

# SVENSK STANDARD

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### **Industritruckar – Säkerhetsskyltar och risksymboler – Allmänna principer (ISO 15870:2000, IDT)**

### **Powered industrial trucks – Safety signs and hazard pictorials – General principles (ISO 15870:2000, IDT)**

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The International Standard ISO 15870:2000 has the status of a Swedish Standard. This document contains the official English version of ISO 15870:2000.

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 15870 was prepared by Technical Committee ISO/TC 110, *Industrial trucks*, Subcommittee SC 2, *Safety of powered industrial trucks*.

Annexes A to E of this International Standard are for information only.



# Powered industrial trucks — Safety signs and hazard pictorials — General principles

## 1 Scope

This International Standard establishes general principles for the design and application of safety signs and hazard pictorials permanently affixed to all types of industrial truck including those defined in ISO 5053. This International Standard outlines safety sign objectives, describes the basic safety sign formats and colours, and provides guidance on developing the various panels that together constitute a safety sign.

## 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 5053:1987, *Powered industrial trucks — Terminology*.

## 3 Objectives of safety signs

### 3.1 The objectives of a safety sign are

- to alert persons to an existing or potential hazard,
- to identify the hazard,
- to describe the nature of the hazard,
- to explain the consequences of potential injury from the hazard, and
- to instruct persons about how to avoid the hazard.

### 3.2 In achieving these objectives, a safety sign

- should be distinctive on the equipment,
- should be in a clearly visible location,
- should be protected to the greatest extent practicable from damage and obliteration, and
- should have a reasonably long life expectancy.

**3.3** Safety signs and hazard pictorials shall be located on the machine or in the operating service instruction manuals, as appropriate. Safety signs and hazard pictorials located on the machine shall be located near the location of the hazard or the control area to prevent the hazard.

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**3.4** Care shall be taken to prevent excessive need/use of safety signs and hazard pictorials on the machine, because overuse can reduce their effectiveness.

**NOTE** Experience has indicated that the effectiveness of safety signs and hazard pictorials is reduced when they begin to exceed approximately seven in number, particularly if they are in close proximity to one another.

**3.5** Safety signs and hazard pictorials can be used in operator and service instruction manuals to highlight areas requiring special care. Their use in manuals is not subject to the requirement in 3.4.

## 4 Formats for safety signs

### 4.1 General

A safety sign is composed of a border surrounding two or more rectangular panels that convey information about hazards associated with the operation of a product.

There are four standard formats for safety signs:

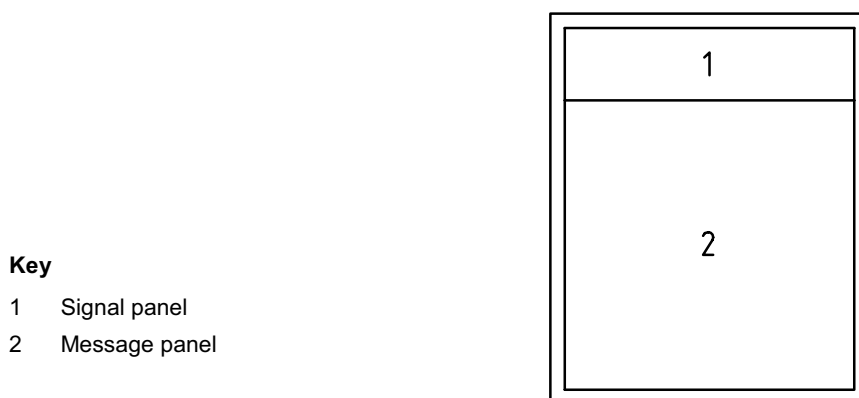
- two-panel safety sign: signal panel, message panel (see 4.2);
- three-panel safety sign: signal panel, pictorial panel, message panel (see 4.3);
- two-panel safety sign: pictorial panel, message panel (see 4.4);
- two-panel safety sign: two pictorial panels (see 4.5).

Variations on these standard formats may be appropriate for some situations.

A vertical configuration is usually preferred, although a horizontal configuration is acceptable. The final choice of safety sign format and configuration should be determined by whichever alternative is judged to communicate most effectively, by the geographical and language areas where the product will be marketed, by legal requirements, and by the space available for the safety sign.

### 4.2 Two-panel safety signs: signal panel, message panel

The signal panel contains the safety alert symbol and one of the three signal words (CAUTION, WARNING, DANGER). The message panel contains a text message that describes the hazard, explains the consequences of exposure to the hazard, and instructs how to avoid the hazard. See Figure 1.

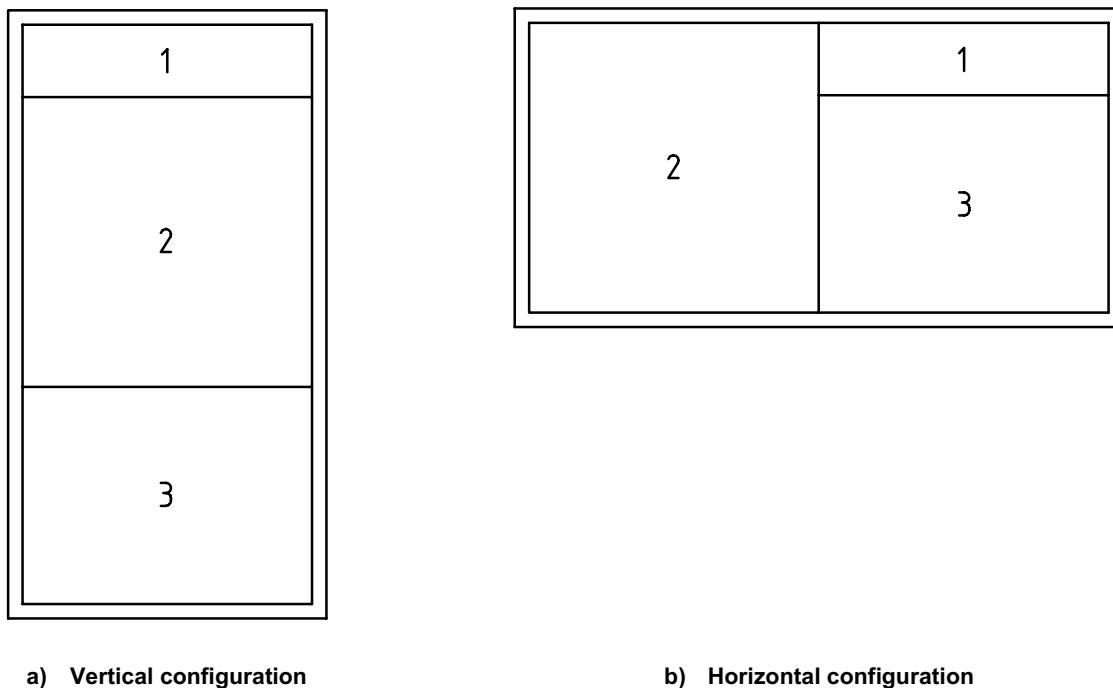


**Figure 1 — Two-panel safety sign: signal panel, message panel (vertical configuration)**



### 4.3 Three-panel safety signs: signal panel, pictorial panel, message panel

The signal panel contains the safety alert symbol and one of the three signal words. The pictorial panel contains a hazard description pictorial or, in some cases, a combined hazard description and hazard avoidance pictorial. The message panel contains a text message that describes the hazard, explains the consequences of exposure to the hazard, and instructs how to avoid the hazard. See Figure 2.



**Key**

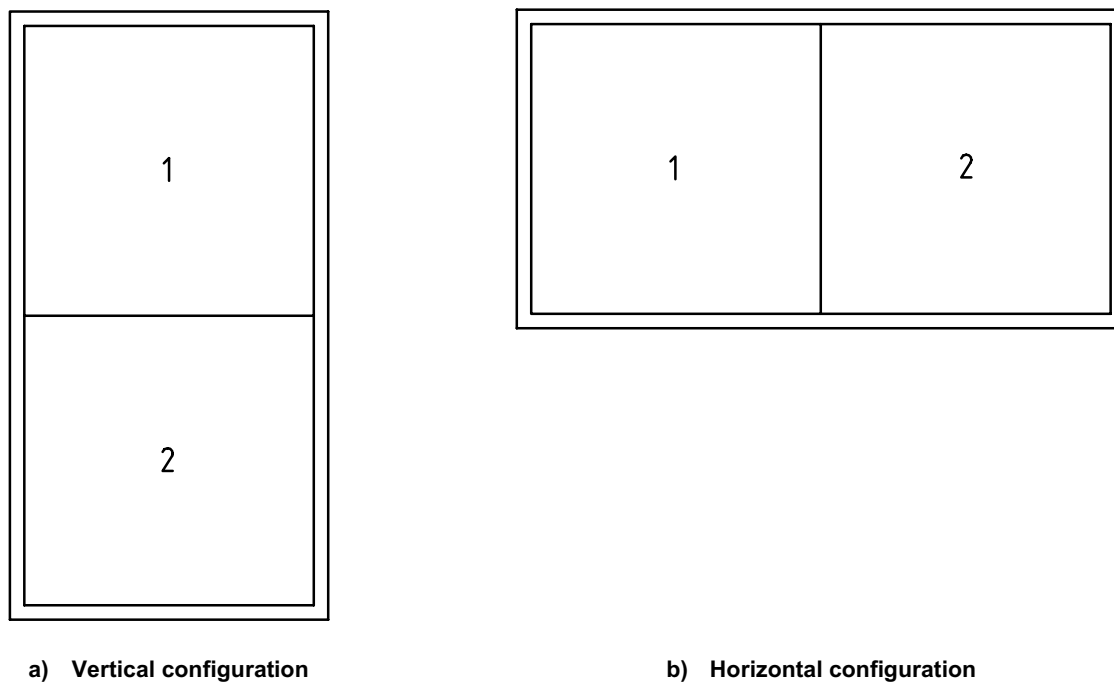
- 1 Signal panel
- 2 Hazard description pictorial panel
- 3 Message panel

**Figure 2 — Three-panel safety signs: signal panel, pictorial panel, message panel**

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### 4.4 Two-panel safety signs: pictorial panel, message panel

The pictorial panel contains either a hazard description pictorial enclosed by the safety alert triangle or the safety alert symbol alone. The message panel contains a text message that describes the hazard, explains the consequences of exposure to the hazard, and instructs how to avoid the hazard. See Figure 3.



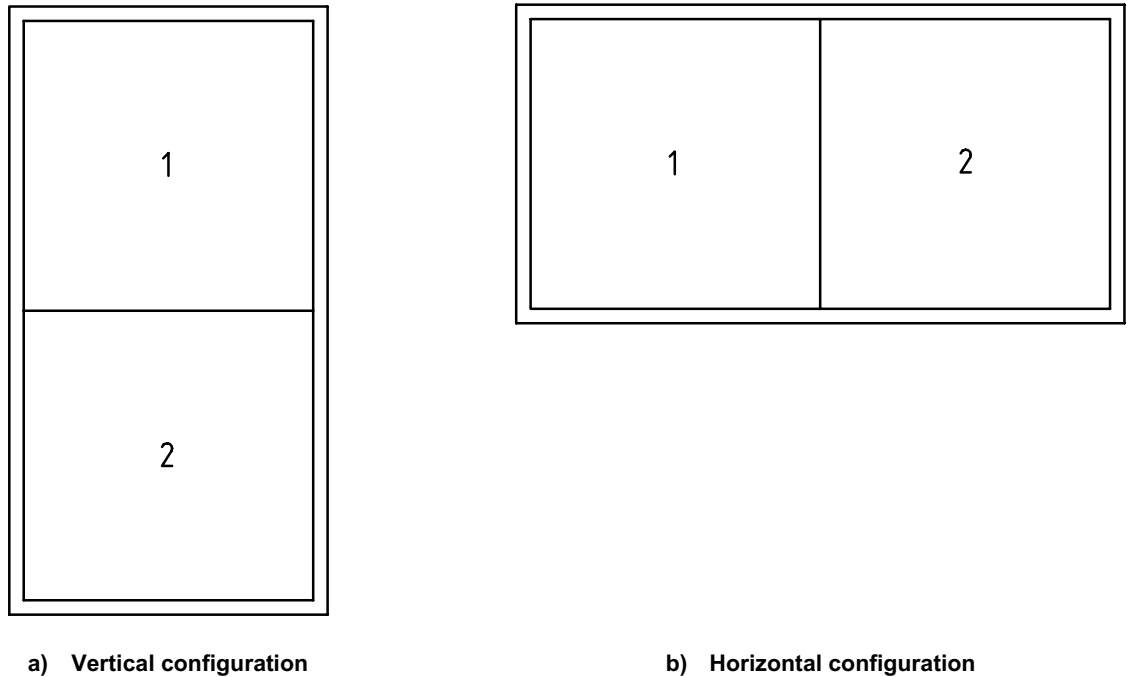
#### Key

- 1 Pictorial panel with safety alert symbol or with hazard description pictorial enclosed by the safety alert triangle
- 2 Message panel

**Figure 3 — Two-panel safety signs: pictorial panel, message panel**

#### 4.5 Two-panel safety signs: two pictorial panels

The first pictorial panel is the hazard description pictorial panel and contains either a hazard description pictorial enclosed by the safety alert triangle or the safety alert symbol alone. The second pictorial panel is the hazard avoidance pictorial panel and contains a hazard avoidance pictorial. See Figure 4.



**Key**

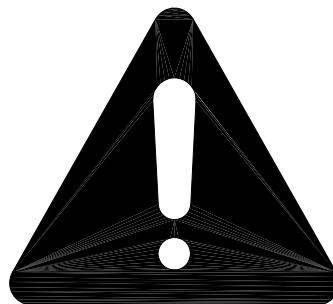
- 1 Pictorial panel with safety alert symbol or with hazard description pictorial enclosed by the safety alert triangle
- 2 Hazard avoidance pictorial panel

**Figure 4 — Two-panel safety signs: two pictorial panels**

### 5 Signal panel

5.1 The signal panel of a safety sign contains the safety alert symbol and one of the three signal words.

5.2 The safety alert symbol for safety signs that contain one of the signal words shall be as shown in Figure 5 and shall be used for safety signs that contain one of the three signal words.



**Figure 5 — Safety alert symbol for safety signs that contain a signal word**