

M3-EN.2 HEALTH AND SAFETY SIGNALLING

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Chapter Description

In this chapter, the minimum signs in a workplace are described according to the EU Directive 92/58. This chapter aims at the familiarization of those who are engaged in Occupational Health and Safety with the signs used in a workplace and especially in Metal Processing workshops, resulting in health and safety of the employees.

M3-EN.2.1 Labelling – General introduction

In metal processing workshops and especially in a workplace where many metallurgical proceedings are taken place, signalling is very important not only for the employees of the workshop but for the clients and visitors too.

Signs are something more than just necessary because signs inform for the potential dangers that can appear in the workplace. All kinds of signs- prohibition, warning and mandatory- are compulsory to be placed according to certain legislation. These involve the use of acoustic and lighting signs, gesticulation signs, announcements and chemical substances labelling. Inextricable part of health and safety signalling is also fire safety and warning signs together with marking for dangerous location.

M3-EN.2.2 Signs characteristics

Signs characteristics are:

- simple for easy understanding
- proof and hardy
- colours and size must be appropriate to the workplace size

Use of signs:

- Must be placed in a proper height, so that can be seen from any point in the workplace
- Colours must be bright and if daylight is inadequate, artificial light should be used
- Signs must be taken off when the certain risk is no longer present
- A poster with all the signs and their explanation should exist, preferably in areas where employees are gathered for breaks

M3-EN.2.3 Prohibition, warning and mandatory signs

Prohibition signs characteristics:

- They prohibit employees of doing a specific work
- They are round-shaped, with a black symbol on white background with a red contour which should cover the minimum of 35% of sign surface
- They should have a red erasure line with 45 degrees inclination

(M3.02.01, M3.02.02, M3.02.03, M3.02.04, M3.02.05, M3.02.06, M3.02.07, M3.02.08)

Warning signs characteristics:

- They warn of a specific danger
- They are triangle-shaped with a black symbol on yellow background with black contour which should cover the minimum of 50% of sign surface

(M3.02.09, M3.02.10, M3.02.11, M3.02.12, M3.02.13, M3.02.14, M3.02.15, M3.02.16, M3.02.16, M3.02.17, M3.02.18, M3.02.19, M3.02.20, M3.02.21, M3.02.22, M3.02.23, M3.02.24, M3.02.25, M3.02.26)

Mandatory signs characteristics:

- They indicate a specific action
- They are round-shaped with a white symbol on blue background, which should cover the minimum of 50% of sign surface.

(M3.02.27, M3.02.28, M3.02.29, M3.02.30, M3.02.31, M3.02.32, M3.02.33, M3.02.34, M3.02.35, M3.02.36, M3.02.37)

M3-EN.2.4 Temporary signalling- Acoustic and lighting signals

Temporary signalling should be used when:

- There is an emergency
- It is necessary to call someone for a specific action
- To evacuate in case of emergency
- To guide someone to do some conduct

Acoustic signal characteristics:

- The sound level should be higher than the background and different than the other sounds of the workplace
- The sound should be easily recognized
- The sound should have unsteady frequency
- Combined use of two different signals should be avoided
- The electric current should be continuous and in case of blackout there should be another energy source
- Signal sources should be carefully installed and maintained

Lighting signals characteristics:

- There should be appropriate contrast to avoid eye problems
- One colour must be used (usually orange and red are preferable)
- Signal should be intermittent to spot danger
- Signal should be easy recognized
- The electric current should be continuous and in case of blackout there should be another energy source
- Signal sources should be carefully installed and maintained

M3-EN.2.5 Temporary signalling- Announcement and gesticulation signals

Announcement characteristics:

- Brief, simple and clear messages
- The user should be knowledgeable about the language used in the particular workplace
- Words-passwords should be used for instance start, stop, end, forward, etc

Gesticulation signals characteristics:

- Signaller: the person who guides
- Crane man: the person who receives the signals
- The signal must be simple, justified, easy recognized

Signalmen duties:

- They wear suitable clothes with luminous finishing, helmet and carry rackets
- They give specific instructions to the crane man
- They are responsible for the other employees round the crane

General gestures:

- Start: Stretch of the two arm in front of the body, in parallel position and the flat of the hand upwards
- Stop: Stretch upwards the right arm and the flat of the hand forwards
- End: Both arms united on the chest

Vertical gestures:

- Lift: The right arm is stretched upwards and the flat of the hand curves
- Down: The right arm is stretched downwards and the flat of the hand curves
- Vertical distance: The flats of the hands in parallel position show the distance

Horizontal gestures:

- Move forward: The two arms joined with the flats face each other move towards the body in slow motion

- Move backwards: The two arms joined with the flat face each other move away from the body in slow motion
- Move right: The right arm stretched right horizontally with the flat of the hand downwards moving towards the body
- Move left: The left arm stretched left horizontally with the flat of the hand downwards moving towards the body
- Horizontal distance: The flats of the hands in parallel position show the distance