

## Operators Directive

ATEX 1999/92/EC



## Manufacturers Directive

ATEX 2014/34/EU



**„Minimum requirements for protecting the health and safety of employees at risk from potentially explosive atmospheres.“**

**Applies to companies that use, manufacture, store, process or transport flammable material.**

In accordance with the potential risks European directive ATEX 1999/92/EC, also known as ATEX 137, sets out the minimum requirements for the health and safety of employees at risk from potentially explosive atmospheres.

This means that employers have to fulfill a number of obligations based on an individual assessment of the respective risks. These obligations include:

1. The prevention of the occurrence of potentially explosive atmospheres in the work zone or the avoidance of igniting potentially explosive atmospheres.
2. Carrying out a risk assessment, including the likelihood that a potentially explosive atmosphere and an ignition source could occur.
3. The classification of the work locations in zones according to the frequency and duration of the presence of a potentially explosive atmosphere. This process was already required by the framework directive (89/391EEC) previously in force.
4. Marking the zones with signs in the entrance area. (Example sign above)
5. Drawing up and maintaining a document on explosion protection.
6. The selection of equipment to ATEX 2014/34/EU according to zones of intended use.

**„Equipment and safety systems for appropriate use in potentially explosive environments.“**

**Applies to companies which supply equipment for use in potentially explosive environments.**

ATEX 1999/92/EC provides that all products which are to be used in these zones must satisfy the requirements of Directive ATEX 2014/34/EU. The main purpose of the directive is to ease the free movement of goods inside the EU by harmonizing the technical and legal standards according to which equipment to be used in potentially explosive environments is manufactured.

ATEX 2014/34/EU places equipment in three categories according to the respective level of protection applied. These satisfy the requirements of ATEX 1999/92/EC:

- Category 1 – Very high safety requirement
- Category 2 – High safety requirement
- Category 3 – Standard safety requirement

The category number is followed by a G (gas, vapor/mist), if the equipment is intended for use in zone 0, 1 or 2, and by a D (dust), if it is intended for use in zones 20, 21 or 22.

### Zone 1

Zone in which, during normal operation, a potentially explosive atmosphere in the form of a mixture of air and flammable gases, vapors or mists can occur occasionally.

**Category 2G**

### Zone 2

Zone in which, during normal operation, a potentially explosive atmosphere in the form of a mixture of air and flammable gases, vapors or mists can normally not occur or only occurs briefly.

**Category 3G**

### Zone 21

Zone in which, during normal operation, a potentially explosive atmosphere in the form of cloud of flammable dust carried in the air can occur occasionally.

**Category 2D**

### Zone 22

Zone in which, during normal operation, a potentially explosive atmosphere in the form of cloud of flammable dust carried in the air can normally not occur or only occurs briefly.

**Category 3D**

**ATEX regulations apply to both, suppliers and operators of equipment designed for use in potentially explosive atmospheres and are binding for all companies within EU member states.**

# Products

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## Services

### Products

Sichelschmidt offers over 50 years of know-how in the development and production of explosion-protected industrial vehicles. Many years of specialist research and development, meeting the needs of our clients, has enabled Sichelschmidt to design and build an impressive and unique portfolio of fully flameproof components including drive motors, pump and steering motors, control equipment enclosures and oil immersed disc brakes.

By incorporating products from within this range and utilizing the accepted industry standard flame proofing techniques, Sichelschmidt is able to build its complete range of flameproof battery electric forklifts without resorting to gas detection or other 'add on' warning systems.

This approach ensures that machines are consistently built to a high protection standard of Gas Group II B, Temperature Class T4 and depending upon specification fully meet the requirements of ATEX for use in Zone 2 (3G) or the more stringent requirements for Zone 1 (2G).

Additionally, machines are available to accommodate IIC gas, and dust or powder, even for the harsh environment of the off shore oil industry, where additional protection and specialized battery recharging apparatus may be necessary.

### Explosion Protection

A wide variety of businesses in many different industries are potentially at risk when manufacturing, handling, processing, storing or transporting flammable liquids, gases, dusts or powders.

Most meet or exceed their legal and moral obligations to their workforce, shareholders and society in general, being fully aware of the potentially devastating consequences of non-compliance with explosion proofing requirements should a mishap occur.

### Explosive Dusts

The use of powders and the creation of dust is often an everyday occurrence in numerous industries.

Dusts and powders, many of which would be regarded as inert, can and will, ignite under certain conditions and will explode when a dust cloud, at certain powder to air ratios, is ignited. Sichelschmidt design, engineer and build forklift trucks to meet the requirements of these situations.

### Explosion Group IIC

All Sichelschmidt pedestrian trucks and M200 sit-on pallet trucks are certified by PTB for the use with gases of explosion group IIC, acetylene and hydrogen.

### Quality

Sichelschmidt is certified for quality assurance under the ATEX 2014/34/EU directive and ISO 9001:2008. Regular audits are carried out by Lloyds Register, TÜV Nord and TÜV-Rheinland.

### Service

A comprehensive service network made up of branches and authorized dealers in 23 countries ensure that our customers receive fast, professional support and comprehensive maintenance.

**Sichelschmidt GmbH and all their products fully certified by notified bodies, such as PTB, TÜV, and Lloyds.  
All products are CE marked.**

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