

# HOT WORK PERMIT

No.: .....

Fire hazard activities, in particular  
e.g. welding, cutting, soldering, flashing, electric thawing, flame chipping, abrasive cutting

Principal/Contracting body/Client: (Place / Location of work)				
Area of Work: .....				
Type of Work: .....				
Planned period of work:				
Start on: ..... at (time) ..... a.m./p.m until ..... a.m./p.m.				
End on: .....				
<input type="checkbox"/> Executing company/professional: ..... <input type="checkbox"/> In-house/proprietary professional				
Name(s) of executing professional(s): .....				
<b>PERMIT</b> „NOTE: The permit may only be granted during an on-site inspection"				
Permit valid until:     Date: ..... Time: .....				
Special provisions: .....				
.....				
Detectors/detector groups: ..... of the fire alarm system (to be) deactivated/disabled				
Name: .....		Telephone number: .....		
Date: .....		Signed: .....		
<b>CONFIRMATION OF ACCEPTANCE</b> Executing responsible person/agent on site: ..... I herewith pledge myself to ensure that the above-mentioned special FIRE SAFETY PROVISIONS, as well as those mentioned on the reverse side and below, are observed and I herewith certify receipt of this hotwork permit.				
Date: ..... Signed: .....				
Controlling body required: <input type="checkbox"/> yes <input type="checkbox"/> no   Name of controlling body: .....				
Detector/detector groups reset:				
Date: ..... Time (am/pm): .....				
Name: ..... Signed: .....				
Responsible for <b>CHECK-UPS AFTER HOTWOK TERMINATION</b> :.....				
Duration of check-ups after termination: ..... hours (Supplement may be added to list, if necessary)				
	Date	Time	Name	Signature
1				
2				
3				
4				

Copies distributed to:

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## Fire-safety provisions for hot works

Welding, cutting, soldering, flashing, electric thawing, abrasive cutting, and similar activities are sometimes indispensable on permanent workplaces that are not primarily intended/equipped for hot work activities (e.g. on building sites) and they almost always pose a risk of fire.

### **Please bear in mind:**

Combustible/flammable materials may ignite due to thermal conductivity even behind a non-flammable wall-covering (such as mortar/plaster, asbestos cement, sheet metal, etc.); also canals (tubes, ducts), shafts, pipes, false floors, and similar hollows may favour the spread of fire.

In order to adopt the right measures and take the right action, it is therefore advisable to inspect the location of the intended work and the surroundings carefully beforehand, and to demand all necessary information about potential hazards from your principal or client. For more detailed information about the fire hazards involved in these so-called "hot works" please consult the Austrian Technical Guideline for Preventive Fire Safety, TRVB 104 0.

### **"Fire hazards in welding, cutting, soldering and other hot works"**

This technical guideline may be obtained from the Fire Prevention Agency that has jurisdiction for the Austrian province in which your project is located; alternatively, you may obtain it from the Austrian Federal Fire-Fighters' Association<sup>1</sup> or from the regional fire-fighters' associations<sup>2</sup>, which are competent for and located in each Austrian province.

### **Pre hot work safety inspection checks:**

Before starting hot work activities, the total equipment (machines, machine tools) must be inspected and found free of damage or defects. Further the most suitable place and position must be determined, so as to be able to interrupt energy supply quickly, if necessary.

Wall, floor and ceiling penetrations, as well as inserted floors, inserted ceilings, joints/seams and other openings (cracks, gaps) that lead to adjacent areas, but also open pipe ducts connected to the work area must be sealed with non-combustible (fire-resistant) materials, such as wetted mineral rock wool, flame retardants, mortar or the like. Attention is to be paid to avoiding potential thermal conductivity.

All flammable/ignitable materials (also dust) must be removed from the "protected zone". This must be respected above all in the case of non-lockable penetrations and for all areas beside, above and below the site of the intended hot work activities.

All tanks or containers containing combustible/flammable liquids (irrespective of their flashpoint) must be safely closed with lids, sealed (and removed). This applies, in particular, also to emptied but not cleaned containers (rendering inert, neutralisation).

If the presence or occurrence of combustible vapours in the protected area cannot be excluded, it is prohibited to start fire hazard activities or hot works.

Note for example that the temporary disablement of control panels of a fire alarm system may entail a disablement of the venting systems, whereby a higher concentration of ignitable / flammable vapours may be present than during normal operation.

If hot works have to be executed directly on installations such as tanks/containers, ductwork, pipes or tubes, all flammable substances must be removed from them (to a predetermined distance) and these containers/ducts/tubes must be thoroughly cleaned before work may begin. Containers/tanks, pipes or ducts in which ignitable or flammable substances, vapours or gases were stored or present before, must either be filled completely with water or must be rendered chemically inert (neutralised).

Flammable parts, which cannot be removed, must be covered with non-flammable (fire-resistant/fire retardant) substances of low thermal conductivity and all joints/seams have to be tightly sealed (e.g. non-flammable mats,pads or boards, but not sheet metal) and must be reliably protected against ignition.

Building/structural parts bearing a risk of ignition must be wetted with water immediately before the onset of works, or must be covered with wet sand or materials, thus safeguarding an equivalent protection.

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<sup>1</sup> Österreichischer Bundesfeuerwehrverband

<sup>2</sup> Landesfeuerwehrverbände

If an automatic fire alarm system is in place, a disablement of detectors is to be arranged only for those detectors in the area of the hot works. All other parts of the fire alarm system must remain operational!

Flammable insulations around facility (building or plant) parts undergoing hot works (e.g. around pipes, venting ducts) must be removed around the area of work to such an extent and distance that they cannot ignite.

A sufficient number of persons trained in fire-safety (e.g. fire wardens, supervisors) must be summoned to safeguard the supervision of the work area/work in progress and its surroundings. In cases of increased risk it is advisable to demand that the supervision be carried out by in-house (company-own) fire-fighters, if available, or that a request be filed ahead of time with the local public fire command/department for the setting up of a fire-safety service (fire duty, fire watch service) for the duration of operations.

An adequate number of portable fire extinguishers must be available on site, or, alternatively, if wall hydrants are available, a filled hose line is to be kept available and operational near the area of work.

Furthermore, the agents executing these hot works, as well as the control organs appointed for their supervision, have to acquaint themselves with all other fire-fighting means available - in particular with installations and equipment for alerting and alarming (e.g. the fire brigade) - and have to familiarise themselves with routes of escape and evacuation procedures.

#### **During hot works:**

The executing organs as well as the controlling organs are required to guarantee an uninterrupted supervision of all endangered areas, whereas particular care and attention must be given to flaming, flying sparks, thermal flux caused by heated materials, and the like.

Electrode stubs must be discarded into suitable, non-flammable containers or into a water-filled bucket/container.

Structural parts susceptible to ignition must be repeatedly or regularly cooled and wetted.

In a fire hazard situation hot work activities must be stopped at once, the fire brigade must be alerted, all persons in the danger zone be informed, and fire suppression must be initiated without delay (conduct in the event of a fire).

#### **After termination of the hot works:**

Renewed / repeated cooling of hot parts, e.g. with water.

The entire hazard area (compare item 5 of the TRVB 104 O) including all rooms, shafts/chutes, and other hollows lying beside, above, and below the work area, must be inspected repeatedly and thoroughly for potential glowing or smouldering spots, smouldering smell and smoke formation. These check-ups must be carried out for a duration of at least two hours after the termination of works, whereas the minimum check-ups are three and are to be carried out as follows: immediately after the termination of hot works, half an hour later, and again two hours after work ended. Depending on the actual conditions on site (storages, special constructional situation), significantly longer control/check-up durations and/or shorter control cycles may be necessary.

#### **Note: longer interruptions of work (e.g. over 30 minutes) are to be considered identical to a termination of work!**

The work area and its surroundings must be reliably supervised during the mandated control times. If indispensable hot work is carried out in the late afternoon, the site must be thoroughly supervised also at night.

It is prohibited to store acetylene, oxygen or liquid gas cylinders over night in engineering rooms or on floors reserved for personnel or other users/occupants in an industrial plant. They have to be relocated to a workshop or to special premises suitable for the storage of these cylinders.

It is required to seal penetrations of fire compartments at least in a provisional or temporary way (e.g. rock wool pads, fire-safety cushions...)

The resetting of (deactivated) fire-safety installations (detectors, alarm control panels) must be authorized.

Flammable materials may not be taken back to their original locations until several hours after the termination of all mandated control checks.

If unforeseen installations or repair works are indispensable at any time in a location where the aforementioned protective measures are insufficient, or cannot be implemented, cold work procedures such as screwing, sawing, should be favoured.

If you are not authorized to take a decision, discuss the procedures with your superior or a representative of the Commissioning agent/ Principal. In cases where company-own fire fighters are available, it is advisable to obtain their opinion.

Never allow yourself to be induced to disregard this directive by a pressure of time or by other circumstances.

#### **IN THE EVENT OF FIRE**

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|------------------|--|
| 1. ALERTING      | immediately actuate fire alarm (via telephone No.....) |
| 2. RESCUING      | alert/warn endangered persons                          |
| 3. EXTINGUISHING | if possible, start fighting the fire                   |

Brief and assist the fire fighters/fire brigade

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Signature of the responsible executing agent

(I have duly taken cognizance of the fire-safety and prevention measures described above)