

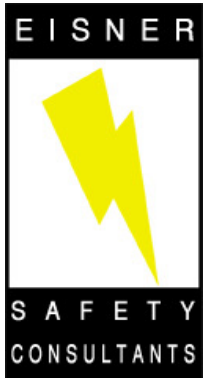
Attention ⚠ ISO 15223-1 4th Edition is almost here: How to update your medical device labeling to comply with the new requirements

July 8, 2021

Eisner Safety Consultants

Presented by Leo the “IEC 60601 Guy” Eisner

 **greenlight guru** Webinar



MEDICAL DEVICE QUALITY IS ALL WE DO, AND WE'RE ALWAYS AHEAD OF THE GAME.

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We provide consulting services for medical devices companies:



Product Safety
(60601)



EMC



Risk
Management



Labeling
Review



Standards
Regulations
Laws/Guidances



Design



DHF/TF/TD



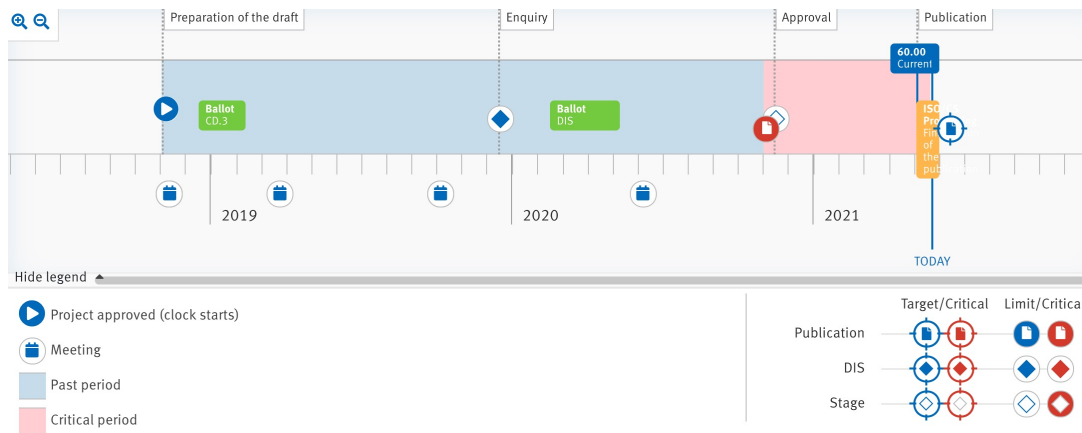
Training

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Topics

- Timing of ISO 15223-1, 4th edition
- Summary of Changes 3rd to 4th ed.
 - Revised Introduction & Scope
 - Title Change
 - Addition & Deletion of Defined Terms
 - Addition of Symbols
 - Expansion of Annex A containing examples & new guidance
 - Other Changes
- What's in the Future?

Timeline of ISO 15223-1 4th Edition



Stage	Version	Description	Target date	Limit date	Started	Status
10.99	1	New project approved			2018-11-05	Closed
20.00	1	New project registered in TC/SC work programme			2018-11-05	Closed
30.00	1	Committee draft (CD) registered			2018-11-22	Closed
30.20	1	CD study/ballot initiated			2018-12-19	Closed
30.60	1	Close of voting/comment period			2019-02-14	Closed
30.99	1	CD approved for registration as DIS			2019-12-05	Closed
40.00	1	DIS registered	2019-11-03	2019-11-05	2019-12-18	Closed
40.20	1	DIS ballot initiated	2020-02-19		2020-02-19	Closed
40.60	1	Close of voting	2020-05-13		2020-05-14	Closed
40.99	1	Full report circulated: DIS approved for registration as FDIS			2020-06-28	Closed
50.00	1	Final text received or FDIS registered for formal approval	2020-09-02		2020-11-17	Closed
50.20	1	Proof sent to Secretariat or FDIS ballot initiated: 2 months	2021-03-07		2021-03-07	Closed
50.60	1	Close of voting -- Proof returned by Secretariat	2021-05-02		2021-05-03	Closed
60.00	1	International Standard under publication			2021-05-09	Current
60.60		International Standard published	2021-07-04	2020-11-05		Awaiting

**ISO 15223-1
4th Edition is
almost here!!!
FINALLY
PUBLISHED!!**



**Schedule as of 12 June '21 –
Above International Std
Published on 6 Jul '21**

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POLL

Has your company started to plan for the ISO 15223-1:2021 changes?

- **Yes**
- **No**

Planning for ISO 15223-1, 4th ed. Changes

INTERNATIONAL
STANDARD

**ISO
15223-1**

Fourth edition
2021-07

**Medical devices — Symbols to be used
with information to be supplied by the
manufacturer —**

**Part 1:
General requirements**

*Dispositifs médicaux — Symboles à utiliser avec les informations à
fournir par le fabricant —
Partie 1: Exigences générales*



Reference number
ISO 15223-1:2021(E)

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User Needs	Design Inputs	Design Outputs	Design Verifications	Design Validations
<p>UN-10 Instructions for Use</p> <p>User must be able to properly use device reading</p> <p>UN-11 Regulatory Requirement - 21 CFR Part 820</p> <p>Labeling Requirement per ISO 15223</p>	<p>DI-19 Labeling Requirement</p> <p>All symbols must contain text descriptions</p>	<p>DO-14 IFU-1234</p> <p>Instructions for Use</p>	<p>VER-15 TR-1234: Labeling Review</p> <p>Review of all Labeling Documents</p>	<p>VAL-8 TR-4567: Simulate Use Validation</p> <p>Validation Lab</p>

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Summary of Changes 3rd to 4th Edition

- Revised Introduction & Scope
- Title of Standard Changed
- Deleted defined terms
- Added defined terms from ISO 20417, ISO 13485 & ISO 14971;
- Added 20 new symbols validated per ISO 15223-2;
- Added 5 existing symbols from ISO 7000, ISO 7010 & IEC 60417;
- Expansion of Annex A containing examples & new guidance;
- Moved information about European Regulations to informative notes;
- Other changes.



Revised Introduction & Scope

- Revised introduction & scope to make clearer
- Intro: "...specific information on the *medical device* itself, as part of the **packaging**, or in the *accompanying information*....this information can be provided as *symbols* that have a specific meaning..." (small part of intro)
- Scope: "This document specifies *symbols* used to express information supplied for a *medical device* ~~labelling that convey information on the safe and effective use of medical devices. It also lists symbols that satisfy the requirements of this document.~~"
(~~deleted from prev ed.~~, next 2 para's cleaned up)

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Title of Standard Changed

3rd ed. (2016) Medical devices - Symbols to be used with medical device labels, labelling and information to be supplied - Part 1: General requirements

4th ed. (2021) Medical devices - Symbols to be used with ~~medical device labels, labelling and~~ information to be supplied by the manufacturer - Part 1: General requirements

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Deletion of Defined Terms

- Deletion of defined terms
 - labelling – deleted title & definition
 - NOTE: *Label* updated definition – previous just on device **but now** also on packaging
 - characteristic information

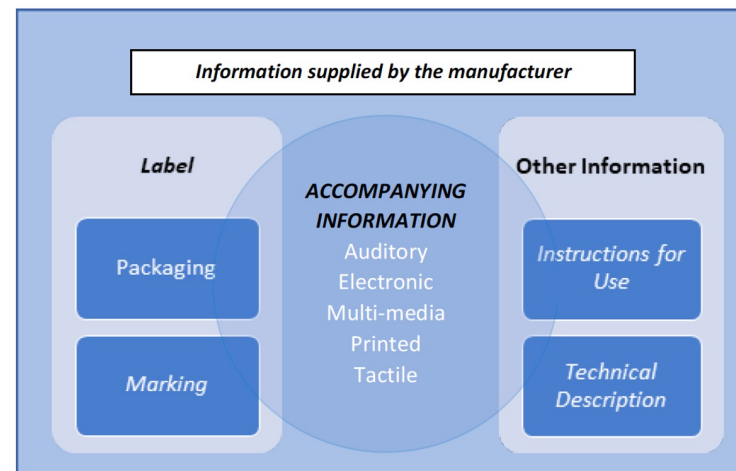
Addition of Defined Terms

ISO 20417:2021

- ISO 20417:2021 Medical devices — Information to be supplied by the manufacturer – Normative referenced std
 - Intro: "...standard provides the requirements for the identification and *labels* on a *medical device* or *accessory*, their *packaging*, *marking* of a *medical device* or *accessory* and *accompanying information*."

Modified fig from ISO 20417:2021
modified

Figure 1 from ISO 15223-1, 4th ed.



Addition of Defined Terms

Source ISO 20417:2021

- *accompanying information*
- *catalogue number*
- *distributor*
- *importer*
- *information supplied by the manufacturer*
- *instructions for use, IFU*
- *Label**
- *lot number, batch code, batch number, lot code*
- *marking*
- *model number*
- *serial number*
- *single patient multiple use*
- *single use, do not re-use, use only once*
- *sterile*

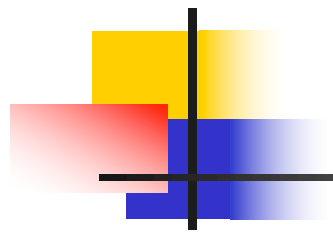
Reason ISO 20417 def's added so don't need to purchase std -- but still need to meet 20417 labeling requirements

Addition of Defined Terms

ISO 13485:2016 & ISO 14971:2019

- ISO 13485:2016 – Bibliographic std (Informative)
 - *medical device*
- ISO 14971:2019 –Bibliographic std (Informative)
 - *manufacturer*
 - *risk*
 - *risk assessment*

Note: Informative → Not a requirement → Guidance



ADDED SYMBOLS

Table 1 formatting changes

Table 1 — Symbols to convey ~~information essential for proper use~~ medical device information

Reference number of symbol and symbol graphic	Title of symbol	Description of symbol	Requirements	Informative notes <u>Notes</u>	Restrictions of use	Additional requirements	<u>ISO/IEC</u> symbol number +and registration date ^a
---	----------------------------	----------------------------------	--------------	---	---------------------	-------------------------	---

- Changes include:
 - New and existing symbol changes & details within table
 - MDR, GHTF, & IMDRF impacts show up in Notes as can't be requirements – an ISO requirement
 - *Italics* for defined terms (not normal format for ISO standards)
 - Clarifications and changes to existing symbols

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ADDED 20 NEW SYMBOLS
(VALIDATED PER ISO 15223-2)

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Background

- Jun '17 N197 - **proposed 21 new symbols** potential candidates for inclusion in 15223-1 via 15223-2 validation process – **None adopted** as proposed
- Nov '17 N204 - Feedback on symbols proposed from N197
 - 12 symbols no persuasive justification or existing IEC/ISO symbol
 - 9 symbols further development recommended
 - 8 add'l candidates (3 rejected, 1 considered as an ISO 7000 symbol and 4 were potential candidates via 15223-2 val process)

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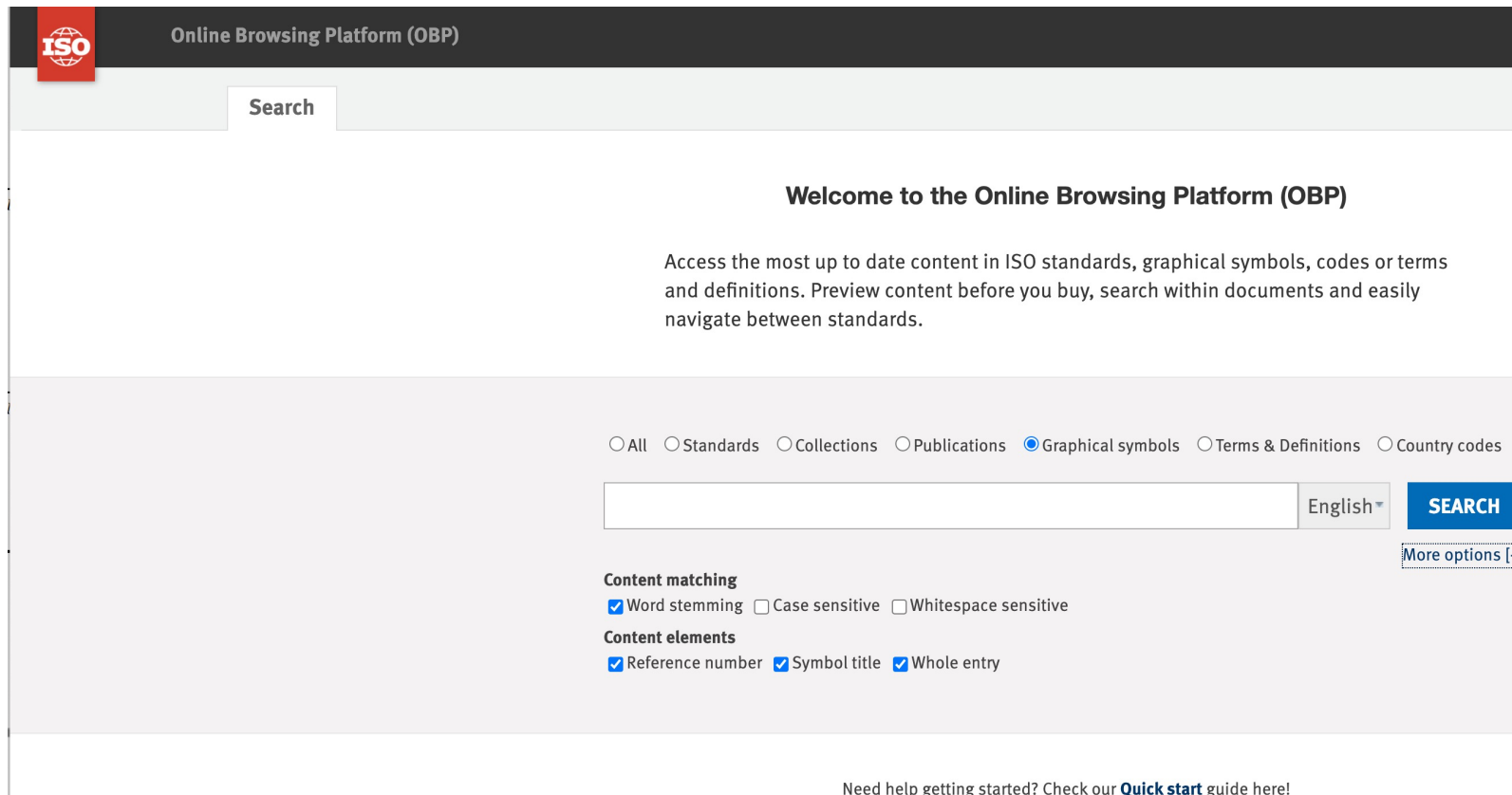
Background

- Nov '17 N204 Feedback on symbols proposed from N197 (Cont'ed)
 - Contains or Incorporates Blood Products
 - Contains a Medicinal Substance
 - Device contains CMR substances
 - Device contains Nano Material
 - Device Contains Cells of Human Origin
 - Device Contains Animal (Non Human) Tissue
 - Sterilization by Vapour-Phase Hydrogen Peroxide
 - Breaching compromises sterility (Single, double barriers, etc.)
- 4th ed. project officially opened Nov '18



ISO Online Browsing Platform

<https://www.iso.org/obp/ui/#home>



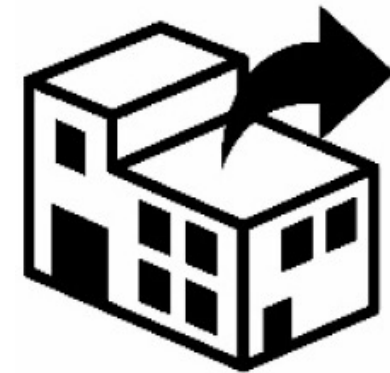
The screenshot shows the ISO Online Browsing Platform (OBP) homepage. At the top left is the ISO logo. The main header reads "Online Browsing Platform (OBP)". Below this is a search bar with the word "Search" inside. The main content area features a welcome message: "Welcome to the Online Browsing Platform (OBP)" followed by a paragraph: "Access the most up to date content in ISO standards, graphical symbols, codes or terms and definitions. Preview content before you buy, search within documents and easily navigate between standards." Below the text are radio button options for filtering: "All", "Standards", "Collections", "Publications", "Graphical symbols" (which is selected), "Terms & Definitions", and "Country codes". There is a search input field, a language dropdown menu set to "English", and a blue "SEARCH" button. A link for "More options [-]" is located below the search button. Underneath, there are two sections: "Content matching" with checkboxes for "Word stemming" (checked), "Case sensitive", and "Whitespace sensitive"; and "Content elements" with checkboxes for "Reference number", "Symbol title", and "Whole entry" (all checked).

Need help getting started? Check our [Quick start](#) guide here!

Manufacturer Symbols (5.1)



- Reference #: **5.1.8** Title: ***Importer***
- Description: entity importing *med dvc* into locale
- Requirement: *symbol* shall include name & address of importing entity, near *symbol*.
- Note: If multiple *symbols* (i.e., AR, *Importer*, *Distributor*, Translation, or Repackaging) identify same responsible entity, don't duplicate name & address.
(ISO 7000-3725)
- Reference #: **5.1.9** Title: **Distributor**
- Description: entity distributing *med dvc* into locale
- Requirement: *symbol* shall include name & address of distributor near *symbol*.
- Note: Same as 5.1.8 ***(ISO 7000-3724)***





Sterilization Symbol (5.2)

- Reference #: **5.2.10** Title: **Sterilized using vaporized hydrogen peroxide**
- Description: *med dvc* sterilized using vaporized hydrogen peroxide
- Note: use of *symbol* in Europe explained in EN 556-1, clause 4.1.
- Restriction of use: Use of *symbol* precludes use of 5.2.1
- ISO/IEC #: **N/A**





STERILE

STERILE | VH202










Four Sterile Barrier Symbols (5.2)

■ Section 5.2 - Sterility

-  ■ Ref #: **5.2.11** Title: **Single *sterile* barrier system (sbs) (*ISO 7000-3707*)**
-  ■ Ref #: **5.2.12** Title: **Double sbs (*ISO 7000-3704*)**
-  ■ Ref #: **5.2.13** Title: **Single sbs with protective packaging inside (*ISO 7000-3708*)**
-  ■ Ref #: **5.2.14** Title: **Single sbs with protective packaging outside (*ISO 7000-3709*)**

Four Sterile Barrier Symbols (5.2) (Cont'ed)

- “Requirement” same for all 4: Any of 4 symbols shall be placed near or in combo with symbol

■ 5.2.1  5.2.2  5.2.3  5.2.4 
 5.2.5  5.2.9  or 5.2.10 



- Note 1 – Explains what the lines & dashes mean for the barriers
- Note 2 same for all 4: Additional info on sbs systems → ISO 11607-1 & ISO 11607-2

Seven Safe Use Symbols (5.4)



- Reference #: **5.4.6** Title: **Contains human blood or plasma derivatives**
- Description: *med dvc contains* / incorporates human blood / plasma derivatives
- Requirement: **embedded cross may be deleted / replaced with another element appropriate with cultural requirements. (ISO 7000-3701)**

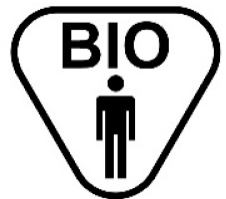
- Reference #: **5.4.7** Title: **Contains a medicinal substance**
- Description: *med dvc contains* / incorporates medicinal substance
- Requirement: **same text as 5.4.6 (ISO 7000-3702)**



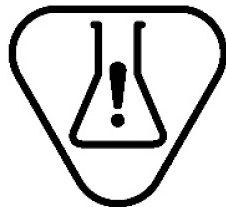
Seven Safe Use Symbols (5.4)



- Reference #: **5.4.8** Title: **Contains biological material of animal origin**
- Description: *med dvc* contains biological tissue, cells, or their derivatives, of **animal origin (ISO 7000-3699)**



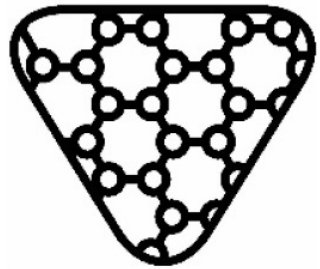
- Reference #: **5.4.9** Title: **Contains biological material of human origin**
- Description: *med dvc* contains biological tissue, cells, or their derivatives, of **human origin (ISO 7000-3700)**



- Reference #: **5.4.10** Title: **Contains hazardous substances**
- Description: *med dvc* contains substances can be **carcinogenic, mutagenic, reprotoxic (CMR)**, / substances with endocrine disrupting properties
- Note: term "substances" used → single / multiple substances **(ISO 7000-3723)**



Seven Safe Use Symbols (5.4)

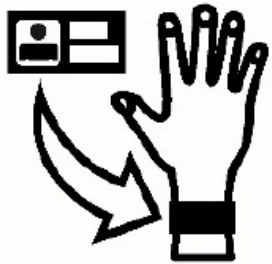


- Reference #: **5.4.11** Title: **Contains nano materials**
- Description: *med dvc contains nano materials*
(ISO 7000-3703)



- Reference #: **5.4.12** Title: **Single patient multiple use**
- Description: *med dvc may be used multiple times (multiple procedures) on single patient*
(ISO 7000-3706)

Six “Others” Symbols (5.7)



- Reference #: **5.7.2** Title: **Patient name**
- Description: name of patient
- Requirement: If used, *symbol* shall appear next to patient name or space provided to record it. **(ISO 7000-3726)**



- Reference #: **5.7.4** Title: **Patient information website**
- Description: website where patient obtain add'l info on medical product
- Requirement: web address shall be next to *symbol*
- Note: indicate location of info avail to patient **(ISO 7000-3705)**



Six “Others” Symbols (5.7)



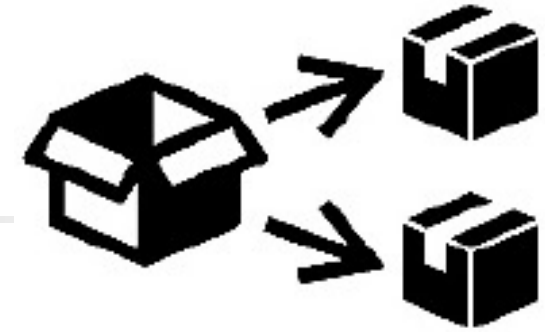
- Reference #: **5.7.7** Title: ***Medical device***
- Description: *med dvc*
- Note: in Europe - full def of “*medical device*” in 2017/745 MDR. Other jurisdictions may have different def’s. **(ISO/IEC #: N/A)**

- Reference #: **5.7.8** Title: Translation



- Description: original *med dvc* info undergone translation supplements / replaces original info
- Requirement: *symbol* shall be accompanied by name & address of entity responsible for translation activity, near *symbol*
- Note: Same note as Importer (5.1.8), Distributor (5.1.9), etc. **(ISO 7000-3728)**

Six “Others” Symbols (5.7)



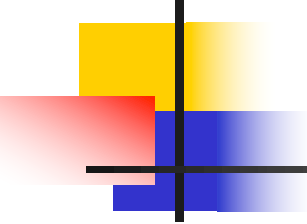
- Reference #: **5.7.9** Title: Repackaging
- Description: modification to original *med dvc* packaging configuration occurred
- Requirement: *symbol* shall be accompanied by name & address of entity responsible for repackaging activity, near *symbol*
- Note 1: depending on AHJ additional info such as date of repackaging may be required
- Note 2: Same note as Importer (5.1.8), Distributor (5.1.9), etc.
- Restrictions of use: *symbol* use only when repackaging other than mfr (***ISO 7000-3727***)



Six “Others” Symbols (5.7)



- Reference #: **5.7.10** Title: Unique device identifier
- Description: carrier contains UDI info
- Requirement: *symbol* may be used when multiple data carriers present on label. If used, *symbol* shall be placed near UDI carrier
- Note: *symbol* identifies UDI carrier (ISO/IEC #: **N/A**)

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**ADDED EXISTING 5 SYMBOLS FROM
ISO 7000, ISO 7010 & IEC 60417**

Added Existing 5 Symbols – Manufacture (5.1)



- Reference #: **5.1.10** Title: ***Model number***
- Description: *model / type number* of product
- Requirement: *model number* placed shall be near *symbol* (**IEC 60417-6050**)



- Reference #: **5.1.11** Title: **Country of manufacture**
- Description: country of manufacture of products
- Requirement: "CC" replaces by either 2 or 3 letter country code defined in ISO 3166-1. Date of manufacture allowed near symbol.
- Note: Not all AHJs recognize 2 or 3 letter country codes.
- Restrictions of use: use of symbol with a date of manufacture precludes use of symbol 5.1.3  (**IEC 60417-6049**)

Added Existing 5 Symbols – “Others” (5.7)



- Reference #: **5.7.3** Title: **Patient identification**
- Description: identification data of patient
- Requirement: If used, *symbol* appear near patient id / space provided to record it
- Note: ? part of symbol **(ISO 7000-5664)**

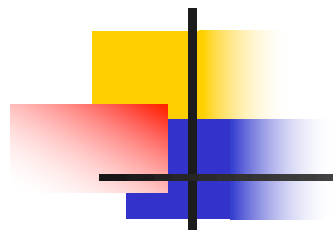


- Reference #: **5.7.5** Title: **Health care centre or doctor**
- Description: address of health care centre / doctor where medical info about patient found
- Requirement: If used, *symbol* shall appear near address of health care facility / doctor or space provided to record it
- Note: cross can be deleted / replaced with another item appropriate with cultural requirements **(ISO 7001-PI PF 044)**

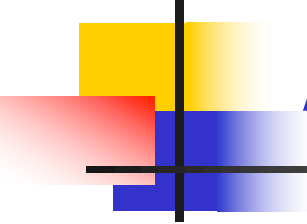
Added Existing 5 Symbols – “Others” (5.7)

- Reference #: **5.7.6** Title: **Date**
- Description: date info entered or med procedure took place
- Requirement: If used, *symbol* appear near date appropriate for use of *symbol* or space provided to record it.
(IEC 60417-5662)





ANNEX A CHANGES

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Annex A - Changes

- Title Change
 - “Guidance and **examples** of *symbols* use, including multiple *symbols*”
- New Note: Requested info such as Name, address, date, etc. shown in example *symbols* on the right or below may be located elsewhere if info is unambiguous
- A.1 Guidance: Defined terms *accompanying information* (3.1) & *information supplied by the manufacturer* (3.6) are very similar & their application may vary by AHJs.

Annex A - Changes

- A.2 – A.4, A.7 – A.9, A.19 New Examples: Text next to symbol on right or below *symbol* vs Old Examples A.1 – A.3, A.6 – A.8, A.14 different for same *symbols*
- Examples of use *symbol w/ name & address*
 - A.10 *Importer*, A.11 *Distributor*, A.19 *Translation*, A.20 *Repacking*
- A.12 Country of manufacturer examples of use *symbol w/ or w/o date of manufacture*
- A.21 Examples of use of *symbol* 5.7.10, “Unique Device Identifier”



(01)01234567891011
(11)200622
(17)240622
(21)88888888



(01)01234567891011(11)200622(17)240622(21)88888888

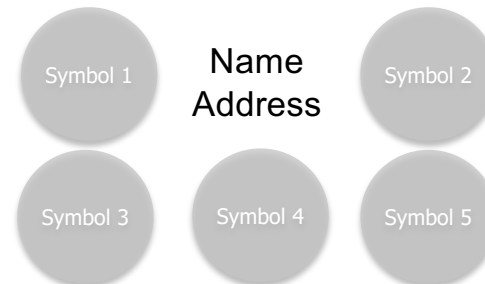


Annex A - Changes

- A.22 Examples of use of *symbols* 5.2.11 – 5.2.14 in conjunction with *symbols* 5.2.1 – 5.2.5, 5.2.9 or 5.2.10

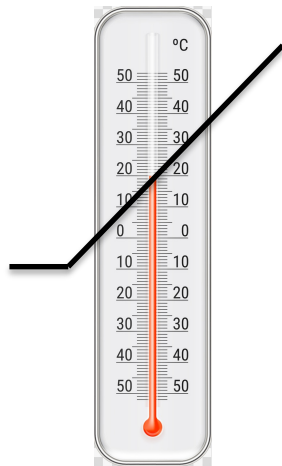


- A.23 how deal with multiple *symbols* used together
 - *symbols* AR (EC REP), *Importer*, *Distributor*, *Translation*, or *Repackaging* all have notes indicating the same responsible entity doesn't need to duplicate their name & address. So, A.23 shows many ways to lay out in groups of 2, 3, 4, & 5 symbols with 1 name & address



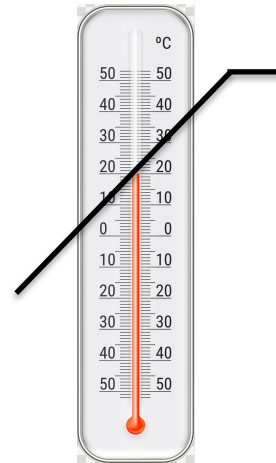
Annex A - Changes

- Deleted the temperature limit examples out of Annex A for Symbols from Table 1 - Representations only below



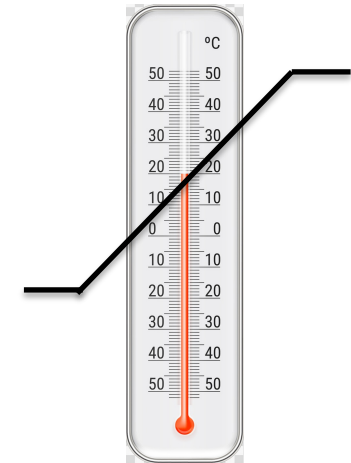
5.3.5

ISO 7000-0534



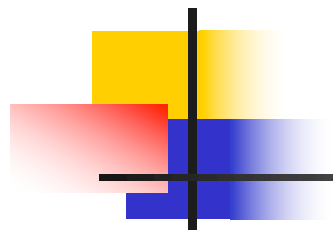
5.3.6

ISO 7000-0533







5.3.7

ISO 7000-0632



OTHER CHANGES

Changes in Consult instructions for use & Caution – Existing Symbols (15223-1)

- If use consult IFU as primary risk control measure for a specific risk control measure (e.g., IFU has safety info) per ISO 20417:21 either (ISO 7010-M002)  or text of mandatory action to read IFU. OR use  [ISO 20417:21, Cl. 6.1.5; ISO 15223-1:21 for 5.4.3  Note 2 refers to ISO 20417 &  ISO 7010-M002; IEC 60601-1:05+A1:12+A2:20, Cl 7.2.3 except no text option]
- Caution – (5.4.4)



- Not to be used solely for Consult IFU. Use an option above
- Always has been a safety caution not for consult IFU but was used incorrectly

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Other Change

- New (Informative) Annex C → Terminology
Alphabetized index of defined terms

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WHAT'S IN THE FUTURE?



Potential for next revision

- Would need to be validated per ISO 15223-2
 - # of cycles reprocessed
 - Low temp steam & formaldehyde sterilization
 - QTY for quantity
 - 5.7 *Symbols* that look male make gender neutral or 1/2 male / 1/2 female
 - 5.7.3 ? → not clear about data to enter. Change *symbol* to make clearer
 - Symbol to identify a system, procedure pack or convenience kit producer
- Consider adding to symbols list for ISO 15223-1 for next revision
 - ISO 7000-1640 – Technical manual; manual for service
 - ISO 7000 registered exempts ISO 15223-2 validation (4.1 a)





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