

SAFETY MANUAL

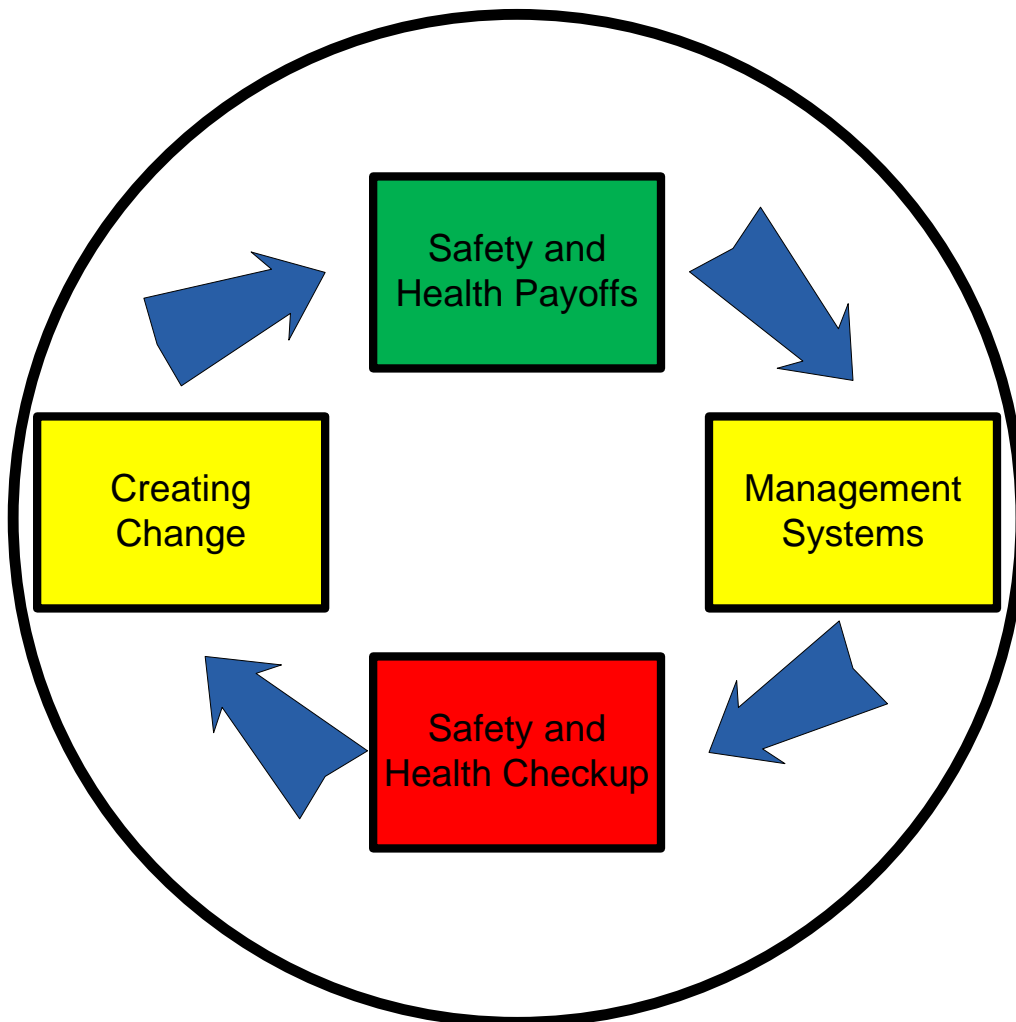


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Section 1

MANAGEMENT COMMITMENT AND INVOLVEMENT

Policy Statement

The management of Tennessee Tool and Engineering is committed to providing employees with a safe and healthful workplace. It is the policy of this organization that employees report unsafe conditions and do not perform work tasks if the work is considered unsafe. Employees must report all accidents, injuries and unsafe conditions to their supervisors. Such reports will not result in retaliation, penalty or other disincentives.

Employee recommendations to improve safety and health conditions will be given thorough consideration by our management team. Management will give top priority to and provide the financial resources for the correction of unsafe conditions. Similarly, management will take disciplinary action against an employee who willfully or repeatedly violates workplace safety rules. This action may include verbal or written reprimands and may ultimately result in termination of employment.

The primary responsibility for the coordination, implementation and maintenance of our workplace safety program has been assigned to:

Name: Gregory Williams

Title: Director of Quality Telephone: (865) 483-6334

Senior management will be actively involved with employees in establishing and maintaining an effective safety program. Our safety program coordinator and other members of our management team will participate with you or your department's employee representative in ongoing safety and health program activities, which include:

- Promoting safety committee participation;
- Providing safety and health education and training; and
- Reviewing and updating workplace safety rules.

This policy statement serves to express management's commitment to and involvement in providing our employees a safe and healthful workplace. This workplace safety program will be incorporated as the standard of practice for this organization. Compliance with the safety rules will be required of all employees as a condition of employment.

General Manager, Production Machining and Assembly

Date

Section 2

SAFETY COMMITTEE

Safety Committee Organization

A safety committee has been established to recommend improvements to our workplace safety program and to identify corrective measures needed to eliminate or control recognized safety and health hazards. The safety committee consists of an “equal” representation of supervisory and nonsupervisory members of our organization.

Safety Program Coordinator Greg Williams	Nonsupervisory Employee Member Lisa Lewellyn
Supervisory Employee Member Keith Carter	Nonsupervisory Employee Member
Supervisory Employee Member Dale Tanner	Nonsupervisory Employee Member

Responsibilities

The safety committee shall determine the schedule for evaluating the effectiveness of control measures used to protect employees from safety and health hazards in the workplace.

The safety committee will be responsible for assisting management in reviewing and updating workplace safety rules based on accident investigation findings, any inspection findings, and employee reports of unsafe conditions or work practices; and accepting and addressing anonymous complaints and suggestions from employees.

The safety committee will be responsible for assisting management in updating the workplace safety program by evaluating employee injury and accident records, identifying trends and patterns, and formulating corrective measures to prevent recurrence.

The safety committee will be responsible for assisting management in evaluating employee accident-and illness-prevention programs, and promoting safety and health awareness and co-worker participation through continuous improvements to the workplace safety program.

Safety committee members will participate in safety training and will be responsible for assisting management in monitoring workplace safety education and training to ensure that it is in place, that it is effective, and that it is documented.

Meetings

Safety committee meetings are held quarterly or more often if needed. The safety program coordinator will post the minutes of each meeting (see following page) within one week after each meeting.

SAFETY COMMITTEE MEETING MINUTES

Date of Committee Meeting: _____ Time: _____

Minutes Prepared by: _____ Location: _____

Names of Members in Attendance:

Previous Action Items: _____

Review of Accidents since Previous Meeting: _____

Recommendations for Prevention: _____

Recommendations from Anonymous Employees: _____

Suggestions from Employees: _____

Recommended Updates to Safety Program: _____

Recommendations from Accident Investigation Reports: _____

Safety Training Recommendations: _____

Comments: _____

Section 3

SAFETY AND HEALTH TRAINING

Safety and Health Orientation

Workplace safety and health orientation begins on the first day of initial employment or job transfer. Each employee has access to a copy of this safety manual, through his or her supervisor, for review and future reference, and each employee will be given a personal copy of the safety rules, policies and procedures pertaining to his or her job. Supervisors will ask questions of employees and answer employees' questions to ensure knowledge and understanding of safety rules, policies and job-specific procedures described in our workplace safety program manual.

All employees will be instructed by their supervisors that compliance with the safety rules described in the workplace safety manual is required.

Job-Specific Training

- Supervisors will initially train employees on how to perform assigned job tasks safely.
- Supervisors will carefully review with each employee the specific safety rules, policies and procedures that are applicable and that are described in the workplace safety manual.
- Supervisors will give employees verbal instructions and specific directions on how to do the work safely.
- Supervisors will observe employees performing the work. If necessary, the supervisor will provide a demonstration using safe work practices or remedial instruction to correct training deficiencies before an employee is permitted to do the work without supervision.
- All employees will receive safe operating instructions on seldom-used or new equipment before using the equipment.
- Supervisors will review safe work practices with employees before permitting the performance of new, nonroutine or specialized procedures.

Periodic Retraining of Employees

All employees will be retrained periodically on safety rules, policies and procedures, and when changes are made to the workplace safety manual.

Individual employees will be retrained after the occurrence of a work-related injury caused by an unsafe act or work practice, and when a supervisor observes employees displaying unsafe acts, practices or behaviors.

SAFETY TRAINING DOCUMENTATION

EMPLOYEE:

DATE:

SUPERVISOR:

TRAINER:

RULES AND REGULATIONS REVIEWED

DATE: _____

- General Review of Old/New (Circle One) Safety Rules For All Employees

- Specific Safety Procedures for Employees Position

- General Maintenance

- First Aid

- Lifting Procedures

- Office Safety

- Furniture Use

- Equipment Use

- Climbing a Step Ladder

- Sanitation / Health

All categories have been reviewed with employee.

Supervisor Name, Printed:

Signature: _____

I have been advised of all Safety and Health regulations and will adhere to them to the best of my ability.

Employee Name, Printed:

Signature: _____

Section 4

SAFETY INSPECTIONS

Checklists for safety inspections ensure that important items are not overlooked. Inspections identify areas of risk. It is the responsibility of all employees to maintain safe working conditions. Our Safety Inspections checklist can be found on pages 18 thru 39 of the [small-business.pdf](#).

Section 5

PREVENTIVE MAINTENANCE

Preventive maintenance programs will avoid most equipment failures. Provide regular equipment maintenance to prevent breakdowns that can create hazards.

Preventive maintenance is a schedule of planned inspections to prevent breakdowns and failures before they happen. During preventive maintenance, workers can document damage or wearing of parts or equipment so as to repair or replace parts *before* they cause a failure or injuries.

We maintain equipment specific preventive maintenance procedures that are performed at various intervals by machine specific operators, maintenance staff personnel and machine specific vendors.

Section 6

FIRST-AID PROCEDURES

Emergency Phone Numbers

Safety Coordinator: Greg Williams

Poison Control: 1-800-222-1222

First Aid Response: Supervisor/s

Fire Department: 911

Ambulance: 911

Police: 911

Medical Clinic: (865) 483-4040

Clinic Name/Address: Park Med. Urgent Care Center\ - 115-B S. Illinois Ave., Oak Ridge

Minor First-Aid Treatment

First-aid kits are kept in the front office and manufacturing areas. If you sustain an injury or are involved in an accident requiring minor first-aid treatment:

- Inform your supervisor.
- Administer first-aid treatment to the injury or wound.
- If a first-aid kit is used, indicate usage on the accident investigation report.
- Access to a first-aid kit is not intended to be a substitute for medical attention.
- Provide details for the completion of the accident investigation report.

Nonemergency Medical Treatment

For nonemergency work-related injuries requiring professional medical assistance, management must first authorize treatment. If you sustain an injury requiring treatment other than first aid:

- Inform your supervisor.
- Proceed to the posted medical facility. Your supervisor will assist with transportation, if necessary.
- Provide details for the completion of the accident investigation report.

Emergency Medical Treatment

If you sustain a severe injury requiring emergency treatment:

- Call for help and seek assistance from a co-worker.
- Use the emergency telephone numbers and instructions posted on the first-aid kit to request assistance and transportation to the local hospital emergency room.
- Provide details for the completion of the accident investigation report.

First-Aid Training

Each employee will receive training and instructions from his or her supervisor regarding our first-aid procedures.

FIRST-AID INSTRUCTIONS

In all cases requiring emergency medical treatment, immediately call or have a co-worker call to request emergency medical assistance. Use required blood borne pathogen procedures / PPE while administering first aid.

Wounds:

Minor: *Cuts, lacerations, abrasions or punctures*

- Wash the wound using soap and water; rinse it well.
- Cover the wound using a clean dressing.

Major: *Large, deep and bleeding wounds*

- Stop the bleeding by pressing directly on the wound, using a bandage or cloth.
- Keep pressure on the wound until medical help arrives.

Broken Bones:

- Do not move the victim unless it is absolutely necessary.
- If the victim must be moved, “splint” the injured area. Use a board, cardboard or rolled newspaper as a splint.

Burns:

Thermal (Heat)

- Rinse the burned area without scrubbing it, and immerse it in cold water.
Do not use ice water.
- Blot dry the area and cover it using sterile gauze or a clean cloth.

Chemical

- Immediately flush the exposed area with cool water for 15 to 20 minutes.

Eye Injury:

Small particles

- Do not rub your eyes.
- Use the corner of a soft clean cloth to draw particles out, or hold the eyelids open and flush the eyes continuously with water.

Large or stuck particles

- If a particle is stuck in the eye, do not attempt to remove it.
- Cover both eyes with a bandage.

Chemical

- Immediately irrigate the eyes and under the eyelids with water for 30 minutes.

Neck or Spine Injury:

- If the victim appears to have injured his or her neck or spine, or is unable to move his or her arm or leg, do not attempt to move the victim unless it is absolutely necessary.

Heat Exhaustion:

- Loosen the victim’s tight clothing.
- Give the victim *sips* of cool water.
- Make the victim lie down in a cooler place with the feet raised.

Section 7

ACCIDENT INVESTIGATION

Accident Investigation Procedures

An accident investigation will be performed by the supervisor at the location where the accident occurred. The safety coordinator is responsible for seeing that the accident investigation reports are being filled out completely and that the recommendations are being addressed. Supervisors will investigate all accidents, injuries and occupational diseases using the following investigation procedures:

- Implement temporary control measures to prevent any further injuries to employees.
- Review the equipment, operations and processes to gain an understanding of the accident situation.
- Identify and interview each witness and any other person who might provide clues to the accident's causes.
- Investigate causal conditions and unsafe acts; make conclusions based on existing facts.
- Complete the accident investigation report.
- Provide recommendations for corrective actions.
- Indicate the need for additional or remedial safety training.

Accident investigation reports must be submitted to the safety coordinator within 24 hours of the accident.

OSHA requires employers to report any/all of the following within 8 hours of the incident:

- ◆ **Fatalities**
- ◆ **A single incident which requires hospitalization of 3 or more employees**

OSHA CENTRAL TELEPHONE NUMBER: 1-800-321-6742

ACCIDENT INVESTIGATION REPORT

Report No.: _____

Company: _____

Address: _____

1. Name of injured: _____ S.S. No.: _____

2. Sex: M F Age: _____ Date of accident: _____

3. Time of accident: _____ a.m. _____ p.m. Day of accident: _____

4. Employee's job title: _____

5. Length of experience on job: _____ years: _____ months

6. Address of location where the accident occurred: _____

7. Nature of injury, injury type, and part of the body affected: _____

8. Describe the accident and how it occurred: _____

9. Cause of the accident: _____

10. Was personal protective equipment required? yes no

Was it provided? yes no

Was it being used? yes no

If "no," explain: _____

Was it being used as trained by supervisor or designated trainer? yes no

If "no," explain: _____

11. Witness(es): _____

12. Was safety training provided to the injured? yes no

If "no," explain: _____

13. Interim corrective actions taken to prevent recurrence: _____

14. Permanent corrective action recommended to prevent recurrence: _____

15. Date of report: _____ , _____ 20_____

Prepared by: _____

Supervisor (**Signature**): _____ Date: _____

16. Status and follow-up action taken by safety coordinator: _____

Safety Coordinator (**Signature**) _____ Date _____

INSTRUCTIONS FOR COMPLETING THE ACCIDENT INVESTIGATION REPORT

An accident investigation is not designed to find fault or place blame, but it is an analysis of the accident to determine causes that can be controlled or eliminated.

- (Items 1-6) Identification:** This section is self-explanatory.
- (Item 7) Nature of Injury:** Describe the injury, e.g., strain, sprain, cut, burn, fracture.
Injury Type: First aid—injury resulted in minor injury/treated on premises; Medical—injury treated off premises by physician; Lost time—injured missed more than one day of work; No Injury—no injury, near-miss type of incident.
Part of the Body: Part of the body directly affected, e.g., foot, arm, hand, head.
- (Item 8) Describe the accident:** Describe the accident, including exactly what happened, and where and how it happened. Describe the equipment or materials involved.
- (Item 9) Cause of the accident:** Describe all conditions or acts which contributed to the accident, e.g.—
- a. unsafe conditions (spills, grease on the floor, poor housekeeping or other physical conditions).
 - b. unsafe acts (unsafe work practices such as failure to warn, failure to use required personal protective equipment).
- (Item 10) Personal protective equipment:** This section is self-explanatory.
- (Item 11) Witness(es):** List name(s), address(es), and phone number(s).
- (Item 12) Safety training provided:** Was any safety training provided to the injured relating to the work activity being performed?
- (Item 13) Interim corrective action:** Measures taken by supervisor to prevent recurrence of incident, e.g., barricading accident area, posting warning signs, shutting down operations.
- (Item 14):** This section is self-explanatory.
- (Item 15):** This section is self-explanatory.
- (Item 16) Follow-up:** Once the investigation is complete, the safety coordinator shall review and follow up the investigation to ensure that corrective actions recommended by the safety committee and approved by the employer are taken and that control measures have been implemented.

Section 8

RECORDKEEPING PROCEDURES

The safety coordinator will control and maintain all employee accident and injury records. Records are maintained for a minimum of five (5) years and include:

- Accident Investigation Reports, see Section 7, page 13
- Workers' Compensation First Report of Injury or Illness
- Log and Summary of Occupational Injuries and Illnesses as required by OSHA's Recordkeeping Regulation, 29 CFR 1904.2:
 - OSHA Form 300 (Rev. 1-2004): Log of Work Related Injuries and Illnesses
 - OSHA Form 300A (Rev. 1-2004): Summary of Work Related Injuries and Illnesses
 - OSHA Form 301: Injury and Illness Incident Report

Section 9

SAFETY RULES, POLICIES AND PROCEDURES

The safety rules contained on these pages have been prepared to protect you in your daily work. Employees are to follow these rules, review them often and use good common sense in carrying out assigned duties.

These safety rules include both general workplace safety rules and job-specific safety rules.

General Rules:

All Employees

Job-Specific Rules:

By Occupational Class, e.g., Machine Operator, Lathe Operator, Forklift Driver.

Personal Protective Equipment (PPE)

The requirement, use and training of PPE will be discussed with you by your Supervisor during job, machine or operation specific training.

SAFETY GLASSES are mandatory in all machining areas where chemical, flying debris or high-pressure air are present.. These areas are generally defined as any area outside of the WHITE painted walkways.

Wearing SAFETY GLASSES throughout the facility is strongly recommended.

ALL VISITORS must wear SAFETY GLASSES outside of office spaces at all times.

ALL EMPLOYEES

Housekeeping

1. Use caution signs/cones to barricade slippery areas.
2. Do not store or leave items on stairways.
3. Return tools to their storage places after using them.
4. Do not block or obstruct stairwells, exits or accesses to safety and emergency equipment such as fire extinguishers or fire alarms.
5. Do not place materials such as boxes or trash in walkways and passageways.
6. Do not use gasoline for cleaning purposes.
7. Mop up water around water fountains, drink machines and ice machines.

Lifting Procedures

General

1. Test the weight of the load before lifting by pushing the load along its resting surface.
2. If the load is too heavy or bulky, use lifting and carrying aids such as hand trucks, dollies, pallet jacks and carts, or get assistance from a co-worker.
3. Never lift anything if your hands are greasy or wet.
4. Wear protective gloves when lifting objects with sharp corners or jagged edges.

When lifting

1. Face the load.
2. Position your feet 6"-12" apart with one foot slightly in front of the other.
3. Bend at the knees, not at the back.
4. Keep your back straight.
5. Get a firm grip on the object using your hands and fingers. Use handles when they are present.
6. Hold the object as close to your body as possible.
7. Perform lifting movements smoothly and gradually; do not jerk the load.
8. If you must change direction while lifting or carrying the load, pivot your feet and turn your entire body. Do not twist at the waist.
9. Set down objects in the same manner as you picked them up, except in reverse.
10. Do not lift an object from the floor to a level above your waist in one motion. Set the load down on a table or bench and then adjust your grip before lifting it higher.

ALL EMPLOYEES

Ladders and Stepladders

1. Read and follow the manufacturer's instruction label affixed to the ladder if you are unsure how to use the ladder.
2. Do not use ladders that have loose rungs, cracked or split side rails, missing rubber foot pads, or other visible damage.
3. Keep ladder rungs clean and free of grease. Remove buildup of material such as dirt or mud.
4. When performing work from a ladder, face the ladder and do not lean backward or sideways from the ladder.
5. Allow only one person on the ladder at a time.
6. Do not stand on the top two rungs of any ladder.
7. Do not stand on a ladder that wobbles or leans to the left or right of center or is crooked.
8. Do not try to "walk" a ladder by rocking it. Climb down the ladder and then move it.

Climbing a Ladder

1. Face the ladder when climbing up or down it.
2. Do not carry items in your hands while climbing up or down a ladder.
3. Maintain a three-point contact by keeping both hands and one foot or both feet and one hand on the ladder at all times when climbing up or down the ladder.

Driving/Vehicle Safety

Fueling Vehicles

1. Turn the vehicle off before fueling.
2. Do not smoke while fueling a vehicle.
3. Wash hands with soap and water if you spill gasoline on them.

Driving Rules

1. Shut all doors and fasten your seat belt before moving the vehicle.
2. Obey traffic patterns and signs at all times.
3. Maintain a three-point contact using both hands and one foot or both feet and one hand when climbing into and out of vehicles.
4. Do not leave keys in an unattended vehicle.

OFFICE PERSONNEL

Office Safety

General

1. Do not place material such as boxes or trash in walkways and passageways.
2. Do not throw matches, cigarettes or other smoking materials into trash baskets.
3. Do not kick objects out of your pathway; pick them up or push them out of the way.
4. Keep floors clear of items such as paper clips, pencils, tacks or staples.
5. Straighten or remove rugs and mats that do not lie flat on the floor.
6. Mop up water around water fountains and drink machines.
7. Do not block your view by carrying large or bulky items; use a dolly or hand truck or get assistance from a fellow employee.
8. Store sharp objects, such as pens, pencils, letter openers or scissors, in drawers or with the points down in a container.
9. Carry pencils, scissors and other sharp objects with the tips pointing down.
10. Use the ladder or step stool to retrieve or store items that are located above your head.
11. Do not run on stairs or take more than one step at a time.
12. Keep doors in hallways fully open or fully closed.
13. Use handrails when ascending or descending stairs or ramps.
14. Obey all posted safety and danger signs.

Furniture Use

1. Open only one file cabinet drawer at a time. Close the filing cabinet drawer you were working in before opening another filing drawer in the same cabinet.
2. Use the handle when closing doors, drawers and files.
3. Put heavy files in the bottom drawers of file cabinets.
4. Do not tilt your chair on its back two legs while you are sitting in it.
5. Do not stand on furniture to reach high places.

Equipment Use

1. Do not use fans that have excessive vibration, frayed cords or missing guards.
2. Do not place floor-type fans in walkways, aisles or doorways.
3. Do not plug multiple electrical cords into a single outlet.
4. Do not use extension or power cords that have the ground prong removed or broken off.
5. Do not use frayed, cut or cracked electrical cords.
6. Use a cord cover or tape down cords when running them across aisles, between desks or across entrances or exits.
7. Turn the power switch of the local exhaust fans to "ON" when operating the blueprint machine.
8. Do not use lighting fluid to clean drafting equipment; use soap and water.

Job Specific

1. SAFETY GLASSES are mandatory in all machining areas where chemical, flying debris and high-pressure air present immediate eye hazard conditions. Wearing SAFETY GLASSES throughout the facility is strongly recommended. ALL VISITORS must wear SAFETY GLASSES outside of office spaces at all times.
2. Job, process and machine specific safety rules and procedures are found at point-of-use throughout the manufacturing department. Supervisors will be responsible for developing, revising, training and posting this information in a Job Safety Analysis format at or near each machine operation. All training shall be documented on [JSA Training.doc](#)
3. The Safety Coordinator maintains completed Job Safety Analysis forms and verifies operator training during audits. See Form [JSA.doc](#)

Equipment Specific

1. **Forklift Safety:** All operators of forklifts SHALL be trained and certified for the model they are operating. Tri-annual recertification is required. As a minimum, this training will consist of the following:
 - a. View Forklift Operators Training Video
 - b. Pass (20) question written exam
 - c. Pass oral examination from certified examiner
 - d. Pass practical operations exam