

How can I prevent ware- house fires?

Fire prevention
for high-bay
warehouses



Introduction

When there is a fire in a warehouse, it is usually too late to take successful counteractive measures. In most cases, the only option is to call the fire brigade and in the worst case to allow the warehouse to burn down in a controlled manner.

Rapid technological developments in the storage and logistics fields have yielded new solutions using automation and robotics. Extremely high packing density, intelligent networking and complex processes also present new challenges in terms of fire prevention for automated warehouses.

In this guideline, you will learn how you can prevent fires in your warehouse in order to effectively avoid business interruptions. The aim is to protect the highly automated warehousing and logistics processes so as to permanently guarantee the existence of your company and your value chain.

Did you know?

- 46% of all companies in Europe fear business interruptions and disruptions to the supply chain.
- 40% of all companies worldwide fear business interruptions as a result of fire and explosions.
- 24% of all corporate insurance claims worldwide result from fire and explosions.
- > 14 billion euros in insurance damages were paid out to 9,500 claims made as a result of fire in the last five years.

Source: Allianz Risk Barometer,
corporate insurance claims 2013–2018

Your risk

Business interruptions due to fire risks have serious consequences. In addition to the financial impact, there are also the intangible losses such as the loss of reputation, missed market opportunities and the loss of customers and knowledge. Business interruption insurance is no longer enough to prevent such consequences. Part of the risk therefore remains with the company, non-transferable.

It is time to change this!

Step 1: Define your protection objectives

To minimise the risks to the company, you have to define your protection objectives. Important protection objectives for warehouses and logistics centres:

- *Preserving delivery capabilities*
- *Securing operational readiness*
- *Protecting the stored goods*
- *Preventing smoke contamination*
- *Avoiding loss of business image*

Step 2: Analyse your risk

Consider usage-specific fire hazards associated with automated high-bay warehouses:

- *Technical operating equipment*
- *Use of flammable construction and insulation materials*
- *Extremely dry atmosphere, e.g. in deep-freeze warehouses*
- *Stored goods that are extremely sensitive to smoke and temperature*

Consider other fire hazards:

- *Electrical systems*
- *Lighting systems*
- *Battery chargers for industrial trucks, pickers, etc.*

Be careful not to neglect the usual causes of increased risk in warehouses:

- *Tall, narrow rack construction*
- *Tightly packed pallets and goods with little space between them*

- *High fire loads as a result of flammable stored goods, packaging, transport equipment and storage aids*
- *Risk of arson*
- *Spark-forming activities*

Step 3: Create a sound fire prevention concept

High-bay warehouses with a height of over 7.50 m are classed as special constructions that require a fire prevention concept in order to be built. Whether planning an automated high-bay warehouse or a deep-freeze one, all warehouse types present specific risks from a fire prevention perspective and therefore have different requirements in terms of fire prevention. As such, even as early as the planning phase for your warehouse, you should appoint a fire prevention expert to create a fire prevention concept tailored to your individual needs.

Did you know?

- *44 % of all fires in deep-freeze warehouses are caused by faults with electrical systems.*

Source: VdS 2032: 2008–2009 (02)



Our services: *Fire protection system technology*

To comprehensively protect your high-bay warehouse against the risk of fire, WAGNER's experts will help you create a risk analysis tailored to your specific protection objectives, right through to the operating phase. Fire protection as a customer-specific solution – this is how WAGNER regards its partnership approach.

Innumerable customers all over the world trust in the fire protection solutions from WAGNER.

*Want to find out how to effectively
prevent fires in high-bay warehouses?*



*Download our informative
white paper now!*