

Hot Work Permits

Corporate Environment Safety & Health

Hot Work Permits

Why are we here?

Every year fires occur, which could have been prevented had employees used appropriate fire prevention measures.

This company requires the use of the Hot Work Permit system as a primary means of preventing fires due to non-routine open flame and high temperature processes.

Hot Work Permits

Goals and Objectives:

At the end of this session you will:

- Recognize work that requires the use of Hot Work Permits.
- Be familiar with the Hot Work Permit System.
- Pass a quiz with a score of 100%.

Hot Work Permits

Definitions:

Hot Work is any work using open flames or sources of heat that could ignite materials in the work area.

Hot Work Permits

Examples of hot work are:

welding

burning

brazing

propane soldering

oxyacetylene cutting

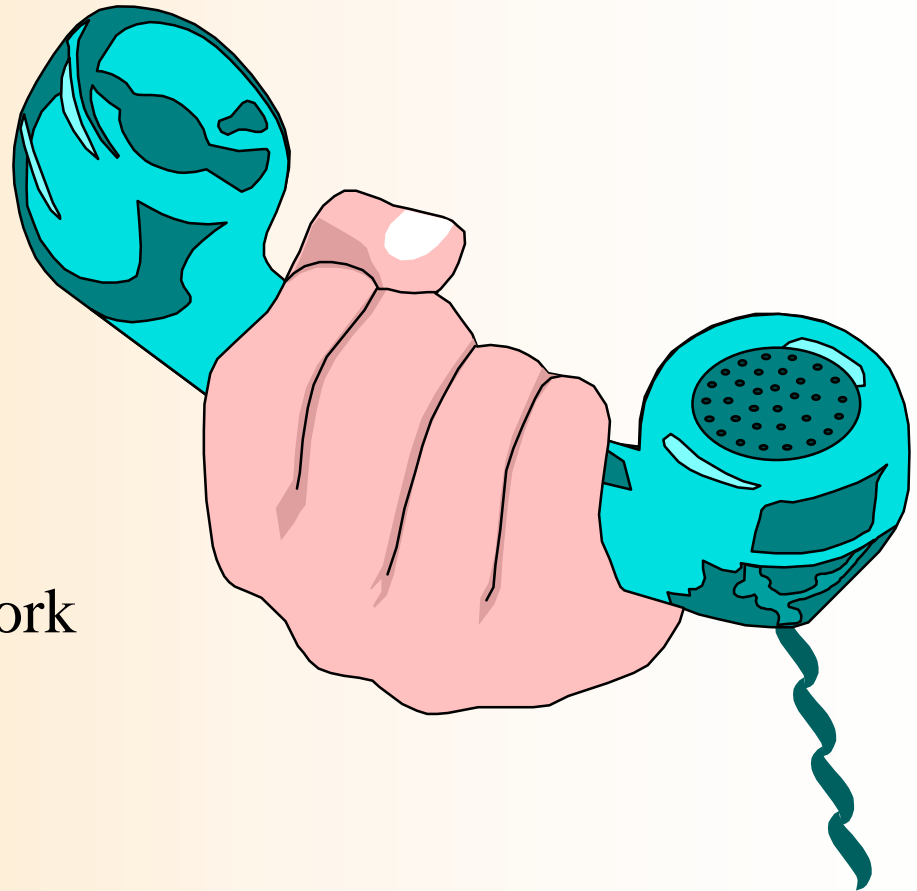
grinding ferrous metals



Hot Work Permits

Procedures:

Before beginning hot work, contact the Fire Marshal, Safety Engineer, or Maintenance Manager to have a Hot Work Permit issued.



Hot Work Permits

Cutting / Welding Permit

Location: Job No.

Date: Job No.

Location & Building: Floor

Nature of Job:

Welder's Name:

The above location has been examined. The precautions checked on the reverse of this card have been taken to prevent fire.
Permission is granted for this work.

Permit Date: Time:
Expires AM
PM

Permits are issued for the specific job being done, and for a specific time period. The time period is usually for the working shift, but may never exceed twenty-four hours.

Hot Work Permits

Necessary Precautions

- Sprinklers are in service.
- Cutting and welding equipment in good repair.

Precautions within 35 ft. (10 m.) of work.

- Floors swept clean of combustibles.
- Combustible floors wet down, covered with damp sand or fire-resistive sheets.
- Flammable liquids removed; other combustibles, if not removed protected with fire-resistive tarpaulins or metal shields.
- Explosive atmosphere in area eliminated.
- All wall and floor openings covered.
- Fire-resistive tarpaulins suspended beneath work.

Work on Walls or Ceilings

- Construction is noncombustible and without combustible covering or isolation.
- Combustibles moved away from other side of wall.

Work on Enclosed Equipment

- Enclosed equipment cleaned of all combustibles.
- Containers purged of flammable liquids.

Fire Watch

- Fire watch will be provided during and for at least 30 minutes after work, and during any coffee or lunch breaks.
- Fire watch is supplied with suitable extinguishers, or charged small hose.
- Fire watch is trained in use of this equipment and in sounding alarm.

The Fire Marshal, Safety Engineer, or Maintenance Manager has the responsibility to verify that all necessary precautions have been taken at the worksite.

Hot Work Permits

Necessary Precautions

- Sprinklers are in service.

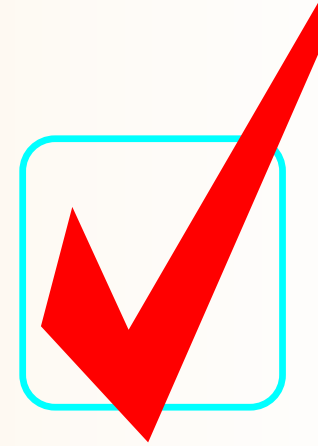


Welding and other hot work have been found to be high ranking causes of industrial fires. Sprinkler systems must remain in service in the hot work area, unless specifically approved by the Fire Marshal, Safety Engineer, or Maintenance Manager.

Hot Work Permits

Necessary Precautions

- Cutting and welding equipment in good repair.



Gas hoses, backflow preventers, fire resistive tarpaulins, curtains and other cutting and welding equipment must be in good repair before the permit is issued.

Hot Work Permits

Necessary Precautions

Precautions within 35 ft. (10 m.) of work.

- Floors swept clean of combustibles.
- Combustible floors wet down, covered with damp sand or fire-resistive sheets.
- Flammable liquids removed; other combustibles, if not removed protected with fire-resistive tarpaulins or metal shields.
- Explosive atmosphere in area eliminated.
- All wall and floor openings covered.
- Fire-resistive tarpaulins suspended beneath work.

Work on Walls or Ceilings

- Construction is noncombustible and without combustible covering or isolation.
- Combustibles moved away from other side of wall.

Work on Enclosed Equipment

- Enclosed equipment cleaned of all combustibles.
- Containers purged of flammable liquids.



Anything that can burn must be removed from the immediate work area.

Hot Work Permits



Necessary Precautions

Fire Watch

- Fire watch will be provided during and for at least 30 minutes after work, and during any coffee or lunch breaks.
- Fire watch is supplied with suitable extinguishers, or charged small hose.
- Fire watch is trained in use of this equipment and in sounding alarm.

Should other precautions fail, trained personnel will be needed with fire fighting equipment to extinguish any fires which start. Personnel and equipment must be readily available before the permit is issued.

Hot Work Permits

Necessary Precautions

Fire Watch

- Fire watch will be provided during and for at least 30 minutes after work, and during any coffee or lunch breaks.
- Fire watch is supplied with suitable extinguishers, or charged small hose.
- Fire watch is trained in use of this equipment and in sounding alarm.

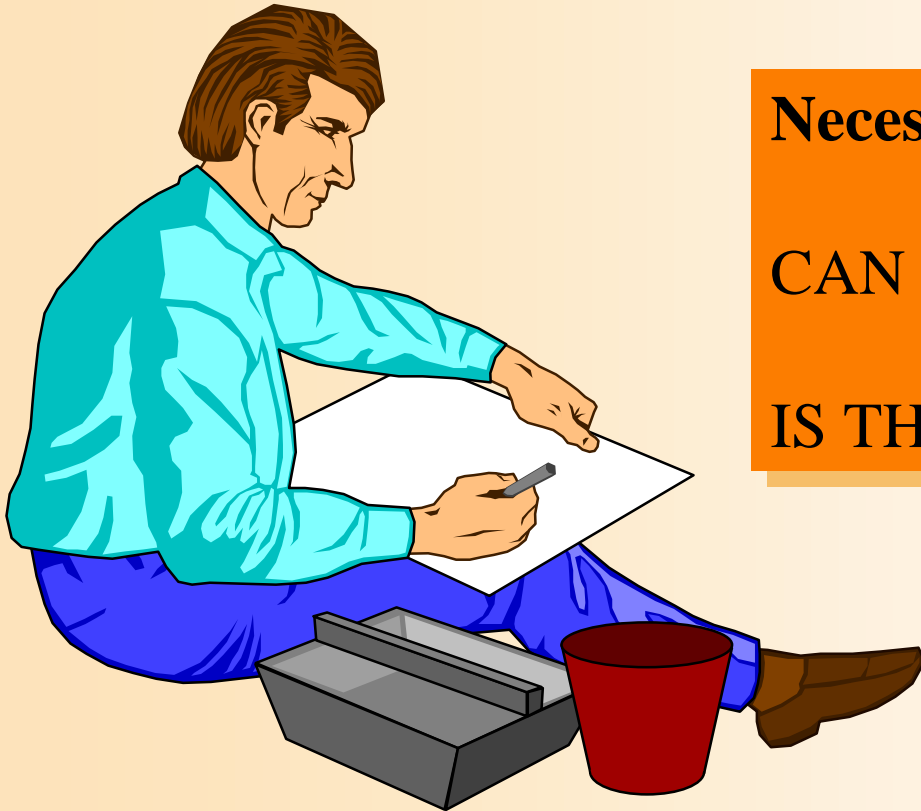
Fire Watch Personnel may not do other jobs which detract from their primary responsibility.

Fire Watch Personnel must be trained to use fire extinguishment media provided.

Fire Watch Personnel must be aware of how to report emergencies, and in emergency evacuation procedures.

Fire Watch Personnel must be identified and their qualifications verified, before permits are issued.

Hot Work Permits



Necessary Precautions

CAN THE JOB BE AVOIDED?

IS THERE A SAFER WAY?

Before beginning any hot work, ask yourself if the work can be done a safer way. Hot work is very hazardous and should be avoided if not absolutely necessary.

Hot Work Permits

Final Checkup By Welder

Work area and all adjacent areas to which sparks and heat might have spread (such as floors above and below and on opposite side of walls) were inspected after the work was completed and were found firesafe.

Signed:

After signing, return to person who issued it.



Before leaving the area for the day, verify that no smoldering fires have developed within walls, cracks in floors, or in ceiling areas where you have been working. Return the work permit to the person who issued it within 30 minutes of job completion, so that they may complete any necessary job follow-up.

Hot Work Permits - Summary

- o Jobs like electric arc welding, brazing, gas soldering, and oxygen-acetylene cutting and welding require hot work permits be issued by the Fire Marshal, Safety Engineer, or Maintenance Manager before work begins.
- o Permits are issued for a specific job, for a specific time frame, to a specific person.
- o All necessary equipment must be on site and in good working order before work begins.
- o A fire watch must be present for the duration of hot work and for at least 30 minutes after work is done.
- o A fire inspection must be conducted by the person doing the hot work before leaving the job site.
- o Permits are to be returned to the person who issued them.

Where to Get Help?

Your supervisor is responsible for all necessary equipment and for contacting the Fire Marshal, Safety Engineer, or Maintenance Manager.

The Fire Marshal, Safety Engineer, or Maintenance Manager will issue all permits and answer any specific questions about fire protection systems, fire prevention measures, and precautions.

The Safety Representative can answer any questions regarding other hazards, such as welding light or fumes.