

Technical safety information

# Business shutdowns

## Covering risks when the business is shut down

**There may be various reasons for a company to shut down parts of their business for a certain period or even completely. This may produce an additional local hazard potential. For this reason, appropriate safety measures covering the risks should be planned and implemented well in advance.**

A dramatic reduction in orders in times of economic crises, strikes or business restructuring frequently result in business and production facilities having to be shut down either for a limited period or completely. Possible reasons for such measures may also include an extended company holiday or seasonal business shutdowns.

It is true that production-specific and business-related risks are reduced or eliminated automatically when shutting down facilities or parts of facilities. However, insurers' experience with losses reveals that quite different hazard potentials may arise at the same time, especially due to arson, vandalism and theft. The hazard to related downstream production areas must also be taken into account here.

### **Example: Arson in a shut-down plant building**

During one night in late summer 2008, a fire occurred in an empty building of a bankrupt meat and sausage processing business in Germany. The fire brigade was called only after the flames had penetrated the roof of the single-floor former shipping and production hall. As packaging materials were still stored in the area affected by the fire, the fire spread and caused a material loss of around € 6.5 million. The reason of the loss: assumed intentional arson.

Appropriate risk protection measures could have prevented or limited the loss considerably. When after a short temporary business shutdown, the planned restart of production operations is adversely affected by the loss event, the

consequences are even more serious than in the above example.

For this reason, the HDI-Gerling Sicherheitstechnik specialists recommend their customers to implement loss prevention measures that are appropriate for the risk prior to business shutdowns or the shutting down of units. Also, it has proved extremely useful in practice to use limited "shut-down periods" for thorough maintenance and inspections of production facilities and safety equipment in order to safeguard a company in the long term, or possibly even lead the company out of such downtimes in a stronger condition.

### **Which measures should be taken prior to a business shutdown?**

All unscheduled business shutdowns should be reported to the HDI-Gerling contact person without delay. This is the only way to prepare and implement an individual set of measures in a co-ordinated and timely manner with HDI-Gerling Sicherheitstechnik. At the same time, it is important to adapt the property insurance cover to the changed risk situation in order to guarantee continued complete insurance cover. The legal and contractual provisions (requirements), e.g. when an increased hazard is involved, must be considered.

**A target related strategy of measures is essentially sub-divided into the following areas:**

#### **1. Protection against arson, theft and vandalism**

Protecting an industrial building against arson essentially requires the protection of the premises either by technical/structural means (fencing, lighting, mechanical/electric

burglary protection) and/or by guarding which is adequate to the risk. The manpower, the number of guard rounds and the definition of the routes depends on the local situation. The experience gathered by the HDI-Gerling Sicherheitstechnik specialists shows that specific areas where high fire loads occur – i.e. combustible materials stored at this location – must be specially protected/monitored or be cleared during a business standstill/shutdown or be substantially reduced. The same considerations apply to external storage areas which are often a particular target for arsonists.

As far as the theft risk is concerned, this also relates to goods of economic value. In addition, the following applies: The worse the general appearance of an operations building, e.g. due to broken windows, the greater the risk of offenders to engage in arson or vandalism attacks. Also, particular attention is required in case of repeated offences. For this reason, it is advisable to contact the HDI-Gerling contact person in charge after every known arson attempt in order to jointly examine the existing protection measures and develop these further, as required according to the circumstances.

## 2. Minimisation of ignition sources

Another increased hazard results from the probable substantial reduction of staff on the premises. Frequently the premises are no longer permanently manned. This increases the risk of a fire not being detected in the critical early stages and not successfully extinguished. This is why it is important



to anticipate and avoid ignition sources in advance as far as practically possible. The risk is of a considerable extent: According to the loss statistics prepared by insurers, around 30 percent of all fires are caused by defects of technical systems such as electric lighting and power installations or mobile electric devices (see graphics). The latter include: Coffee machines, water boilers, refrigerators, mobile heaters etc. In general, such appliances should be included in the scope of inspection of electric equipment and be disconnected from the mains during extended shutdown periods by removing the plug from the socket outlet.

## 3. Minimisation of fire loads

Fire loads should be minimised not only in the storage areas in order to reduce the arson risk, but also where combustible materials are stored next to or even inside production facilities as these can change their fire behaviour very quickly after shutting down the production. For example, materials with an initially high moisture content such as wood chips, paper trimmings and various other combustible substances, can dry out quickly, thus reducing their ignition temperature.

For these reasons, production areas should be completely emptied, cleared and thoroughly cleaned prior to shutting them down. This also applies to some plant items e.g. to suction and filter systems, conveyor systems etc..

## 4. Safety precautions relating to fire protection equipment

Safety equipment should always be maintained in operational order, even during difficult economic conditions, so that property losses can be avoided or significantly reduced. This applies particularly when locations are no longer manned or are only manned with a small number of employees, when automatic fire protection equipment such as fire protection gates, fixed protection and fire alarm systems become of particular importance.

The following measures should therefore be carried out consistently:

- Maintenance and repair work as well as the usual routine checks by specialist companies and acknowledged experts (e.g. in Germany by the VdS)
- Transmission of alarms to a permanently manned office. Alarm delays should be deactivated for the duration of the shutdown phase.
- Training of personnel regarding the operation of fire protection equipment.

Important: If shutdown periods are to be used for performing alterations and/or repair work on fire protection systems such as the sprinkler system, the impairment of those systems must be reported to the responsible HDI-Gerling contact person. This is essential to ensure that adequate alternative protection measures can be implemented by joint discussion.

## 5. Safety precautions on buildings and technical systems

After shutting down the production facilities and disconnecting the electrical systems from the mains supply, the other

utilities may require particular attention, e.g. gas consuming appliances which are no longer in operation during the shutdown period should be disconnected from the gas supply at the main shut-off valves (which are usually located externally). Systems containing water as well as pipes (fresh, heating, process and fire water) must be protected against frost unless safeguarded and monitored heating of the buildings can be ensured during the cold season.

This applies in particular to water-filled wet pipe groups of fixed protection systems during frost periods. In the above cases, the building temperature must not drop to below +5°C without any frost protection measures in place, e.g. pipe insulations and trace heating. Trace heating systems must be redundant and must be monitored in respect of power failure and breakdown of heating elements and temperature sensors.

Draining wet-pipe sprinkler systems is not allowed as a precautionary measure as fire protection is no longer provided after such a step. In dry-pipe systems, it must be ensured that they will be thoroughly drained after a test flooding.

**6. Other organisational measures**

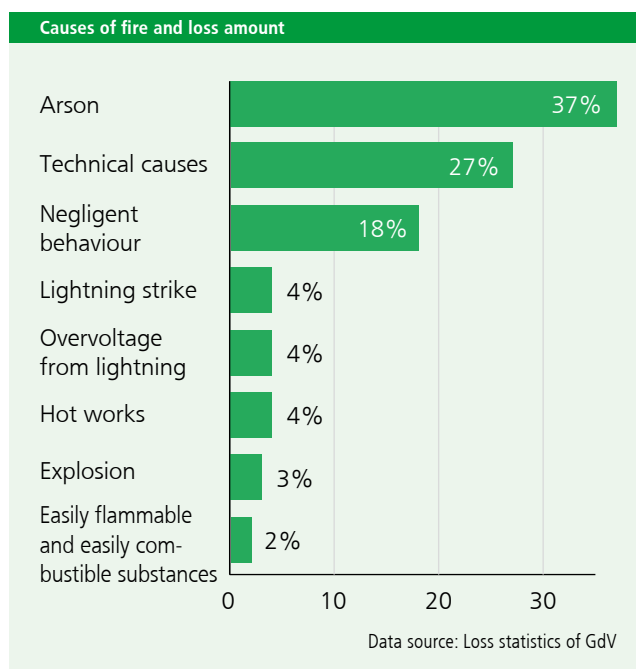
Around 15 to 20 percent of all fire losses are attributable to negligent behaviour (see graphics). For this reason, the personnel remaining on the premises and responsible for operations there should be prepared appropriately so they are able to handle the changed or new risk situation. The following measures must be emphasized in this context:

- Updating/adaptation of alarm and emergency plans, e.g. regarding new contact partners/phone numbers
- Control and monitoring of hot works, especially of those connected with repair and alteration work on existing production facilities

Hot works represent an exceptionally high fire hazard: An undetected smouldering fire may develop into a large-scale fire even hours after completing the hot works in question. For these reasons, it is particularly important that such activities involving hot work are carried out with utmost care and are thoroughly monitored. To support this approach, your HDI-Gerling contact person will make "Hot works permit" forms available to you.

The use of these hot works permit forms is to ensure that hot works on the premises are approved only after adequate protection measures are implemented prior to, during and after the works. One centrally responsible employee provided with rights and obligations directly by the business management should ensure the approval and the handing-over/acceptance of the works at a later date. Hot work permits may therefore have to be issued several times per day, depending on the location and the type of works.

An in-house fire-fighting group or a works fire brigade which may be available should be integrated into the protection concept as a support for providing additional protection in the work areas concerned. In addition, it is recommended to report the new operating situation to the local police and fire brigade as well and/or to consider them in the planned measures. The fire brigade must have unrestricted access to all operational areas at all times. The risk situations arising in the process of a business standstill/shutdown are manifold and may increase the local hazard potential. For these reasons, we recommend that you contact your HDI-Gerling contact person in good time in all circumstances. In the usual partner-like cooperation with the HDI-Gerling Sicherheitstechnik specialists, it can be ensured that your business is protected in the best possible way both technically and commercially during such periods.



**Check list for preparing business standstills/shutdowns**  
 Attached you will find a checklist for business shutdowns with the most important measures to secure your property.

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 Note: Requirements made by authorities are not covered by our recommendations.



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[www.hdi-gerling.de/berater](http://www.hdi-gerling.de/berater)

## Check list: Measures for business shutdowns

Measures	Completed		Remarks
	Yes	No	
<b>General information:</b>			
Which business areas are shut down? (location, building, building section, systems, machinery)			
For how long will the above business areas be probably shut down?			
<b>Protection against arson, theft and vandalism:</b>			
Are the premises completely enclosed by a fencing?	<input type="checkbox"/>	<input type="checkbox"/>	
Are all buildings/halls sufficiently protected against unauthorized access, e.g. by installing locks that are adequate for the risk as well as door and window protection?	<input type="checkbox"/>	<input type="checkbox"/>	
Are locks, doors and windows checked at regular intervals for damage and repaired without delay?	<input type="checkbox"/>	<input type="checkbox"/>	
Are burglar alarm systems provided (if yes, please give a brief description)?	<input type="checkbox"/>	<input type="checkbox"/>	
Are the premises supervised around the clock?	<input type="checkbox"/>	<input type="checkbox"/>	
Was the concept of premises monitoring by guards coordinated with HDI-Gerling regarding the manpower, number of rounds and definition of the routes?	<input type="checkbox"/>	<input type="checkbox"/>	
Are safety-relevant rooms, the outer building shell and the fences checked every day (at least every 2 days)?	<input type="checkbox"/>	<input type="checkbox"/>	
Is the operations building including the fence, any possible outdoor storage areas and the building shell lit around the clock? (Alternative: lighting system controlled by motion alarms).	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Minimisation of ignition sources:</b>			
Is an unrestricted ban on smoking in force on the entire premises during the business standstill?	<input type="checkbox"/>	<input type="checkbox"/>	
Are mobile electric appliances (coffee machines, water boilers, refrigerators, mobile heaters) disconnected from the mains by removing the plug from the socket outlet?	<input type="checkbox"/>	<input type="checkbox"/>	
Are operations areas electrically isolated centrally? (If so, which areas?) Note: Safety-relevant equipment/systems such as fire protection systems or emergency lighting systems must not be affected by electrical isolation.	<input type="checkbox"/>	<input type="checkbox"/>	
Are electric devices/systems (as far as they are still operative) still inspected according to BGV A3 (by the electrician) and/or according to clause 3602 (by an expert approved by the VdS)?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Cleaning/minimisation of operational fire loads:</b>			
Are all operations rooms cleaned thoroughly prior to the business standstill?	<input type="checkbox"/>	<input type="checkbox"/>	
Are production facilities shut down completely and cleaned?	<input type="checkbox"/>	<input type="checkbox"/>	
Are unnecessary fire loads such as packaging which are not needed in the near future and combustible raw and base materials (solid/liquid or gaseous) removed from/reduced in the production and storage areas prior to the business standstill?	<input type="checkbox"/>	<input type="checkbox"/>	Reduction in %: _____
Are stocks of combustible finished/semi-finished goods reduced to the greatest possible extent?	<input type="checkbox"/>	<input type="checkbox"/>	Reduction in %: _____
Are combustible materials removed from yards, external areas etc.(as an arson protection)?	<input type="checkbox"/>	<input type="checkbox"/>	
Are combustible materials which must be stored externally located at a distance of at least 10 m from buildings and from the boundary of the premises?	<input type="checkbox"/>	<input type="checkbox"/>	
Are water, emulsion, lubrication and hydraulic oil contents removed from machinery and systems as a fire and frost protection measure if this can be justified from an operational/ technological point of view?	<input type="checkbox"/>	<input type="checkbox"/>	
Are machinery and systems protected against corrosion by greasing or by protective covers and checked at regular intervals?	<input type="checkbox"/>	<input type="checkbox"/>	

Measures	Completed		Remarks
	Yes	No	
<b>Safety precautions relating to fire protection equipment:</b>			
Is the insurer notified about the shutdown of fire alarm or fixed fire protection systems if this is required at short notice in exceptional cases? Are compensation measures relating to fire protection coordinated with the insurer?	<input type="checkbox"/>	<input type="checkbox"/>	
Is maintenance work, revisions and repair work on fire protection systems (fire alarm system, fixed fire protection systems, fire protection gates, etc.) carried out by own personnel, specialist companies, the VdS or other experts in the usual way and at the usual intervals?	<input type="checkbox"/>	<input type="checkbox"/>	
Is alarm transmission from fire alarm systems updated to reflect the possibly changed personnel situation?	<input type="checkbox"/>	<input type="checkbox"/>	
Is it ensured that in areas with water-filled wet pipe groups of fixed protection systems, the building temperature will not drop below +5°C and that sufficient freezing protection is provided by other measures, e.g. by redundant trace heating systems?	<input type="checkbox"/>	<input type="checkbox"/>	
Are all fire protection gates and doors closed as the business is shut down?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Safety precautions on buildings and technical systems:</b>			
Are vehicles parked in such a manner on the premises that they will not represent a fire hazard for the building, i.e. in areas covered by a sprinkler system or externally at a distance of at least 10 metres from buildings? Note: The building code for garages must be considered.	<input type="checkbox"/>	<input type="checkbox"/>	
Are all systems containing water as well as pipes (fresh, heating, process and fire water) protected against frost unless safeguarded and monitored heating of the buildings can be ensured?	<input type="checkbox"/>	<input type="checkbox"/>	
Are gas consuming appliances which are not operating during the shutdown period disconnected from the gas supply at the main shut-off valves?	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Other organisational measures:</b>			
Are particular safety precautions taken when performing hot works? Are hot work permits being issued before starting such works?	<input type="checkbox"/>	<input type="checkbox"/>	
Are alarm plans updated regularly, e.g. regarding new phone numbers and other changed conditions?	<input type="checkbox"/>	<input type="checkbox"/>	
Are selected employees informed 48 hours in advance through the storm information system of the Deutschen Wetterdienst (German Weather Service, <a href="http://www.dwd.de">www.dwd.de</a> ) or <a href="http://www.unwetterzentrale.de">www.unwetterzentrale.de</a> , e.g. in order to take safety precautions in case of predicted storms or heavy rain?	<input type="checkbox"/>	<input type="checkbox"/>	
Is the safety and control personnel trained to handle the existing hazards/fire hazards and to operate the alarm systems and fire protection systems properly?	<input type="checkbox"/>	<input type="checkbox"/>	
Was the business shutdown reported to the insurer?	<input type="checkbox"/>	<input type="checkbox"/>	
Remarks / notes:			

Place, date

Signature (optional)

The experts in the local HDI-Gerling branch offices or HDI-Gerling Sicherheitstechnik at +49 (0)5 11 / 6 45 - 43 37 will be glad to assist you with further information.