European Standardization Organizations

Webinar for Standard Drafters

Drafting for XML: Recap webinar series and refreshment of the Internal Regulations Part 3

We start at 14:00 CET

Your webinar moderator

Els Somers

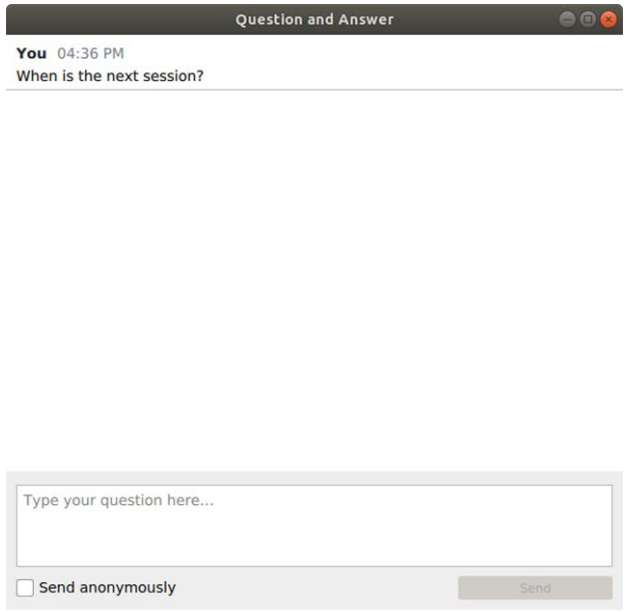
Project Manager

Governance & Partnerships

esomers@cencenelec.eu

Get the most out of the webinar today

- Use the Q&A panel to submit your questions



- Talk about us on Twitter #training4standards @Standards4EU

Your speakers today

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Project Managers

Editing & Production

Standardization & Digital Solutions

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To be discussed…

- Introduction
- Drafting for XML – recap of key points
  - How XML is created
  - Templates
  - Figures
  - Tables
  - Formulae
  - Citations
- Internal Regulations (IR) Part 3 – Drafting rules refresher

Introduction

- Last webinar of the series!

  Check all webinars via this link
- Recap of the key points discussed this year:
  - your questions from the Q&A
  - identified drafting issues present in submitted texts
  - email questions

- Webinar series → Technical Body Officers training (info)

- For more detail on any point → see previous webinars

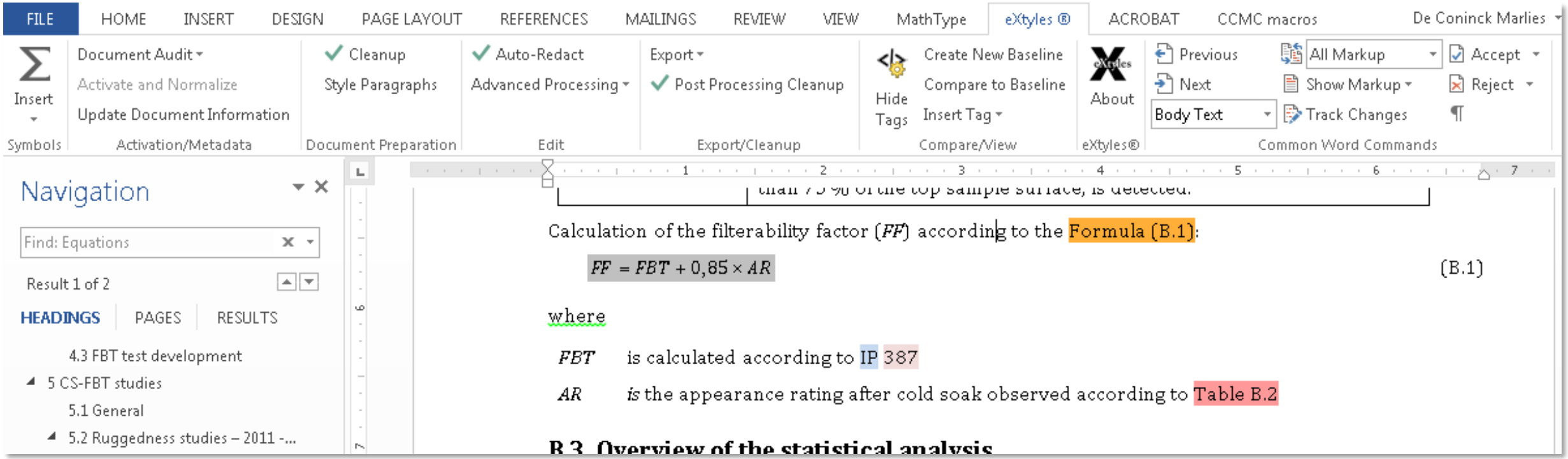
Good quality documents for XML

Good quality documents for XML

- **Obligatory** XML for **all applicable deliverables**
- Crucial to have good quality from first submission
- Fixing problems = time-consuming
- Requirements to fulfil

Word to XML (1)

- Use of tools (eXtyles)



Word to XML (2)

64_e_stf.docx

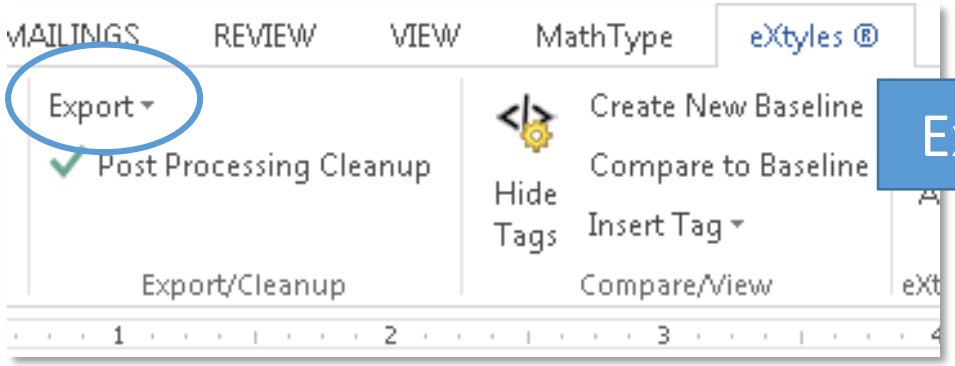
Calculation of the filterability factor (*FF*) according to the Formula (B.1):

$$FF = FBT + 0{,}85 \times AR$$

where

FBT is calculated according to IP 387

AR *is* the appearance rating after cold soak observed according to Table B.2



Export

64_e_stf.xml

```
<p>Calculation of the filterability factor (<italic>FF</italic>) according to
the <xref ref-type="disp-formula" rid="formula_B.1">Formula (B.1)</xref>
:</p>
<disp-formula id="formula_B.1"><mml:math id="mml_m1">
 <mml:mrow>
  <mml:mi>F</mml:mi><mml:mi>F</mml:mi><mml:mo>=</mml:mo><mml:mi>F
  </mml:mi><mml:mi>B</mml:mi><mml:mi>T</mml:mi><mml:mo>+</mml:mo><mml:mn>0,85
  </mml:mn><mml:mo>&#x00D7;</mml:mo><mml:mi>A</mml:mi><mml:mi>R
  </mml:mi></mml:mrow>
</mml:math><label>(B.1)</label></disp-formula>
<p>where</p>
<array id="tab_d">
<table width="651">
<col width="7.28%"/>
<col width="92.72%"/>
<tbody>
<tr>
<td valign="top" align="justify" scope="row"><italic>FBT</italic></td>
<td valign="top" align="justify">is calculated according to <std><std-ref>IP
387</std-ref></std></td>
</tr>
<tr>
<td valign="top" align="justify" scope="row"><italic>AR</italic></td>
<td valign="top" align="justify"><italic>is</italic> the appearance rating
after cold soak observed according to <xref ref-type="table" rid="tab_B.2">
Table B.2</xref></td>
</tr>
</tbody></table></array>
</sec>
```

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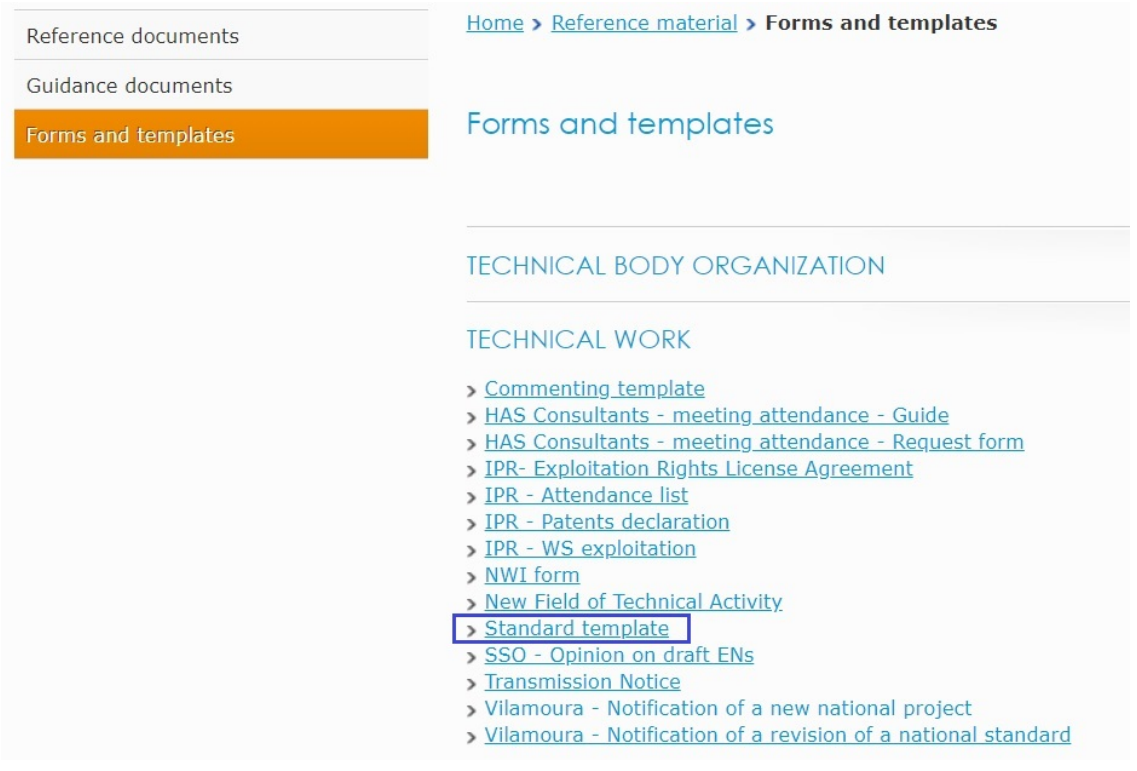
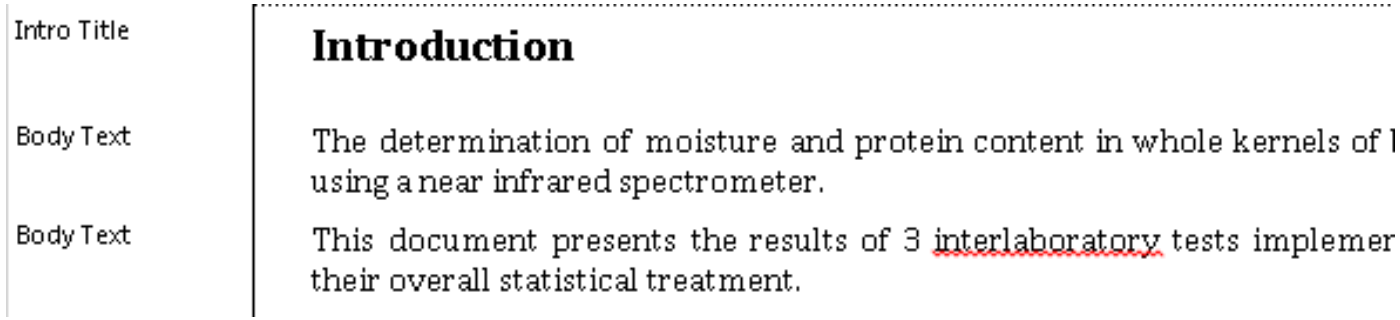
CEN & CENELEC Simple Templates

▶ CEN & CENELEC BOSS

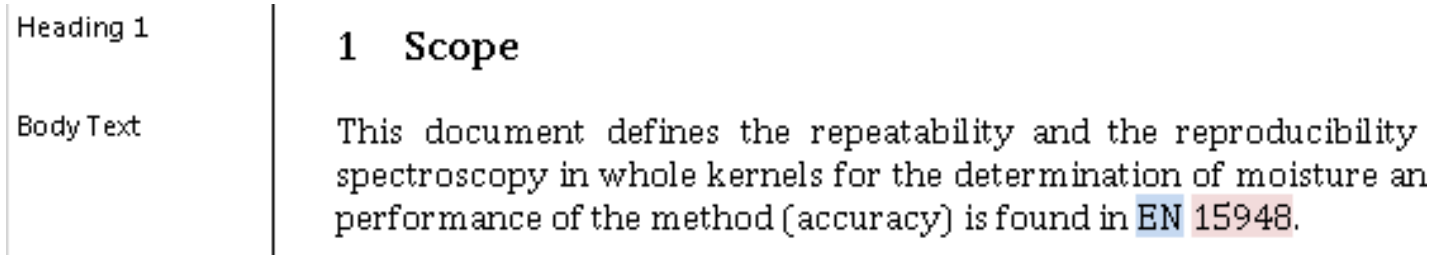


Introduction & Clause 1

- Introduction styling
  - Intro Title
  - Body text



- Clause 1 styling
  - Heading 1
  - Body text



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Clauses 2 & 3 (1)

- Clause 2 styling
  - Body text – introductory wording
  - RefNorm – Each reference, including non-EN/ISO/IEC references

Heading 1	**2 Normative references**
Body Text	The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.
RefNorm	<std>prEN 15947-1:2020, *Pyrotechnic articles — Fireworks, Categories F1, F2 and F3 — Part 1: Terminology*</std>

- Clause 3 styling
  - Body text
  - TermNum
  - Term
  - Definition

Heading 1	**3 Terms and definitions**
Body Text	For the purposes of this document, the terms and definition following apply.
Body Text	ISO and IEC maintain terminological databases for use in standar
List Continue 1	• IEC Electropedia: available at http://www.electropedia.org/
List Continue 1	• ISO Online browsing platform: available at http://www.iso.c
TermNum	**3.1**
Term(s)	**commercial butane**
Definition	hydrocarbon product composed predominantly of butanes and/c
Note	Note 1 to entry: The remaining part can consist mainly of propane/prc
Definition	[SOURCE: ISO 9162]

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Clauses 2 & 3 (2)

- Incorrect styling is time consuming and prevents editors from generating XML

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Incorrect:

EN 825:2013	Thermal insulating products for building applications — Determination of flatness
EN 1604:2013	Thermal insulating products for building applications — Determination of dimensional stability under specified temperature and humidity conditions

Correct:

EN 825:2013, *Thermal insulating products for building applications — Determination of flatness*

EN 1604:2013, *Thermal insulating products for building applications — Determination of dimensional stability under specified temperature and humidity conditions*

Heading 1	**3 Terms and definitions**
Body Text	For the purposes of this document, the following terms and definitions apply.
Body Text	ISO and IEC maintain terminological databases for use in standardization at the following addresses:
List Bullet	— ISO Online browsing platform: available at https://www.iso.org/obp
List Bullet	— IEC Electropedia: available at http://www.electropedia.org/
List Bullet	Incorrect:
Heading 2 Definition	**3.1 term** text of the definition
Heading 2 Definition	**3.2 term** text of the definition
Definition	Correct:
TermNum Term(s) Definition	**3.1** **term** text of the definition

- Note X to entry and not NOTE!

Clauses 2 & 3 (3)

▶ Footnote for stand-alone amendments

Incorrect: EN 60529:1991+A1:2000+A2:2013, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

What is meant: EN 60529:1991 as amended by EN 60529:1991/A1:2000 and EN 60529:1991/A2:2013

Correct: EN 60529:1991[1)], *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

1) As amended by EN 60529:1991/A1:2000 and EN 60529:1991/A1:2013.

▶ Publication footnote

.... ISO 1234:—[2], lists the test methods for...

---

[2] Under preparation. Stage at the time of publication: ISO/DIS 1234:2014.

Figures (1)

- Separate electronic files:
  - Obligatory for CEN
  - Strongly recommended for CENELEC (no XML)

CEN only

If figures are present in the text, but are not provided with the text at first delivery, the text will be rejected

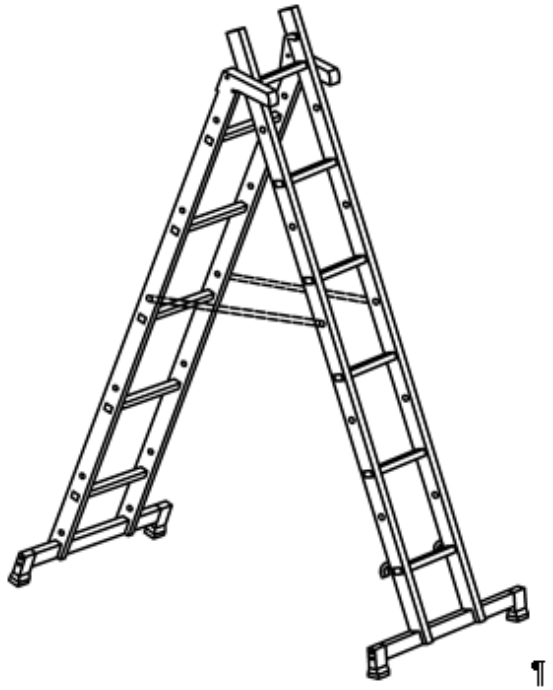
- Naming:
  - Body figures: 001/Fig_1
  - Annex figures: A001/Fig_A1
  - Table figures: Tbl_1_1
  - Key figures: 001_1/Fig_1_1

Figures (2)

- Styling (common styles):
  - Figure image
  - Key title/key text
  - Figure title

Figure Image

Figure title



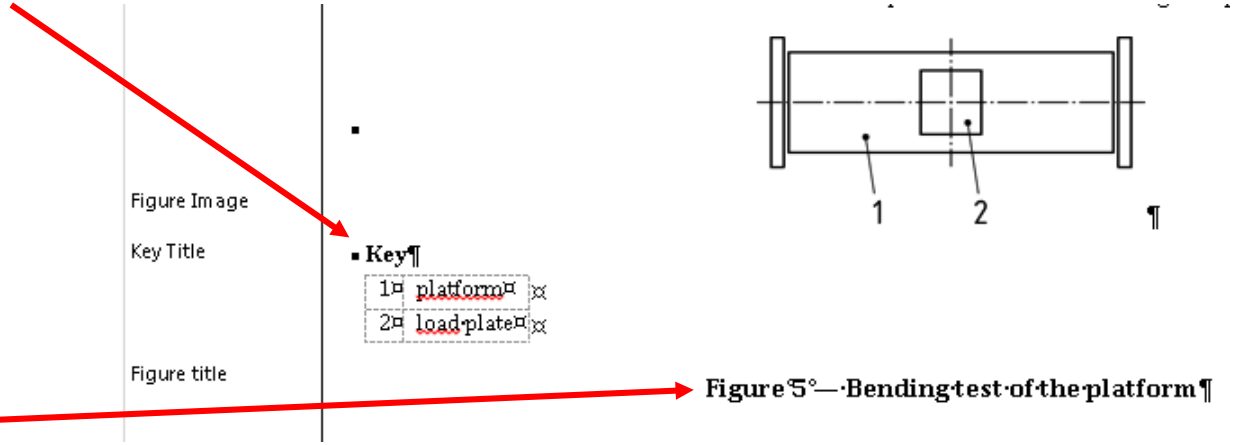
Figure·1·—·Example·of·a·ladder¶

Figures (3)

- .tif(f) (Photoshop) or .eps (Illustrator) format
- 600 dpi
- Compression LZW
- Single Layer (no autoshapes to edit figures)
- Size 100 %
  - Resizing not allowed in the Word file
  - Resizing generates a file with different sized figures
  - Typical issues with real size figures:
    - figure too large for the WORD/pdf page with keys/titles separated
    - figure so small that unreadable

Figures (4)

- Language-neutral (using keys when needed)



- Title
  - recommended by IR Part 3, 28.2, but expected by eXtyles
  - Simple + concise title with ‘Em’ (long) dash after figure number (see e.g.)

Tables (1)

- IR3, Cl. 29
- What can go wrong?
  - Corrupted tables → hard/impossible to generate XML
  - Errors possible when correcting layout
  - Delays in editing + timeframe

- Perfect tables are simple and concise:

Dimensions in millimetres

Type	Length	Inside diameter	Outside diameter
	l_1 [a]	d_1	
	l_2	d_2 [b c]	

A paragraph containing a requirement.

NOTE 1 Table note.

NOTE 2 Table note.

[a] Table footnote.

[b] Table footnote.

[c] Table footnote.

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Tables (2)

- Styling (commonly used)
  - Table title (using long ‘em’ dash after table number)
  - Table header
  - Table body

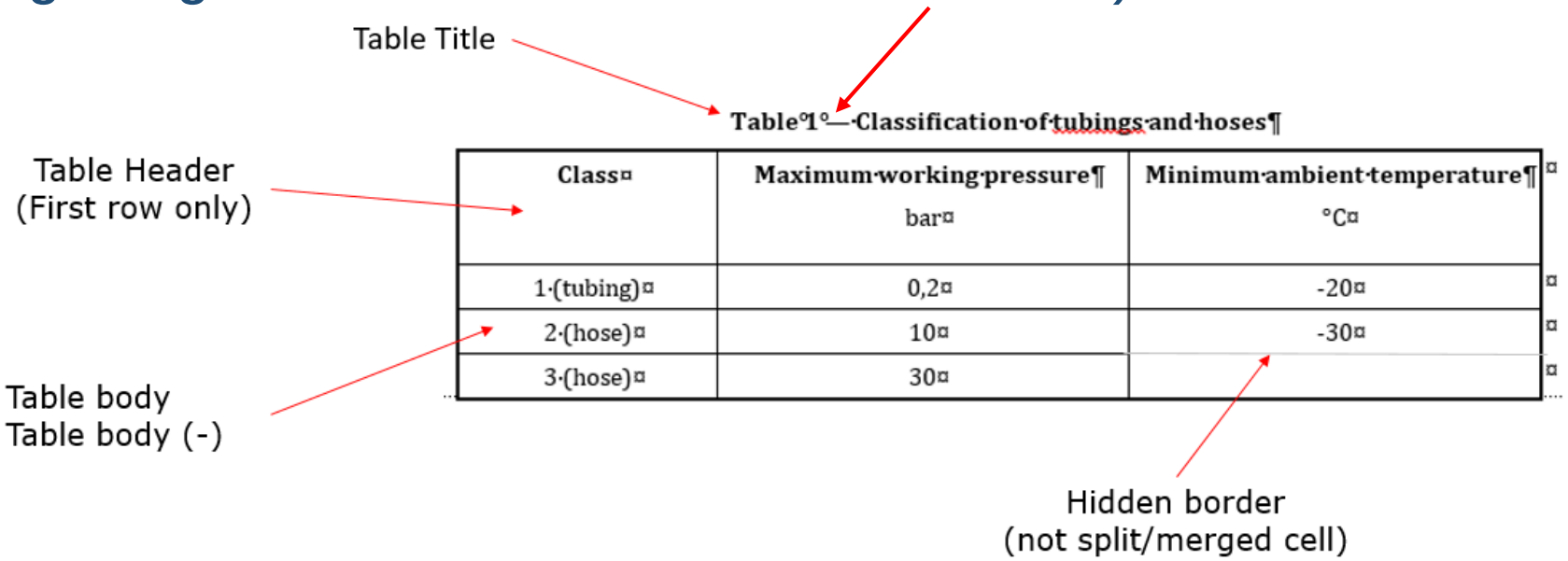


Table 1 — Classification of tubings and hoses

Class	Maximum working pressure bar	Minimum ambient temperature °C
1 (tubing)	0,2	-20
2 (hose)	10	-30
3 (hose)	30	

- Layout:
  - Title before table
  - Dimensions between title and table

Tables (3)

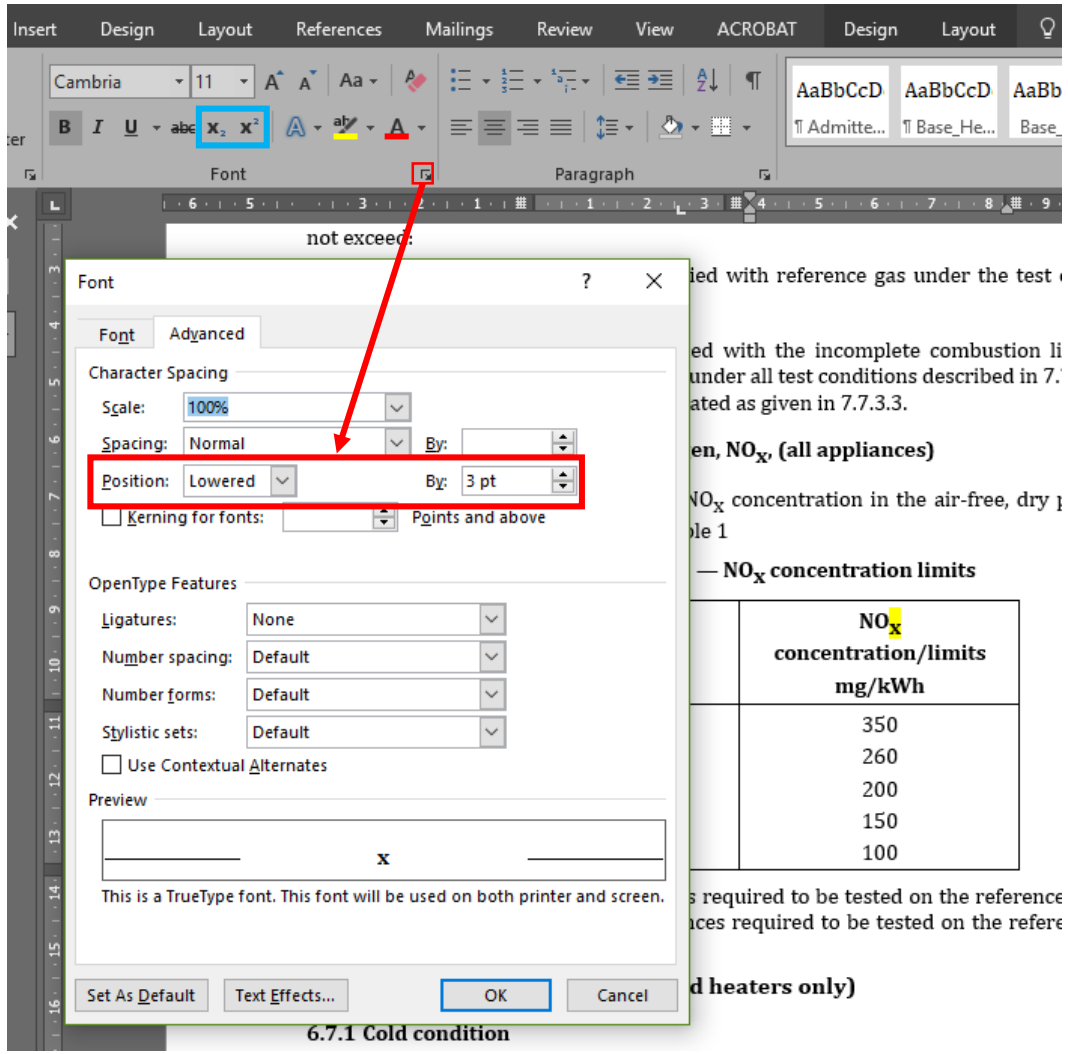
- Styling table-array content (non-designated tables):
  - Figures → **table body + bold** (for subfigure titles)
  - List content → **table body**
  - Formula explanations/keys → **table body**

Tables (4)

- Superscript/Subscript vs Raised/Lowered
  - Either to be used – not both
  - If both → errors in XML
  - Time consuming to fix

- Only use a, b, c; not *

Either Subscript/superscript
OR
Raised/lowered by 3pts
NOT BOTH!



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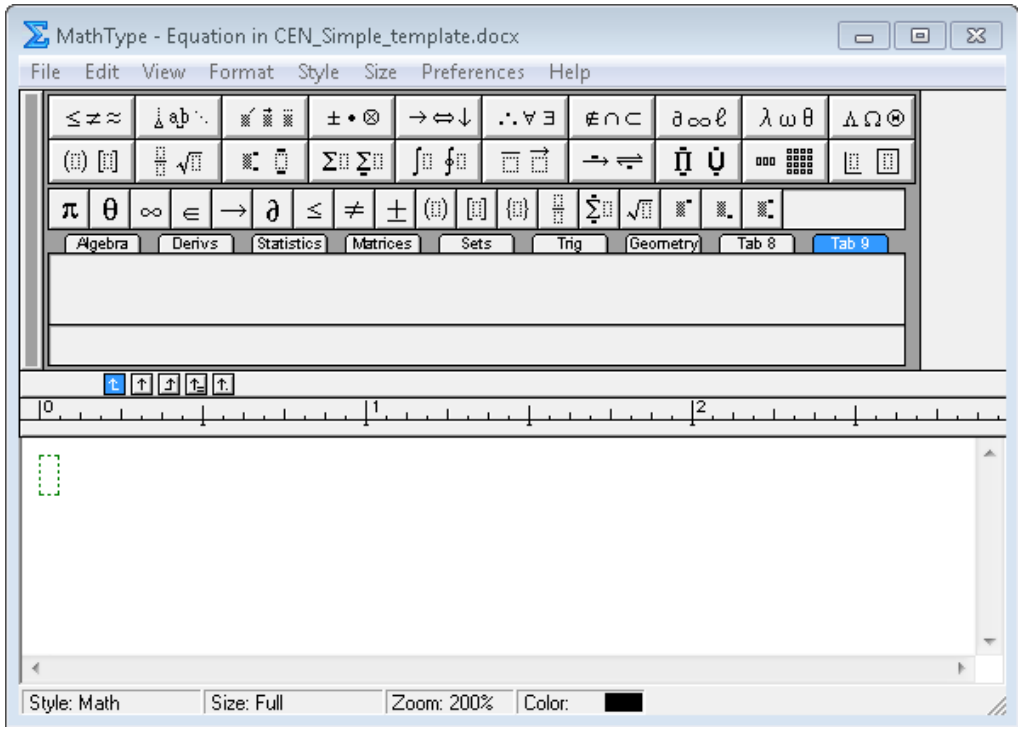
Tables (5)

- Avoid long cells → can create unstable XML
- Avoid splitting/merging cells
  - see guidance on hiding borders
- Vertical text is acceptable for readability purposes
- Black/dark text on white/light cell backgrounds only
  - white text is not supported by XML
- Don’t split cells diagonally
- No images as tables → have to be editable (except flowcharts)

Formulae (1)

- To avoid errors during editing:
  - MathType (required for XML)

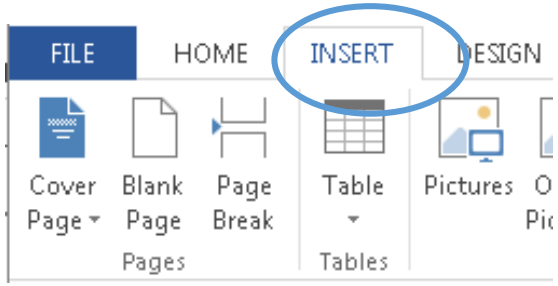


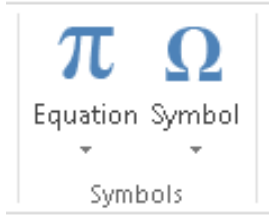
- If not possible

  => Equation Builder in Word

  be aware: possible errors

  when converting to MathType





Formulae (2)

- The Simple templates have a Formula style that allows use of a tab between formula and number
- No need to put formulae in tables for layout purposes!
- Where possible, use the keyboard

a2

A.4 Examples of formulae

Formula

$$A + B = C \qquad (1)$$

Body Text

where

A	is … ;
B	is … ;
C	is … .

Body Text

Body Text

[NOTE to the drafter: For simple formulae, the keyboard can be used. For more complex formulae, it is recommended to use a Word equation tool, such as MathType.]

Formula

$$D_1 = 5{,}77 \times 10^{-13} \frac{C_1 \rho_1}{4\pi} \sum \gamma_i \left(\frac{\mu_{en}}{\rho} \right) E_i \int B_i(1) \frac{e^{-\mu_{i(1)} s_1}}{\ell^2} dV \qquad (2)$$

- The·trueness·of·the·method·shall·be·evaluated·to·investigate·the·potential·for·bias·in·the·method.¶

  The·method·bias·b·can·be·estimated·by·comparing·the·mean·of·analytical·results·$\bar{x}$·(with·uncertainty·$u_{\bar{x}}$)·with·the·assigned·value·x_{av} x_{av}·(uncertainty·u_{av} u_{av})¶

Formulae (3)

- Formula explanations/keys laid out in table

- Should be styled Table Body
  - No MathType in first cell → add an empty column to the left
  - Corrupted document

where

	D_{EQ}	is equilibrium cant (mm)
	q_E	= 11,8 mm·m·h²/km² for 1 435 mm nominal track gauge (assuming a base measurement for cant of 1 500 mm), and
	q_E	= 8,3 mm·m·h²/km² for 1 000 mm nominal track gauge (assuming a base measurement for cant of 1 060 mm).

Citations (1)

- Normative references
  - Ensure they’re actually normatively referenced
  - Specific rules on dated vs undated references
- All tables, figures and annexes shall be referred to in the text
  - simply: ‘see figure/table/annex’
- Clause references:
  - ‘see clause 4’ (no need to add the (sub)clause title)
  - ‘see 4.1’ instead of ‘see clause 4.1’ → allows our tools to work
  - automatic numbering/fieldcodes → **remove before submission**
    - highly error-prone with processing
    - fieldcode links usually broken → errors to be manually deleted → time consuming

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Citations (2)

- Bibliographic references
  - square brackets with number: [1]
  - not obligatory, purely optional

- Layout in body of text is important:
  - EN 1234-5:2020 – no spaces in number or date
  - CLC/TR 1234-5:2020

IR3 – Key points

Foreword (1)

- CEN

European foreword

This document (prEN XXXX:XXXX) has been prepared by Technical Committee CEN/TC XXX "Title", the secretariat of which is held by XXX.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN XXXX:XXXX.

In comparison with the previous edition, the following technical modifications have been made:

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

For candidate harmonized European Standards

Foreword (2)

- CENELEC

European foreword

This document [*CLC standard reference*] has been prepared by CLC/TC/SR/SC **XX** "***Title***".

This document is currently submitted to the Enquiry/ Primary Questionnaire.

The following dates are proposed:

• latest date by which the existence of this document has to be announced at national level	(doa)	dor + 6 months
• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	dor + 12 months
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	dor + 36 months (to be confirmed or modified when voting)

This document will supersede ..... and all of its amendments and corrigenda (if any).

EN XXX:YYYY includes the following significant technical changes with respect to EN XXX:YYYY:

For candidate harmonized European Standards

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Foreword (3)

- Do not forget (when applicable):
  - Superseding note
  - List of technical changes
  - Relationship of the document to other documents or parts in the series

- No requirements, permissions or recommendations

Clause 1: Scope

- Mandatory element
- Defines subject of the document and the aspects covered
- No requirements, recommendations or permissions
  - Shall be worded as a series of statements of fact

Forms of expression such as the following shall be used:

"This document

- specifies
  - the dimensions of ..."
  - a method of ..."
  - the characteristics of ..."
- establishes
  - a system for ..."
  - general principles for ..."
- gives guidelines for ..."
- defines terms ..."

Statements of applicability of the document shall be introduced by wording such as:

- "This document is applicable to ..."
- "This document does not apply to..."

Clause 2: Normative References

- Mandatory element (even if empty)
  - Introductory wording

> The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

> There are no normative references in this document.

- No subdivision of Clause 2
  - However, the clause can be organised how you'd like
- Verbal forms for normative referencing
- IR3, Clause 15 for more in-depth information

Clause 3: Terms and Definitions

- Mandatory element (even if empty)
  - Introductory wording

For the purposes of this document, the terms and definitions given in [external document reference xxx] and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

- Clause can be split into different sections if necessary
- If terms are taken from external sources, this can be cited
  - [SOURCE EN XXXX:YYYY, 3.1]

Clause 3: Terms and Definitions

- Definitions:
  - Shall be drafted to directly replace the term in the text
  - Cannot begin with any article (a, an, the)
  - Shall not contain any requirements

- Notes to terms
  - Note x to entry, where ‘x’ is the number
  - Shall always be numbered, even if there is only 1
  - **CAN** contain requirements, recommendations and permissions
  - restart numbering in each term

Notes (1)

- IR3, Clause 24
- Notes provide additional information

- Not allowed:
  - requirements (shall) or any information considered indispensable for the use of the document
  - recommendations (should)
  - permissions (may)

  => Should be written as statement of fact

"Each label shall have a length of between 25 mm and 40 mm and a width of between 10 mm and 15 mm.

NOTE The size of the label was chosen so that it will fit most sizes of syringe without obscuring the graduation marks."

Notes (2)

- Different rules for:
  - Notes to entry
    - Provide additional information that supplements the terminological data
    - May contain requirements/recommendations/permissions

3.5.8
colour retention
degree of permanence of a colour

Note 1 to entry: Colour retention can be influenced by weathering.

  - Footnotes to figures/tables
    - May contain requirements

NOTE Figure # illustrates a type A rivet head.

[a] The break area shall be milled.

[b] The mandrel head is commonly chromium plated.

Figure 5 – Example illustrating the elements of a figure

Verbal forms (1)

- IR3, Clause 7

- Use of verbal forms for a clear distinction between:
  - Requirements
  - Recommendations
  - Permissions
  - Possibilities & capabilities

Verbal forms (2)

- Requirements
  - Preferred verbal form is “shall (not)”

EXAMPLE 1

Connectors shall conform to the electrical characteristics specified by IEC 60603-7-1.

  - Imperative mood (procedures, test methods)

EXAMPLE 2

Switch on the recorder.

  - ≠ “must” → external constraint

EXAMPLE 1 Particular conditions existing in a country:

Because Japan is a seismically active country, all buildings must be earthquake-resistant.

EXAMPLE 2 A law of nature:

All fish must maintain a balance of salt and water in their bodies to stay healthy

Verbal forms (3)

- Recommendations
  - Preferred verbal form is “should (not)”

EXAMPLE

Wiring of these connectors should take into account the wire and cable diameter of the cables defined in IEC 61156.

- Permissions
  - Preferred verbal form is “may (not)”

EXAMPLE 1

IEC 60512-26-100 may be used as an alternative to IEC 60512-27-100 for connecting hardware that has been previously qualified to IEC 60603-7-3:2008.

  - Do not use “(im)possible” or “can” in this context

Verbal forms (4)

- Possibilities and capabilities
  - Preferred verbal form is “can(not)”

EXAMPLE 1

Use of this connector in corrosive atmospheric conditions can lead to failure of the locking mechanism.

EXAMPLE 3

Only the reverse calculation approach given in E.3 can be used for calculated energy performance.

  - Do not use “may” in this context

Hanging Paragraphs

- Paragraph between a heading 1 and a heading 2
- Impossible to refer to

- Editors will remove these systematically
- Exception to the rule – apparatus/reagents clauses, Clause 3

Directives/Legislation

- Normative references to legislation/directives NOT ALLOWED
- Standards are not legally binding – directives/legislation are
- Instead:
  - Copy/paste any applicable requirements into the standard and give the directive as a source, in a note
  - Use statements of fact when referring to directives/legislation

- Normative references to directives/legislation will cause delays in publication until they’re resolved
- If in doubt, contact CCMC directly.

Conformity Assessment

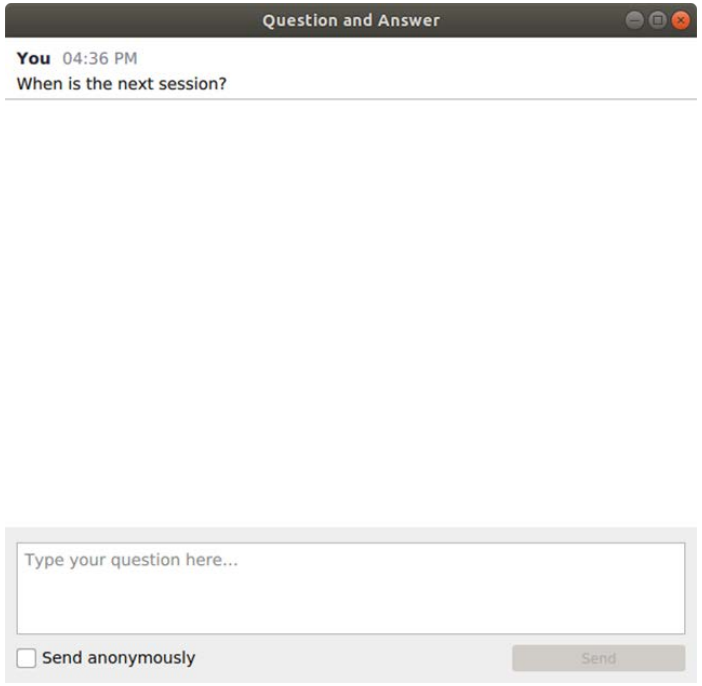
- Normative references cannot be made to any of the standards on Conformity Assessment:

EN ISO/IEC 17025	Testing and calibration laboratories (1st, 2nd, 3rd party)
EN ISO/IEC 17020	Inspection bodies (1st, 2nd, 3rd party)
EN ISO/IEC 17029	(under development) Validation/verification bodies (1st, 2nd, 3rd party)
EN ISO/IEC 17024	Certification bodies for persons (3rd party)
EN ISO/IEC 17021-1	Certification bodies for management systems (3rd party)
EN ISO/IEC 17065	Certification bodies for products, services, processes (3rd party)
EN ISO/IEC 17050	Supplier's declaration of conformity (1st party)

- As this section is large and detailed, get in touch with CCMC for further information

Question time

- Use the Q&A panel to submit your questions



European Standardization Organizations

Thank you for your participation!

Series of webinars for standards drafters 2020: Available here.

2020-12-01 - Webinar: European standards addressing material efficiency aspects
2020-12-10 - Annual training session for newly appointed CEN & CENELEC Technical Body Officers