

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

**Basic principles for graphical symbols for use on equipment –  
Part 3: Guidelines for the application of graphical symbols**  
(standards.iteh.ai)

**Principes élémentaires pour les symboles graphiques utilisables sur le matériel –  
Partie 3: Guide pour l'application des symboles graphiques**

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## FOREWORD

This amendment has been prepared by subcommittee 3C: Graphical symbols for use on equipment, of IEC technical committee 3: Information structures, documentation and graphical symbols.

This amendment has been prepared in collaboration with ISO TC 145/SC 3.

The text of this amendment is based on the following documents:

CDV	Report on voting
3C/1687/CDV	3C/1711/RVC

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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## INTRODUCTION

*Replace the first and the second paragraphs by the following paragraphs, respectively:*

A graphical symbol is defined as a visually perceptible figure with a particular meaning used to transmit information independently of language. Graphical symbols are used on equipment for a wide range of purposes. The understanding of such symbols can be improved by consistent design. This is particularly important where families of symbols are used in one location or on similar equipment. Good design also helps to maintain the legibility of symbols when they are reduced to small dimensions for application. Thus, there is a need to standardize the principles for creating graphical symbols for use on equipment to ensure visual clarity, to maintain consistency and thereby to improve recognition.

The IEC 80416 series is a multi-part international standard which provides basic principles and guidelines for the creation of graphical symbols for use on equipment (Parts 1 and 2) and also principles and guidelines for adapting registered graphical symbols for use in practice (Parts 3 and 4).

### 1 Scope

*Delete the first paragraph.*

## 2 Normative references

Replace the reference to IEC 80416-1 by the following:

IEC 80416-1:2008, *Basic principles for graphical symbols for use on equipment – Part 1: Creation of graphical symbols for registration*

Replace the reference to ISO/FDIS 3864-1:2001 by the following:

ISO 3864-1, *Graphical symbols – Safety colours and safety signs – Part 1: Design principles for safety signs and safety markings*

Add the following reference:

ISO 3864-2, *Graphical symbols – Safety colours and safety signs – Part 2: Design principles for product safety labels*

Replace the reference to ISO/FDIS 7010:2001 by the following:

ISO 7010, *Graphical symbols – Safety colours and safety signs – Safety signs used in workplaces and public areas*

Add the following footnote to ISO 7000:

The ISO 7000 collection of graphical symbols for use on equipment is also available online, either separately or jointly with the IEC 60417 collection of graphical symbols for use on equipment. ISO Catalogue provides further information on this regard.

Replace the reference to IEC 60417 (all parts) by the following:

IEC 60417, *Graphical symbols for use on equipment*

Add the following reference:

ISO 80416-4, *Basic principles for graphical symbols for use on equipment – Part 4: Guidelines for the adaptation of graphical symbols for use on screens and displays (icons)*

## 3 Definitions

Replace the title of Clause 3 by the following:

Terms and definitions

Delete 3.2.

### 4.2 Screens and displays

Add the following to the first paragraph:

In this application, ISO 80416-4 shall be taken into consideration.

Delete Note 1 and renumber Note 2 to “Note”.

**4.4 International Standards**

Replace in Note, the reference ISO/FDIS 14617 by the following:

ISO 14617.

**6.1 Modification according to design**

Replace the text of the existing subclause by the following:

To coordinate with the design requirements of equipment, it is allowed:

- a) to change the line width;
- b) to round the corners;
- c) to fill areas;
- d) to interrupt crossing lines;
- e) to adapt distances between graphical elements;
- f) to adapt the relative proportions of graphical elements;
- g) to modify the type of arrow.

If several graphical symbols are applied together, it can be necessary and it is permitted to adjust their relative sizes and positions in order to achieve a balanced appearance on the equipment.

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These changes shall only be made to the extent that the basic communicative characteristics of the graphical symbol remain unchanged.

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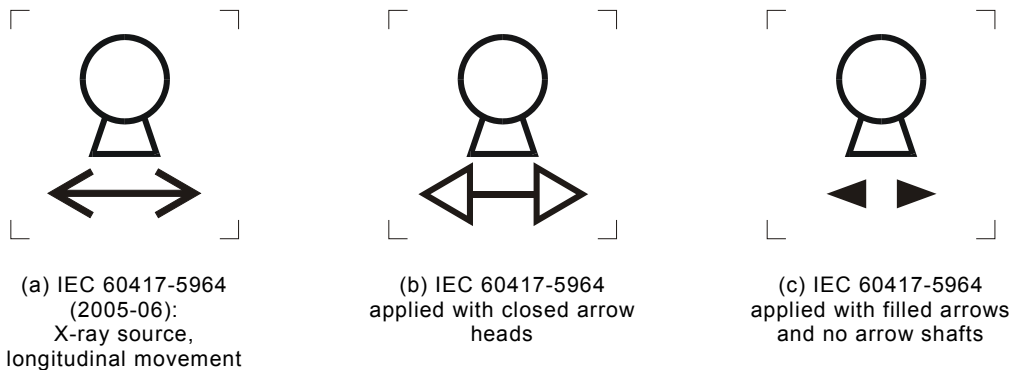
**6.5 Interruption of crossing lines**

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Add after the existing subclause 6.5, the following new subclause 6.6 and the following new Figure:

**6.6 Modification of arrow type**

The arrow type may be modified as in the examples given in Figure 11.



**Figure 11 – Examples of arrows**

**7 Negation**

Replace the first paragraph by the following:

The meaning of graphical symbols registered in ISO 7000 and IEC 60417 may also be negated when they are applied. The method and the meaning of negation should be in agreement with IEC 80416-1:2008, 7.9.

*Replace the second paragraph by the following:*

An application of a circle with a diagonal bar defined in ISO 3864-1 to graphical symbols denotes a 'prohibition'. Therefore, a circle combined with a diagonal bar, in any colour including black and white, shall not be used for other meaning than prohibition.

## 8 Arrows

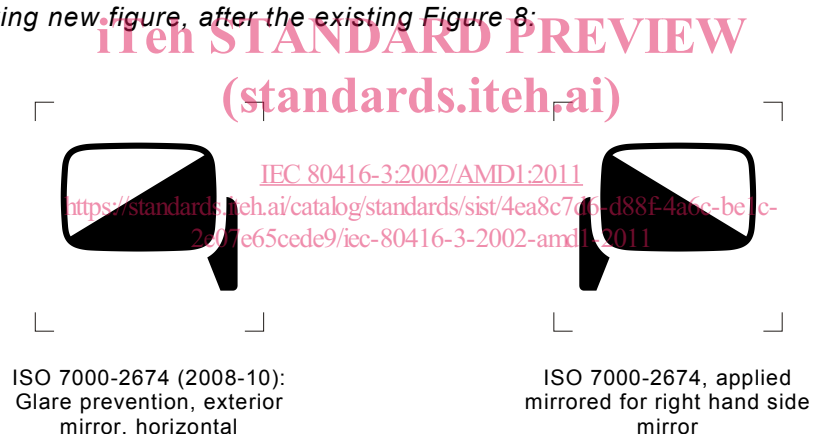
*Delete the last sentence of Clause 8, located below Figure 6.*

### 9.1 Orientation

*Replace the second paragraph by the following:*

If there is no conflict of meaning, the orientation may be changed or the graphical symbol or part of it may be presented in a mirrored position in order to take the equipment or the given reference system into account, as shown in the examples in Figures 7 and 12.

*Add the following new figure, after the existing Figure 8:*



**Figure 12 – Example of mirroring**

### 9.2 Application dependent orientation

*Replace the first sentence by the following:*

The meaning of a graphical symbol can depend upon its orientation in a particular context of use and care should be taken to avoid ambiguity.

## 10 Use of colour

*Replace the text in brackets by the following:*

see ISO 3864-1, ISO 3864-2 , IEC 60073 and ISO 7010

*Delete footnote 2.*

## Bibliography

*Replace the reference ISO/FDIS 14617-1 by the following:*

ISO 14617-1, *Graphical symbols for diagrams – Part 1: General information and indexes*

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