece				
Band saw wheel shall be enclosed with solid material, wire mesh or perforated metal				
Blade type and speed corresponds with material being worked				
CUT-OFF SAW (Horizontal/Vertical)	YES	NO	NA	COMMENTS
Saw blade is totally enclosed and guided to allow minimum exposure at the point of operation				
SHEET METAL BRAKE	YES	NO	NA	COMMENTS
Point of operation guard is in place				

WELDING	YES	NO	NA	COMMENTS
Proper shielding and eye protection used by worker performing welding				
Welding area is isolated from other sections of the shop				
Fire hazards and combustibles are removed from the welding area and tanks or vessels purged before welding				
Appropriate portable fire extinguisher on hand for use by trained individual				
Fire watch instituted when necessary				
Welding cables/ tubing are free from damage (cuts, burn marks, exposed conduit)				
Welding gas cylinders are free from damage (check for leaks) and secured				
Compressed gas cylinders are stored properly				
Appropriate fire extinguisher is located within the immediate work area				
Adequate ventilation is evident/in place				
Workers adjacent to area are protected by flameproof shield (If not, welding goggles needed)				
Approved protective equipment to prevent backflow of oxygen or passage of a flashback into a fuel gas supply				
Color coded hoses for oxygen (green) and fuel gases (red)				