DIN EN ISO 22014:2024-09 (E)

Library objects for architecture, engineering, construction and use (ISO 22014:2024)

Contents

Page

European foreword ... **5**

Foreword ... **6**

Introduction ... **7**

1 Scope ... **8**

2 Normative references ... **8**

3 Terms and definitions ... **9**

4 Applications ... **11**
4.1 General ... 11
4.2 Template objects ... 11
4.3 Generic objects ... 11
4.4 Product objects ... 12
4.4.1 General ... 12
4.4.2 Catalogue product objects ... 12
4.4.3 Parametric series product objects ... 12
4.4.4 Engineered-to-order product objects ... 12

5 Principles ... **13**

6 Identification and origination of library objects ... **14**
6.1 General ... 14
6.2 Data format ... 14
6.3 Object definition ... 14
6.4 Identification ... 14
6.4.1 Clear naming ... 14
6.4.2 Unique naming ... 14
6.4.3 Naming (file and object) ... 15
6.4.4 Description ... 16
6.4.5 Unique identifier ... 16
6.4.6 Other identifiers ... 16
6.5 Origination ... 16
6.5.1 General ... 16
6.5.2 Source ... 16
6.5.3 Library object version and date ... 17
6.5.4 Product version and date ... 17
6.5.5 Further information (references or links) ... 17
6.5.6 Updates (references or links) ... 17
6.5.7 Software ... 17
6.6 Classification ... 17
6.6.1 General ... 17
6.6.2 Classification schemes ... 17
6.6.3 Multiple classifications ... 18
6.7 Occurrence information ... 18
6.7.1 General ... 18
6.7.2 Reference designations ... 19

7 Graphical symbols and simplified representation ... **19**
7.1 General ... 19
7.2 Defining factors for graphical presentations ... 21
7.2.1 General ... 21

7.2.2 Presentation contents ... 21
7.2.3 Dimension ... 21
7.2.4 Projection method ... 21
7.2.5 Scale ... 22
7.2.6 Presentation style ... 22
7.3 Features ... 23
7.3.1 General ... 23
7.3.2 Limited indication of the features of an object ... 23
7.3.3 Symbolic indication of objects ... 23
7.4 Graphic simplicity ... 23
7.5 Graphical symbols (including elements of symbols) ... 24
7.5.1 General ... 24
7.5.2 Graphical symbols sharing common subsidiary features ... 24
7.5.3 Constant size ... 24
7.5.4 Fixed orientation ... 24
7.6 Graphics ... 24

8 Shapes and measurements ... 25
8.1 General ... 25
8.2 Detail ... 25
8.2.1 General ... 25
8.2.2 Low detail ... 26
8.2.3 Medium detail ... 26
8.2.4 High detail ... 26
8.2.5 Library object types and detail ... 26
8.2.6 Orientation ... 26
8.2.7 Insertion points and principal dimensions ... 27
8.2.8 Behaviour ... 28
8.3 Levels of measurement ... 28
8.3.1 General ... 28
8.3.2 Characteristic measurement ... 28
8.3.3 Standard measurement ... 28
8.3.4 Method-based measurement ... 28
8.3.5 Measurements for library objects ... 29

9 Properties ... 29
9.1 General ... 29
9.2 Example purposes ... 29
9.2.1 General ... 29
9.2.2 Specification and selection ... 29
9.2.3 Performance analysis and simulation ... 30
9.2.4 Costing ... 30
9.2.5 Environmental impacts and recycling ... 30
9.2.6 Procurement, work planning and execution ... 30
9.2.7 Commissioning, operation and use ... 30
9.2.8 Expected life and replacement ... 30
9.2.9 Declarations and third-party information ... 30
9.3 Property identification ... 30
9.4 Choice of properties ... 31
9.4.1 General ... 31
9.4.2 Specification properties ... 31
9.4.3 Assessment properties ... 31
9.4.4 Simulation properties ... 31
9.5 Use of properties ... 32
9.5.1 General ... 32
9.5.2 Library object types ... 32
9.6 Occurrence within projects and use ... 32

10 Assemblies ... 32
10.1 General ... 32

10.2 Uses ... 32
10.2.1 General ... 32
10.2.2 Repetitive facility types ... 33
10.2.3 Prefabricated products ... 33
10.2.4 Details and connections ... 33
10.2.5 Fabrication and manufacturing ... 34
10.2.6 Layered constructions ... 34
10.3 Processes ... 34
10.3.1 Preparation and publication ... 34
10.3.2 Design and development ... 34
10.3.3 Measurement ... 34
10.3.4 Use in asset management ... 34
10.4 Implementation ... 35
10.5 Identification and grouping of assemblies ... 35
10.5.1 General ... 35
10.5.2 Graphical symbols ... 35
10.5.3 Shape and measurement ... 36
10.5.4 Properties ... 36
10.5.5 Composition ... 36
Annex A (informative) **Examples** ... **37**
Annex B (informative) **Localization** ... **42**
Bibliography ... **43**