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**Industrial automation systems and  
integration — Product data representation  
and exchange —**

Part 332:

**Abstract test suite: Technical data  
packaging core information and exchange**

*Systèmes d'automatisation industrielle et intégration — Représentation et  
échange de données de produits —*

*Partie 332: Suite d'essai abstrait: Paquet de données techniques*



Reference number  
ISO/TS 10303-332:2002(E)

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

- an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;
- an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed every three years with a view to deciding whether it can be transformed into an International Standard.

Attention is drawn to the possibility that some of the elements of this part of ISO 10303 may be the subject of patent rights. ISO shall not be held responsible for any or all such patent rights.

ISO/TS 10303-323 was prepared by Technical Committee ISO/TC 184, *Industrial automation systems and integration*, Subcommittee SC 4, *Industrial data*.

This International Standard is organised as a series of parts, each published separately. The structure of this International Standard is described in ISO 10303-1.

Each part of this International Standard is a member of one of the following series: description methods, implementation methods, conformance testing methodology and framework, integrated generic resources, integrated application resources, application protocols, abstract test suites, application interpreted constructs, and application modules. This part is a member of the abstract test suite series.

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A complete list of parts of ISO 10303 is available from the Internet:

`<http://www.nist.gov/sc4/editing/step/titles/>`

Annexes A, B and C form a normative part of this part of ISO 10303. Annexes D and E are for information only.

## Introduction

ISO 10303 is an International Standard for the computer-interpretable representation of product information and for the exchange of product data. The objective is to provide a neutral mechanism capable of describing products throughout their life cycle. This mechanism is suitable not only for neutral file exchange, but also as a basis for implementing and sharing product databases, and as a basis for archiving.

This part of ISO 10303 specifies the abstract test suite for ISO 10303-232, Application protocol: Technical data packaging core information and exchange. The abstract test cases presented here are the basis for conformance testing of implementations of ISO 10303-232.

The purpose of an abstract test suite is to provide a basis for evaluating whether a particular implementation of an application protocol actually conforms to the requirements of that application protocol. A standard abstract test suite helps ensure that evaluations of conformance are conducted in a consistent manner by different test laboratories.

This abstract test suite is made up of two major parts:

- the test purposes, the specific items to be covered by conformance testing;
- the set of abstract test cases that meet those test purposes.

The test purposes are statements of the application protocol requirements that are to be addressed by the abstract test cases. Test purposes are derived primarily from the application protocol's information requirements and AIM, as well as from other sources such as standards referenced by the application protocol and requirements stated in the application protocol conformance requirements clause.

The abstract test cases address the test purposes by:

- specifying the requirements for input data to be used when testing an implementation of the application protocol;
- specifying the verdict criteria to be used when evaluating whether the implementation successfully converted the input data to a different form.

The abstract test cases set the requirements for the executable test cases that are required to actually conduct a conformance test. Executable test cases contain the scripts, detailed values, and other explicit information required to conduct a conformance test on a specific implementation of the application protocol.

At the time of publication of this document, conformance testing requirements had been established for implementations of application protocols in combination with ISO 10303-21 and ISO 10303-22. This part of ISO 10303 only specifies test purposes and abstract test cases for a subset of such implementations.

NOTE ISO TC184/SC4 has prepared Standing Documents [1] and [2] for documenting abstract test suites that are prepared as International Standards. Subsequent ISO TC184/SC4 resolutions allow abstract test suites to be prepared as Technical Specifications. This part of ISO 10303 was documented as a Technical Specification using the ISO TC184/SC4 Standing Documents [1] and [2] as a guide. Primary reliance was placed on [2].

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Portions of this part of ISO 10303 that relied on [1] are identified in NOTES in the appropriate clause or subclause. Technical differences in documentation of abstract test suites from the Standing Documents [1] and [2] are identified in NOTES throughout this part of ISO 10303. Editorial differences in documentation are not identified in this part of ISO 10303.

For ISO 10303-21, two kinds of implementations, preprocessors and postprocessors, must be tested. Both these are addressed in this abstract test suite.

For ISO 10303-22, a class of applications will possess the capability to upload and download AP-compliant SDAI-models or schema instances to and from applications that implement the SDAI. By providing test case data that correspond with SDAI-models, this abstract test suite addresses such applications in a single-schema scenario.

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## 1 Scope

This part of ISO 10303 specifies the abstract test suite to be used in the conformance testing of implementations of ISO 10303-232. The following are within the scope of this part of ISO 10303:

- the specification of the test purposes associated with ISO 10303-232;
- the verdict criteria to be applied during conformance testing of an implementation of ISO 10303-232 using ISO 10303-21 or ISO 10303-22;

NOTE The verdict criteria are used to ascertain whether a test purpose has been satisfactorily met by an implementation under test (IUT) within the context of a given test case.

- the abstract test cases to be used as the basis for the executable test cases for conformance testing.

The following are outside the scope of this part of ISO 10303:

- the creation of executable test cases;
- test specifications for tests other than conformance testing such as interoperability or acceptance testing;
- other implementation methods.

## 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 10303. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 10303 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 10303-1:1994, *Industrial automation systems and integration — Product data representation and exchange — Part 1: Overview and fundamental principles*

ISO 10303-11:1994, *Industrial automation systems and integration — Product data representation and exchange — Part 11: Description methods: The EXPRESS language reference manual*

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ISO 10303-21:2002, *Industrial automation systems and integration — Product data representation and exchange — Part 21: Implementation methods: Clear text encoding of the exchange structure*

ISO 10303-22:1998, *Industrial automation systems and integration — Product data representation and exchange — Part 22: Implementation methods: Standard data access interface*

ISO 10303-31:1994, *Industrial automation systems and integration — Product data representation and exchange — Part 31: Conformance testing methodology and framework: General concepts*

ISO 10303-32:1998, *Industrial automation systems and integration — Product data representation and exchange — Part 32: Conformance testing methodology and framework: Requirements on testing laboratories and clients*

ISO 10303-34:2001, *Industrial automation systems and integration — Product data representation and exchange — Part 34: Conformance testing methodology and framework: Abstract test methods for application protocol implementations*

ISO 10303-232:2002, *Industrial automation systems and integration — Product data representation and exchange — Part 232: Application protocol: Technical data packaging core information and exchange*

ISO/IEC 8824-1:1998, *Information technology — Abstract Syntax Notation One (ASN.1): Specification of basic notation*

## **3 Terms, definitions, and abbreviations**

### **3.1 Terms defined in ISO 10303-1**

For the purpose of this part of ISO 10303, the following terms defined in ISO 10303-1 apply.

- abstract test suite (ATS);
- application protocol (AP);
- implementation method.

### **3.2 Terms defined in ISO 10303-31**

For the purpose of this part of ISO 10303, the following terms defined in ISO 10303-31 apply.

- abstract test case (ATC);
- conformance testing;
- executable test case;
- implementation under test (IUT);
- postprocessor;
- preprocessor;

- test purpose;
- verdict criterion.

### 3.3 Terms defined in ISO 10303-232

For the purpose of this part of ISO 10303, the following terms defined in ISO 10303-232 apply.

- associated list;
- data definition exchange (DDE);
- data list;
- indentured data list;
- index list;
- parts list;
- TDP element;
- technical data package (TDP).

### 3.4 Other terms and definitions

For the purposes of this part of ISO 10303, the following definitions apply.

#### 3.4.1

##### **application element**

an application object, attribute, or assertion defining the information requirements in clause 4 of an application protocol.

#### 3.4.2

##### **application element test purpose**

a test purpose derived from the application elements in the ARM of an application protocol.

#### 3.4.3

##### **application interpreted model test purpose**

a test purpose derived from the AIM EXPRESS schema of an application protocol.

#### 3.4.4

##### **domain test purpose**

a test purpose that arises from the requirements that are implicit in an application protocol and derived from usage scenarios and the process and information flows in the application domain of an application protocol.

#### 3.4.5

##### **external reference test purpose**

test purpose derived from requirements that arise from standards referenced by an application protocol.

### **3.4.6**

#### **input specification**

the instance model of an abstract test case presented in an unambiguous form, the table format for preprocessors and physical files (ISO 10303-21).

## **3.5 Abbreviations**

|     |                               |
|-----|-------------------------------|
| AE  | application element           |
| AIM | application interpreted model |
| AP  | application protocol          |
| ARM | application reference model   |
| ATS | abstract test suite           |
| CC  | conformance class             |
| IUT | implementation under test     |
| TDP | technical data package        |
| UoF | unit of functionality         |

## **4 Test purposes**

NOTE 1 Portions of this clause have been written in accordance with the Guidelines for the development of abstract test suites [1].

This clause specifies the test purposes for this part of ISO 10303. Clauses 4.1 and 4.2 describe the source and meaning of test purposes that are derived from the information requirement defined in ISO 10303-232, clause 4, and the AIM EXPRESS schema defined in ISO 10303-232, annex A. Each test purpose statement identifies some specific element from the application elements or the AIM. Every test purpose statement implicitly requires that the identified element, as specified in the test purpose statement, will be correctly instantiated by the implementation under test in at least one test case within the test suite.

Implementation method test purposes in 4.3 are derived from ISO 10303-21. Domain test purposes in 4.4 are derived from implicit domain requirements in the AP that are not clearly specified at the application element level. The primary source of these implicit domain requirements is optional mappings specified in ISO 10303-232, clause 5.1. Implementation method and domain test purposes are individually identified by the prefix “other” in the test purpose number. These test purposes are statements of requirements that shall be met by a conforming implementation.

NOTE 2 Not all test purposes are covered by an abstract test case in clause 6 of this edition of this part of ISO 10303. Additional test cases will be added to a future edition to provide more complete coverage of the test purposes.

## 4.1 Application element test purposes

NOTE 1 This clause has been written in accordance with the Guidelines for the development of abstract test suites [1].

AE test purposes are individually identified by the prefix “ae” in the test purpose number. Each test purpose derived from the information requirements shall be interpreted as given in the following statement: the IUT shall preserve the semantics associated with the unique application element from which the test purpose was derived. This implies that the semantics of the application element are preserved by the IUT between the input and output of a test, according to the reference path specified in the mapping table of the AP. AE test purposes apply to the input specifications of both preprocessor and postprocessor test cases. AE test purposes are derived from the AP information requirements as follows:

- application objects (see 4.2 of ISO 10303-232). A test purpose derived from an application object is a simple statement of the object's name. Each application object test purpose is documented in a separate subclause.

NOTE 2 The following application objects function as simple type attributes and do not have separate, derived test purposes: A\_number, A\_real, An\_integer, Identifier, Label, Measure, and Text. See notes 2 and 3 below.

- application objects with categorisations (subtypes) (see 4.2 of ISO 10303-232). Test purposes derived from application objects with categorisations are statements of the application object name as a specific subtype.
- application object attributes (see 4.2 of ISO 10303-232). Test purposes derived from application object attributes are statements of the application object name with a specific attribute name.

NOTE 3 Only the application object attributes whose type is one of the application objects identified in note 1 have test purposes of this kind.

- application assertions (see 4.3 of ISO 10303-232). Test purposes derived from application assertions are statements describing the relationship between two application objects. Application assertion test purposes address the directions of relationships as well as the number (cardinality) of relationships.

NOTE 4 Application assertions that involve one of the application objects identified in note 1 do not have test purposes.

Each application object test purpose is listed as a separate subclause, with its related application object attribute test purposes and assertion test purposes.

### 4.1.1 Accessed\_file

- ae1 Accessed\_file
- ae2 Accessed\_file with path\_information not present
- ae3 Accessed\_file with path\_information
- ae4 Accessed\_file with storage\_node\_identification not present
- ae5 Accessed\_file with storage\_node\_identification
- ae6 Accessed\_file is entry\_files for one Data\_definition\_entry\_item
- ae7 Accessed\_file is entry\_files for many Data\_definition\_entry\_item objects

- ae8 Accessed\_file is entry\_files for one Data\_definition\_entry\_tdp\_element
- ae9 Accessed\_file is entry\_files for many Data\_definition\_entry\_tdp\_element objects
- ae10 Accessed\_file is file\_entries for one Simple\_list\_of\_files
- ae11 Accessed\_file is file\_entries for many Simple\_list\_of\_files objects

#### 4.1.2 Alternate\_element\_identification

- ae12 Alternate\_element\_identification
- ae13 Alternate\_element\_identification with identifying\_number
- ae14 Alternate\_element\_identification with title not present
- ae15 Alternate\_element\_identification with title
- ae16 Alternate\_element\_identification has change\_status of zero Change\_identification
- ae17 Alternate\_element\_identification has change\_status of one Change\_identification
- ae18 Alternate\_element\_identification has design\_activity of one Design\_authority
- ae19 Alternate\_element\_identification has element\_classifications of zero Element\_type
- ae20 Alternate\_element\_identification has element\_classifications of one Element\_type
- ae21 Alternate\_element\_identification has element\_classifications of many Element\_type objects
- ae22 Alternate\_element\_identification has outstanding\_changes of zero Other\_reference\_document
- ae23 Alternate\_element\_identification has outstanding\_changes of one Other\_reference\_document
- ae24 Alternate\_element\_identification has outstanding\_changes of many Other\_reference\_document objects
- ae25 Alternate\_element\_identification is alternate\_identifications for one Element\_identification
- ae26 Alternate\_element\_identification is alternate\_identifications for many Element\_identification objects

#### 4.1.3 Alternate\_identification\_of\_item

- ae27 Alternate\_identification\_of\_item
- ae28 Alternate\_identification\_of\_item with identifying\_number of one Identifier
- ae29 Alternate\_identification\_of\_item has identifying\_number of one item\_identifying\_number\_select as Drawing\_suffix\_number\_combination
- ae30 Alternate\_identification\_of\_item with nomenclature\_or\_name not present
- ae31 Alternate\_identification\_of\_item with nomenclature\_or\_name
- ae32 Alternate\_identification\_of\_item has change of zero Change\_identification
- ae33 Alternate\_identification\_of\_item has change of one Change\_identification
- ae34 Alternate\_identification\_of\_item has classifications of zero Item\_type
- ae35 Alternate\_identification\_of\_item has classifications of one Item\_type
- ae36 Alternate\_identification\_of\_item has classifications of many Item\_type objects
- ae37 Alternate\_identification\_of\_item has design\_activity of one Design\_authority
- ae38 Alternate\_identification\_of\_item has source\_information of zero Source\_information\_type
- ae39 Alternate\_identification\_of\_item has source\_information of one Source\_information\_type
- ae40 Alternate\_identification\_of\_item is alternate\_identifications for one Item\_identification
- ae41 Alternate\_identification\_of\_item is alternate\_identifications for many Item\_identification objects

#### 4.1.4 Alternate\_item

- ae42 Alternate\_item
- ae43 Alternate\_item with type\_of\_alternate not present
- ae44 Alternate\_item with type\_of\_alternate

- ae45 Alternate\_item with usage\_conditions not present
- ae46 Alternate\_item with usage\_conditions of one An\_integer
- ae47 Alternate\_item with usage\_conditions of many An\_integer elements
- ae48 Alternate\_item with usage\_conditions of one Text
- ae49 Alternate\_item with usage\_conditions of many Text elements
- ae50 Alternate\_item has interchange\_item of one usage\_context as Item
- ae51 Alternate\_item has interchange\_item of one usage\_context as Item\_usage
- ae52 Alternate\_item is alternates for one Item
- ae53 Alternate\_item is alternates for many Item objects

#### 4.1.5 Annotation

- ae54 Annotation
- ae55 Annotation has annotation\_geometry of zero Geometry
- ae56 Annotation has annotation\_geometry of one Geometry
- ae57 Annotation is annotation\_presentation for one Product\_presentation
- ae58 Annotation is annotation\_presentation for many Product\_presentation objects

#### 4.1.6 Approval

- ae59 Approval
- ae60 Approval with purpose\_of
- ae61 Approval has approval\_date of one Date
- ae62 Approval has person\_organization of zero Person\_and\_organization
- ae63 Approval has person\_organization of one Person\_and\_organization
- ae64 Approval is approval\_of\_configuration for one Product\_configuration
- ae65 Approval is approval\_of\_configuration for many Product\_configuration objects
- ae66 Approval is effectivity\_approvals for one Effectivity
- ae67 Approval is effectivity\_approvals for many Effectivity objects

#### 4.1.7 Assembly

- ae68 Assembly

#### 4.1.8 Associated\_list

- ae69 Associated\_list as Document\_list
- ae70 Associated\_list as Other\_list
- ae71 Associated\_list as Parts\_list
- ae72 Associated\_list has presentation of zero List\_presentation
- ae73 Associated\_list has presentation of one List\_presentation
- ae74 Associated\_list has related\_to of zero drawing\_or\_product\_data\_set
- ae75 Associated\_list has related\_to of one drawing\_or\_product\_data\_set as Drawing
- ae76 Associated\_list has related\_to of one drawing\_or\_product\_data\_set as Product\_data\_set

#### 4.1.9 Body\_presentation

- ae77 Body\_presentation
- ae78 Body\_presentation has body\_tabulation\_presentation of one Tabulation
- ae79 Body\_presentation has body\_tabulation\_presentation of many Tabulation objects

- ae80 Body\_presentation is body\_page1\_format for one List\_presentation
- ae81 Body\_presentation is body\_page1\_format for many List\_presentation objects
- ae82 Body\_presentation is body\_pagen\_format for one List\_presentation
- ae83 Body\_presentation is body\_pagen\_format for many List\_presentation objects

#### 4.1.10 Change\_identification

- ae84 Change\_identification
- ae85 Change\_identification with change\_code not present
- ae86 Change\_identification with change\_code = change
- ae87 Change\_identification with change\_code = original
- ae88 Change\_identification with change\_code = original with change
- ae89 Change\_identification with change\_code = other
- ae90 Change\_identification with change\_code = revision
- ae91 Change\_identification with change\_code = revision with change
- ae92 Change\_identification with change\_description not present
- ae93 Change\_identification with change\_description
- ae94 Change\_identification with change\_level not present
- ae95 Change\_identification with change\_level
- ae96 Change\_identification with issue\_level not present
- ae97 Change\_identification with issue\_level
- ae98 Change\_identification with revision\_authorization\_identifications not present
- ae99 Change\_identification with revision\_authorization\_identifications of one Identifier
- ae100 Change\_identification with revision\_authorization\_identifications of many Identifier elements
- ae101 Change\_identification with revision\_description not present
- ae102 Change\_identification with revision\_description
- ae103 Change\_identification with revision\_level not present
- ae104 Change\_identification with revision\_level
- ae105 Change\_identification has action\_status of zero Status
- ae106 Change\_identification has action\_status of one Status
- ae107 Change\_identification has change\_date of zero Date
- ae108 Change\_identification has change\_date of one Date
- ae109 Change\_identification has issue\_date of zero Date
- ae110 Change\_identification has issue\_date of one Date
- ae111 Change\_identification has revision\_authorization\_identifications of one revision\_authorization\_select as Other\_reference\_document
- ae112 Change\_identification has revision\_authorization\_identifications of many revision\_authorization\_select as Other\_reference\_document objects
- ae113 Change\_identification has revision\_date of zero Date
- ae114 Change\_identification has revision\_date of one Date
- ae115 Change\_identification is change for one Alternate\_identification\_of\_item
- ae116 Change\_identification is change for many Alternate\_identification\_of\_item objects
- ae117 Change\_identification is change\_status for one Alternate\_element\_identification
- ae118 Change\_identification is change\_status for many Alternate\_element\_identification objects
- ae119 Change\_identification is change\_status for one Element\_identification
- ae120 Change\_identification is change\_status for many Element\_identification objects
- ae121 Change\_identification is change\_status for one File
- ae122 Change\_identification is change\_status for many File objects
- ae123 Change\_identification is change for one Item\_identification

ae124 Change\_identification is change for many Item\_identification objects

#### 4.1.11 Column\_header

ae125 Column\_header

ae126 Column\_header has single\_column\_header\_titles of one Field\_title

ae127 Column\_header has single\_column\_header\_titles of many Field\_title objects

ae128 Column\_header is tabulation\_columnar\_headings for one Tabulation

ae129 Column\_header is tabulation\_columnar\_headings for many Tabulation objects

#### 4.1.12 Columnar\_data\_content\_holder

ae130 Columnar\_data\_content\_holder

ae131 Columnar\_data\_content\_holder with column\_content\_presentation

ae132 Columnar\_data\_content\_holder is tabulation\_columns for one Tabulation

ae133 Columnar\_data\_content\_holder is tabulation\_columns for many Tabulation objects

#### 4.1.13 Company

ae134 Company

ae135 Company with address not present

ae136 Company with address

ae137 Company with name

ae138 Company is code\_administrator for one Company\_code

ae139 Company is code\_administrator for many Company\_code objects

ae140 Company is code\_administrator for one Element\_type

ae141 Company is code\_administrator for many Element\_type objects

ae142 Company is code\_administrator for one Item\_type

ae143 Company is code\_administrator for many Item\_type objects

ae144 Company is design\_activity\_identification for one Design\_authority

ae145 Company is design\_activity\_identification for many Design\_authority objects

ae146 Company is organization for one Person\_and\_organization

ae147 Company is organization for many Person\_and\_organization objects

ae148 Company is release\_authority for one Release\_authentication

ae149 Company is release\_authority for many Release\_authentication objects

ae150 Company is target\_company for one System\_destination

ae151 Company is target\_company for many System\_destination objects

#### 4.1.14 Company\_code

ae152 Company\_code

ae153 Company\_code with code

ae154 Company\_code with type\_of\_code not present

ae155 Company\_code with type\_of\_code

ae156 Company\_code has code\_administrator of zero Company

ae157 Company\_code has code\_administrator of one Company

ae158 Company\_code is design\_activity\_code for one Design\_authority

ae159 Company\_code is design\_activity\_code for many Design\_authority objects

ae160 Company\_code is release\_authority\_code for one Release\_authentication

ae161 Company\_code is release\_authority\_code for many Release\_authentication objects

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- ae162 Company\_code is target\_company\_code for one System\_destination
- ae163 Company\_code is target\_company\_code for many System\_destination objects

### 4.1.15 Configuration

- ae164 Configuration
- ae165 Configuration with data\_usage\_rights not present
- ae166 Configuration with data\_usage\_rights
- ae167 Configuration has distribution\_authorizations of zero Distribution\_notice
- ae168 Configuration has distribution\_authorizations of one Distribution\_notice
- ae169 Configuration has distribution\_authorizations of many Distribution\_notice objects
- ae170 Configuration has end\_item\_system\_designation of zero Product\_configuration
- ae171 Configuration has end\_item\_system\_designation of one Product\_configuration
- ae172 Configuration has preparing\_contracts of zero Contract
- ae173 Configuration has preparing\_contracts of one Contract
- ae174 Configuration has preparing\_contracts of many Contract objects
- ae175 Configuration has release\_authorizations of zero Release\_authentication
- ae176 Configuration has release\_authorizations of one Release\_authentication
- ae177 Configuration has release\_authorizations of many Release\_authentication objects
- ae178 Configuration has security\_identifications of zero Security\_classification
- ae179 Configuration has security\_identifications of one Security\_classification
- ae180 Configuration has security\_identifications of many Security\_classification objects
- ae181 Configuration is data\_configuration for one  
Header\_configuration\_with\_element\_identification
- ae182 Configuration is data\_configuration for many  
Header\_configuration\_with\_element\_identification objects
- ae183 Configuration is entry\_configuration for one Indentured\_data\_list\_entry
- ae184 Configuration is entry\_configuration for many Indentured\_data\_list\_entry objects
- ae185 Configuration is item\_configuration for one Item
- ae186 Configuration is item\_configuration for many Item objects
- ae187 Configuration is sheet\_configuration for one Sheet
- ae188 Configuration is sheet\_configuration for many Sheet objects

### 4.1.16 Contract

- ae189 Contract
- ae190 Contract with contract\_number
- ae191 Contract with contract\_data\_requirements\_list not present
- ae192 Contract with contract\_data\_requirements\_list
- ae193 Contract with data\_item\_description\_identification not present
- ae194 Contract with data\_item\_description\_identification
- ae195 Contract is delivered\_contract for one Contract\_submission
- ae196 Contract is delivered\_contract for many Contract\_submission objects
- ae197 Contract is preparing\_contracts for one Configuration
- ae198 Contract is preparing\_contracts for many Configuration objects

### 4.1.17 Contract\_submission

- ae199 Contract\_submission
- ae200 Contract\_submission with location

- ae201 Contract\_submission has date\_of\_submission of one Date
- ae202 Contract\_submission has delivered\_contract of one Contract
- ae203 Contract\_submission is available\_from for one Data\_definition\_entry\_item
- ae204 Contract\_submission is available\_from for many Data\_definition\_entry\_item objects
- ae205 Contract\_submission is available\_from for one Data\_definition\_entry\_tdp\_element
- ae206 Contract\_submission is available\_from for many Data\_definition\_entry\_tdp\_element objects
- ae207 Contract\_submission is available\_from for one Data\_list\_entry
- ae208 Contract\_submission is available\_from for many Data\_list\_entry objects
- ae209 Contract\_submission is available\_from for one Indentured\_data\_list\_entry
- ae210 Contract\_submission is available\_from for many Indentured\_data\_list\_entry objects

#### 4.1.18 Data\_definition\_entry\_item

- ae211 Data\_definition\_entry\_item
- ae212 Data\_definition\_entry\_item with entry\_item\_change\_level not present
- ae213 Data\_definition\_entry\_item with entry\_item\_change\_level of one element
- ae214 Data\_definition\_entry\_item with entry\_item\_change\_level of many elements
- ae215 Data\_definition\_entry\_item has available\_from of zero source\_identification
- ae216 Data\_definition\_entry\_item has available\_from of one source\_identification as Contract\_submission
- ae217 Data\_definition\_entry\_item has available\_from of many source\_identification as Contract\_submission objects
- ae218 Data\_definition\_entry\_item has available\_from of one source\_identification as Reference\_document
- ae219 Data\_definition\_entry\_item has available\_from of many source\_identification as Reference\_document objects
- ae220 Data\_definition\_entry\_item has delivery\_accounting\_references of zero Delivery\_accounting
- ae221 Data\_definition\_entry\_item has delivery\_accounting\_references of one Delivery\_accounting
- ae222 Data\_definition\_entry\_item has delivery\_accounting\_references of many Delivery\_accounting objects
- ae223 Data\_definition\_entry\_item has entry\_files of zero data\_definition\_file\_entry
- ae224 Data\_definition\_entry\_item has entry\_files of one data\_definition\_file\_entry as Accessed\_file
- ae225 Data\_definition\_entry\_item has entry\_files of many data\_definition\_file\_entry as Accessed\_file objects
- ae226 Data\_definition\_entry\_item has entry\_files of one data\_definition\_file\_entry as Exchange\_file
- ae227 Data\_definition\_entry\_item has entry\_files of many data\_definition\_file\_entry as Exchange\_file objects
- ae228 Data\_definition\_entry\_item has entry\_notes of zero Notation
- ae229 Data\_definition\_entry\_item has entry\_notes of one Notation
- ae230 Data\_definition\_entry\_item has entry\_notes of many Notation objects
- ae231 Data\_definition\_entry\_item has special\_conditions of zero Special\_condition
- ae232 Data\_definition\_entry\_item has special\_conditions of one Special\_condition
- ae233 Data\_definition\_entry\_item has special\_conditions of many Special\_condition objects
- ae234 Data\_definition\_entry\_item has superseded\_entry of zero Element\_identification
- ae235 Data\_definition\_entry\_item has superseded\_entry of one Element\_identification
- ae236 Data\_definition\_entry\_item has superseded\_entry of many Element\_identification objects
- ae237 Data\_definition\_entry\_item is entry\_characteristics for one Data\_definition\_indentured\_entry
- ae238 Data\_definition\_entry\_item is entry\_characteristics for many Data\_definition\_indentured\_entry objects

#### 4.1.19 Data\_definition\_entry\_tdp\_element

- ae239 Data\_definition\_entry\_tdp\_element
- ae240 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange not present
- ae241 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = already delivered
- ae242 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = available for access
- ae243 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = fully included
- ae244 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = not deliverable
- ae245 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = not delivered yet
- ae246 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = not received
- ae247 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = partially included
- ae248 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = receipt accepted
- ae249 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = receipt acknowledged
- ae250 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = receipt partially rejected
- ae251 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = receipt rejected
- ae252 Data\_definition\_entry\_tdp\_element with actual\_inclusion\_in\_data\_exchange = resubmission
- ae253 Data\_definition\_entry\_tdp\_element with data\_usage\_rights not present
- ae254 Data\_definition\_entry\_tdp\_element with data\_usage\_rights
- ae255 Data\_definition\_entry\_tdp\_element with entry\_format not present
- ae256 Data\_definition\_entry\_tdp\_element with entry\_format of one Text
- ae257 Data\_definition\_entry\_tdp\_element has entry\_format of one entry\_format\_select as File\_format
- ae258 Data\_definition\_entry\_tdp\_element with entry\_item\_change\_level not present
- ae259 Data\_definition\_entry\_tdp\_element with entry\_item\_change\_level of one element
- ae260 Data\_definition\_entry\_tdp\_element with entry\_item\_change\_level of many elements
- ae261 Data\_definition\_entry\_tdp\_element with master\_file not present
- ae262 Data\_definition\_entry\_tdp\_element with master\_file = TRUE
- ae263 Data\_definition\_entry\_tdp\_element with master\_file = FALSE
- ae264 Data\_definition\_entry\_tdp\_element with master\_file = UNKNOWN
- ae265 Data\_definition\_entry\_tdp\_element has available\_from of zero source\_identification
- ae266 Data\_definition\_entry\_tdp\_element has available\_from of one source\_identification as Contract\_submission
- ae267 Data\_definition\_entry\_tdp\_element has available\_from of many source\_identification as Contract\_submission objects
- ae268 Data\_definition\_entry\_tdp\_element has available\_from of one source\_identification as Reference\_document
- ae269 Data\_definition\_entry\_tdp\_element has available\_from of many source\_identification as Reference\_document objects
- ae270 Data\_definition\_entry\_tdp\_element has delivery\_accounting\_references of zero Delivery\_accounting

- ae271 Data\_definition\_entry\_tdp\_element has delivery\_accounting\_references of one Delivery\_accounting
- ae272 Data\_definition\_entry\_tdp\_element has delivery\_accounting\_references of many Delivery\_accounting objects
- ae273 Data\_definition\_entry\_tdp\_element has entry\_files of zero data\_definition\_file\_entry
- ae274 Data\_definition\_entry\_tdp\_element has entry\_files of one data\_definition\_file\_entry as Accessed\_file
- ae275 Data\_definition\_entry\_tdp\_element has entry\_files of many data\_definition\_file\_entry as Accessed\_file objects
- ae276 Data\_definition\_entry\_tdp\_element has entry\_files of one data\_definition\_file\_entry as Exchange\_file
- ae277 Data\_definition\_entry\_tdp\_element has entry\_files of many data\_definition\_file\_entry as Exchange\_file objects
- ae278 Data\_definition\_entry\_tdp\_element has entry\_notes of zero Notation
- ae279 Data\_definition\_entry\_tdp\_element has entry\_notes of one Notation
- ae280 Data\_definition\_entry\_tdp\_element has entry\_notes of many Notation objects
- ae281 Data\_definition\_entry\_tdp\_element has size of zero Size\_characteristics
- ae282 Data\_definition\_entry\_tdp\_element has size of one Size\_characteristics
- ae283 Data\_definition\_entry\_tdp\_element has special\_conditions of zero Special\_condition
- ae284 Data\_definition\_entry\_tdp\_element has special\_conditions of one Special\_condition
- ae285 Data\_definition\_entry\_tdp\_element has special\_conditions of many Special\_condition objects
- ae286 Data\_definition\_entry\_tdp\_element has superseded\_entry of zero Element\_identification
- ae287 Data\_definition\_entry\_tdp\_element has superseded\_entry of one Element\_identification
- ae288 Data\_definition\_entry\_tdp\_element has superseded\_entry of many Element\_identification objects
- ae289 Data\_definition\_entry\_tdp\_element is entry for one Data\_definition\_exchange\_simple\_entry
- ae290 Data\_definition\_entry\_tdp\_element is entry for many Data\_definition\_exchange\_simple\_entry objects
- ae291 Data\_definition\_entry\_tdp\_element is entry\_characteristics for one Data\_definition\_indentured\_entry
- ae292 Data\_definition\_entry\_tdp\_element is entry\_characteristics for many Data\_definition\_indentured\_entry objects

#### 4.1.20 Data\_definition\_exchange

- ae293 Data\_definition\_exchange
- ae294 Data\_definition\_exchange has list\_body of one Data\_definition\_exchange\_body
- ae295 Data\_definition\_exchange has list\_header of one Data\_definition\_exchange\_header
- ae296 Data\_definition\_exchange has presentation of zero List\_presentation
- ae297 Data\_definition\_exchange has presentation of one List\_presentation

#### 4.1.21 Data\_definition\_exchange\_body

- ae298 Data\_definition\_exchange\_body
- ae299 Data\_definition\_exchange\_body has list\_method of one data\_definition\_exchange\_list\_method as Data\_definition\_indentured\_list\_method
- ae300 Data\_definition\_exchange\_body has list\_method of one data\_definition\_exchange\_list\_method as Simple\_list\_of\_elements
- ae301 Data\_definition\_exchange\_body has list\_method of one data\_definition\_exchange\_list\_method as Simple\_list\_of\_files

- ae302 Data\_definition\_exchange\_body has notes\_list of zero Notation
- ae303 Data\_definition\_exchange\_body has notes\_list of one Notation
- ae304 Data\_definition\_exchange\_body has notes\_list of many Notation objects
- ae305 Data\_definition\_exchange\_body has revision\_history of zero Revision
- ae306 Data\_definition\_exchange\_body has revision\_history of one Revision
- ae307 Data\_definition\_exchange\_body has revision\_history of many Revision objects
- ae308 Data\_definition\_exchange\_body is list\_body for one Data\_definition\_exchange

#### 4.1.22 Data\_definition\_exchange\_header

- ae309 Data\_definition\_exchange\_header
- ae310 Data\_definition\_exchange\_header has common\_header of one Header
- ae311 Data\_definition\_exchange\_header has date\_of\_transfer of zero Date
- ae312 Data\_definition\_exchange\_header has date\_of\_transfer of one Date
- ae313 Data\_definition\_exchange\_header has delivery\_accounting\_references of zero Delivery\_accounting
- ae314 Data\_definition\_exchange\_header has delivery\_accounting\_references of one Delivery\_accounting
- ae315 Data\_definition\_exchange\_header has delivery\_accounting\_references of many Delivery\_accounting objects
- ae316 Data\_definition\_exchange\_header has destinations of zero System\_destination
- ae317 Data\_definition\_exchange\_header has destinations of one System\_destination
- ae318 Data\_definition\_exchange\_header has destinations of many System\_destination objects
- ae319 Data\_definition\_exchange\_header has exchange\_reason of one Reason
- ae320 Data\_definition\_exchange\_header has procurement\_references of zero identification\_select
- ae321 Data\_definition\_exchange\_header has procurement\_references of one identification\_select as Element\_identification
- ae322 Data\_definition\_exchange\_header has procurement\_references of many identification\_select as Element\_identification objects
- ae323 Data\_definition\_exchange\_header has procurement\_references of one identification\_select as Item\_identification
- ae324 Data\_definition\_exchange\_header has procurement\_references of many identification\_select as Item\_identification objects
- ae325 Data\_definition\_exchange\_header is list\_header for one Data\_definition\_exchange

#### 4.1.23 Data\_definition\_exchange\_simple\_entry

- ae326 Data\_definition\_exchange\_simple\_entry
- ae327 Data\_definition\_exchange\_simple\_entry has entry of one Data\_definition\_entry\_tdp\_element
- ae328 Data\_definition\_exchange\_simple\_entry has simple\_entry of one Element\_identification
- ae329 Data\_definition\_exchange\_simple\_entry is element\_entries for one Simple\_list\_of\_elements
- ae330 Data\_definition\_exchange\_simple\_entry is element\_entries for many Simple\_list\_of\_elements objects

#### 4.1.24 Data\_definition\_indentured\_entry

- ae331 Data\_definition\_indentured\_entry
- ae332 Data\_definition\_indentured\_entry with indenture\_level not present
- ae333 Data\_definition\_indentured\_entry with indenture\_level
- ae334 Data\_definition\_indentured\_entry has effective\_on of zero Effectivity

- ae335 Data\_definition\_indentured\_entry has effective\_on of one Effectivity
- ae336 Data\_definition\_indentured\_entry has entry\_characteristics of one Data\_definition\_entry\_item
- ae337 Data\_definition\_indentured\_entry has entry\_characteristics of one Data\_definition\_entry\_tdp\_element
- ae338 Data\_definition\_indentured\_entry has indentured\_entry of one list\_entry\_select as Item\_parent\_to\_item\_child\_relationship
- ae339 Data\_definition\_indentured\_entry has indentured\_entry of one list\_entry\_select as Item\_parent\_to\_tdp\_element\_child\_relationship
- ae340 Data\_definition\_indentured\_entry has indentured\_entry of one list\_entry\_select as Tdp\_element\_parent\_to\_item\_child\_relationship
- ae341 Data\_definition\_indentured\_entry has indentured\_entry of one list\_entry\_select as Tdp\_element\_parent\_to\_tdp\_element\_child\_relationship
- ae342 Data\_definition\_indentured\_entry has indentured\_entry of one Tdp\_indentured\_item
- ae343 Data\_definition\_indentured\_entry has indentured\_entry of one Tdp\_indentured\_tdp\_element
- ae344 Data\_definition\_indentured\_entry is order\_of for one Data\_definition\_indentured\_list\_method
- ae345 Data\_definition\_indentured\_entry is order\_of for many Data\_definition\_indentured\_list\_method objects

#### 4.1.25 Data\_definition\_indentured\_list\_method

- ae346 Data\_definition\_indentured\_list\_method
- ae347 Data\_definition\_indentured\_list\_method has method\_of\_entry\_tabulation of one Indentured\_list\_by\_document
- ae348 Data\_definition\_indentured\_list\_method has method\_of\_entry\_tabulation of one Indentured\_list\_by\_part
- ae349 Data\_definition\_indentured\_list\_method has method\_of\_entry\_tabulation of one Indentured\_list\_by\_part\_with\_document\_references\_to\_parts
- ae350 Data\_definition\_indentured\_list\_method has order\_of of one Data\_definition\_indentured\_entry
- ae351 Data\_definition\_indentured\_list\_method has order\_of of many Data\_definition\_indentured\_entry objects
- ae352 Data\_definition\_indentured\_list\_method is list\_method for one Data\_definition\_exchange\_body
- ae353 Data\_definition\_indentured\_list\_method is list\_method for many Data\_definition\_exchange\_body objects

#### 4.1.26 Data\_list

- ae354 Data\_list
- ae355 Data\_list has body of one Data\_list\_body
- ae356 Data\_list has list\_header of one Data\_list\_header

#### 4.1.27 Data\_list\_body

- ae357 Data\_list\_body
- ae358 Data\_list\_body has data\_list\_notes of zero Notation
- ae359 Data\_list\_body has data\_list\_notes of one Notation
- ae360 Data\_list\_body has data\_list\_notes of many Notation objects

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ae361 Data\_list\_body has data\_list\_tabulations of one Data\_list\_tabulation  
ae362 Data\_list\_body has data\_list\_tabulations of many Data\_list\_tabulation objects  
ae363 Data\_list\_body has revision\_history of zero Revision  
ae364 Data\_list\_body has revision\_history of one Revision  
ae365 Data\_list\_body has revision\_history of many Revision objects  
ae366 Data\_list\_body is body for one Data\_list

### 4.1.28 Data\_list\_entry

ae367 Data\_list\_entry  
ae368 Data\_list\_entry with entry\_item\_change\_level not present  
ae369 Data\_list\_entry with entry\_item\_change\_level  
ae370 Data\_list\_entry has available\_from of zero source\_identification  
ae371 Data\_list\_entry has available\_from of one source\_identification as Contact\_submission  
ae372 Data\_list\_entry has available\_from of many source\_identification as Contact\_submission objects  
ae373 Data\_list\_entry has available\_from of one source\_identification as Reference\_document  
ae374 Data\_list\_entry has available\_from of many source\_identification as Reference\_document objects  
ae375 Data\_list\_entry has entry\_notes of zero Notation  
ae376 Data\_list\_entry has entry\_notes of one Notation  
ae377 Data\_list\_entry has entry\_notes of many Notation objects  
ae378 Data\_list\_entry has list\_entry of one valid\_tdp\_elements\_for\_data\_list as Header  
ae379 Data\_list\_entry has list\_entry of one valid\_tdp\_elements\_for\_data\_list as Reference\_document  
ae380 Data\_list\_entry has list\_entry of one valid\_tdp\_elements\_for\_data\_list as Sheet  
ae381 Data\_list\_entry has special\_conditions of zero Special\_condition  
ae382 Data\_list\_entry has special\_conditions of one Special\_condition  
ae383 Data\_list\_entry has special\_conditions of many Special\_condition objects  
ae384 Data\_list\_entry is data\_list\_entries for one Data\_list\_tabulation  
ae385 Data\_list\_entry is data\_list\_entries for many Data\_list\_tabulation objects

### 4.1.29 Data\_list\_header

ae386 Data\_list\_header  
ae387 Data\_list\_header has common\_header of one Header  
ae388 Data\_list\_header is list\_header for one Data\_list

### 4.1.30 Data\_list\_tabulation

ae389 Data\_list\_tabulation  
ae390 Data\_list\_tabulation has data\_list\_entries of zero Data\_list\_entry  
ae391 Data\_list\_tabulation has data\_list\_entries of one Data\_list\_entry  
ae392 Data\_list\_tabulation has data\_list\_entries of many Data\_list\_entry objects  
ae393 Data\_list\_tabulation has for\_item of zero Item\_identification  
ae394 Data\_list\_tabulation has for\_item of one Item\_identification  
ae395 Data\_list\_tabulation is data\_list\_tabulations for one Data\_list\_body  
ae396 Data\_list\_tabulation is data\_list\_tabulations for many Data\_list\_body objects

### 4.1.31 Date

ae397 Date  
 ae398 Date with day not present  
 ae399 Date with day  
 ae400 Date with month not present  
 ae401 Date with month  
 ae402 Date with week not present  
 ae403 Date with week  
 ae404 Date with year  
 ae405 Date has specific\_time of zero Time  
 ae406 Date has specific\_time of one Time  
 ae407 Date is approval\_date for one Approval  
 ae408 Date is approval\_date for many Approval objects  
 ae409 Date is change\_date for one Change\_identification  
 ae410 Date is change\_date for many Change\_identification objects  
 ae411 Date is classification\_date for one Security\_classification  
 ae412 Date is classification\_date for many Security\_classification objects  
 ae413 Date is date\_of\_submission for one Contract\_submission  
 ae414 Date is date\_of\_submission for many Contract\_submission objects  
 ae415 Date is declassification\_date for one Security\_classification  
 ae416 Date is declassification\_date for many Security\_classification objects  
 ae417 Date is end\_date for one Date\_effectivity  
 ae418 Date is end\_date for many Date\_effectivity objects  
 ae419 Date is issue\_date for one Change\_identification  
 ae420 Date is issue\_date for many Change\_identification objects  
 ae421 Date is release\_date for one File\_format  
 ae422 Date is release\_date for many File\_format objects  
 ae423 Date is release\_date for one Release\_authentication  
 ae424 Date is release\_date for many Release\_authentication objects  
 ae425 Date is revision\_date for one Change\_identification  
 ae426 Date is revision\_date for many Change\_identification objects  
 ae427 Date is revision\_date for one Revision  
 ae428 Date is revision\_date for many Revision objects  
 ae429 Date is start\_date for one Date\_effectivity  
 ae430 Date is start\_date for many Date\_effectivity objects

### 4.1.32 Date\_effectivity

ae431 Date\_effectivity  
 ae432 Date\_effectivity has end\_date of zero Date  
 ae433 Date\_effectivity has end\_date of one Date  
 ae434 Date\_effectivity has start\_date of one Date

### 4.1.33 Delivery\_accounting

ae435 Delivery\_accounting  
 ae436 Delivery\_accounting with reference\_identification  
 ae437 Delivery\_accounting with reference\_identification\_description  
 ae438 Delivery\_accounting is delivery\_accounting\_references for one Data\_definition\_entry\_item

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- ae439 Delivery\_accounting is delivery\_accounting\_references for many Data\_definition\_entry\_item objects
- ae440 Delivery\_accounting is delivery\_accounting\_references for one Data\_definition\_entry\_tdp\_element
- ae441 Delivery\_accounting is delivery\_accounting\_references for many Data\_definition\_entry\_tdp\_element objects
- ae442 Delivery\_accounting is delivery\_accounting\_references for one Data\_definition\_exchange\_header
- ae443 Delivery\_accounting is delivery\_accounting\_references for many Data\_definition\_exchange\_header objects

### 4.1.34 Design\_authority

- ae444 Design\_authority
- ae4441 Design\_authority with role not present
- ae4442 Design\_authority with role
- ae445 Design\_authority has design\_activity\_identification of one Company
- ae446 Design\_authority has design\_activity\_code of zero Company\_code
- ae447 Design\_authority has design\_activity\_code of one Company\_code
- ae448 Design\_authority has person\_responsible of zero Person
- ae449 Design\_authority has person\_responsible of one Person
- ae450 Design\_authority is design\_activity for one Alternate\_element\_identification
- ae451 Design\_authority is design\_activity for many Alternate\_element\_identification objects
- ae452 Design\_authority is design\_activity for one Alternate\_identification\_of\_item
- ae453 Design\_authority is design\_activity for many Alternate\_identification\_of\_item objects
- ae454 Design\_authority is design\_activity for one Element\_identification
- ae455 Design\_authority is design\_activity for many Element\_identification objects
- ae456 Design\_authority is design\_activity for one Item\_identification
- ae457 Design\_authority is design\_activity for many Item\_identification objects

### 4.1.35 Distribution\_notice

- ae458 Distribution\_notice
- ae459 Distribution\_notice with distribution\_code not present
- ae460 Distribution\_notice with distribution\_code
- ae461 Distribution\_notice with distribution\_statement not present
- ae462 Distribution\_notice with distribution\_statement
- ae463 Distribution\_notice has distribution\_authority of zero Person\_and\_organization
- ae464 Distribution\_notice has distribution\_authority of one Person\_and\_organization
- ae465 Distribution\_notice is distribution\_authorizations for one Configuration
- ae466 Distribution\_notice is distribution\_authorizations for many Configuration objects
- ae467 Distribution\_notice is distribution\_authorizations for one File
- ae468 Distribution\_notice is distribution\_authorizations for many File objects

### 4.1.36 Document\_list

- ae469 Document\_list as Indentured\_data\_list
- ae470 Document\_list as Single\_document\_list

### 4.1.37 Document\_usage\_parameter

- ae471 Document\_usage\_parameter
- ae472 Document\_usage\_parameter with subject
- ae473 Document\_usage\_parameter with value
- ae474 Document\_usage\_parameter is usage\_parameter for one Reference\_document\_usage
- ae475 Document\_usage\_parameter is usage\_parameter for many Reference\_document\_usage objects

### 4.1.38 Drawing

- ae476 Drawing
- ae477 Drawing has heading of one Header
- ae478 Drawing has pages of one Sheet
- ae479 Drawing has pages of many Sheet objects
- ae480 Drawing is related for one Product\_data\_set
- ae481 Drawing is related for many Product\_data\_set objects

### 4.1.39 Drawing\_suffix\_number\_combination

- ae482 Drawing\_suffix\_number\_combination
- ae483 Drawing\_suffix\_number\_combination with suffix\_identifier
- ae484 Drawing\_suffix\_number\_combination has drawing\_number of one Element\_identification
- ae485 Drawing\_suffix\_number\_combination is identifying\_number for one Alternate\_identification\_of\_item
- ae486 Drawing\_suffix\_number\_combination is identifying\_number for many Alternate\_identification\_of\_item objects
- ae487 Drawing\_suffix\_number\_combination is identifying\_number for one Item\_identification
- ae488 Drawing\_suffix\_number\_combination is identifying\_number for many Item\_identification objects

### 4.1.40 Effectivity

- ae489 Effectivity
- ae490 Effectivity as Date\_effectivity
- ae491 Effectivity as Lot\_effectivity
- ae492 Effectivity as Sequence\_effectivity
- ae493 Effectivity with description not present
- ae494 Effectivity with description
- ae495 Effectivity has effectivity\_approvals of zero Approval
- ae496 Effectivity has effectivity\_approvals of one Approval
- ae497 Effectivity has effectivity\_approvals of many Approval objects
- ae498 Effectivity has product of one Product\_configuration
- ae499 Effectivity is effective\_on for one Indentured\_data\_list\_entry
- ae500 Effectivity is effective\_on for many Indentured\_data\_list\_entry objects
- ae501 Effectivity is effective\_on for one Item\_usage
- ae502 Effectivity is effective\_on for many Item\_usage objects

#### 4.1.41 Element\_identification

- ae503 Element\_identification
- ae504 Element\_identification with identifying\_number
- ae505 Element\_identification with title not present
- ae506 Element\_identification with title
- ae5061 Element\_identification has alternate\_identifications of zero Alternate\_element\_identification
- ae5062 Element\_identification has alternate\_identifications of one Alternate\_element\_identification
- ae5063 Element\_identification has alternate\_identifications of many Alternate\_element\_identification objects
- ae507 Element\_identification has change\_status of zero Change\_identification
- ae508 Element\_identification has change\_status of one Change\_identification
- ae509 Element\_identification has design\_activities of one Design\_authority
- ae5091 Element\_identification has design\_activities of many Design\_authority objects
- ae510 Element\_identification has element\_classifications of zero Element\_type
- ae511 Element\_identification has element\_classifications of one Element\_type
- ae512 Element\_identification has element\_classifications of many Element\_type objects
- ae513 Element\_identification has outstanding\_changes of zero Other\_reference\_document
- ae514 Element\_identification has outstanding\_changes of one Other\_reference\_document
- ae515 Element\_identification has outstanding\_changes of many Other\_reference\_document objects
- ae516 Element\_identification is child for one Item\_parent\_to\_tdp\_element\_child\_relationship
- ae517 Element\_identification is child for many Item\_parent\_to\_tdp\_element\_child\_relationship objects
- ae518 Element\_identification is child for one  
Tdp\_element\_parent\_to\_tdp\_element\_child\_relationship
- ae519 Element\_identification is child for many  
Tdp\_element\_parent\_to\_tdp\_element\_child\_relationship objects
- ae520 Element\_identification is document\_identification for one Reference\_document
- ae521 Element\_identification is document\_identification for many Reference\_document objects
- ae522 Element\_identification is drawing\_number for one Drawing\_suffix\_number\_combination
- ae523 Element\_identification is drawing\_number for many Drawing\_suffix\_number\_combination objects
- ae524 Element\_identification is drawing\_number for one Item\_list\_drawing
- ae525 Element\_identification is drawing\_number for many Item\_list\_drawing objects
- ae526 Element\_identification is identification for one  
Header\_configuration\_with\_element\_identification
- ae527 Element\_identification is identification for many  
Header\_configuration\_with\_element\_identification objects
- ae528 Element\_identification is parent for one Tdp\_element\_parent\_to\_item\_child\_relationship
- ae529 Element\_identification is parent for many Tdp\_element\_parent\_to\_item\_child\_relationship objects
- ae530 Element\_identification is parent for one  
Tdp\_element\_parent\_to\_tdp\_element\_child\_relationship
- ae531 Element\_identification is parent for many  
Tdp\_element\_parent\_to\_tdp\_element\_child\_relationship objects
- ae532 Element\_identification is procurement\_references for one Data\_definition\_exchange\_header
- ae533 Element\_identification is procurement\_references for many  
Data\_definition\_exchange\_header objects
- ae534 Element\_identification is procurement\_references for one Indentured\_data\_list\_header

- ae535 Element\_identification is procurement\_references for many Indentured\_data\_list\_header objects
- ae536 Element\_identification is referenced\_document\_in\_note for one Notation
- ae537 Element\_identification is referenced\_document\_in\_note for many Notation objects
- ae538 Element\_identification is sheet\_identifier for one Sheet
- ae539 Element\_identification is sheet\_identifier for many Sheet objects
- ae540 Element\_identification is simple\_entry for one Data\_definition\_exchange\_simple\_entry
- ae541 Element\_identification is simple\_entry for many Data\_definition\_exchange\_simple\_entry objects
- ae542 Element\_identification is standardization\_documents\_list for one Indentured\_data\_list\_body
- ae543 Element\_identification is standardization\_documents\_list for many Indentured\_data\_list\_body objects
- ae544 Element\_identification is superseded\_entry for one Indentured\_data\_list\_entry
- ae545 Element\_identification is superseded\_entry for many Indentured\_data\_list\_entry objects
- ae546 Element\_identification is tdp\_element\_item for one Tdp\_element\_list\_item
- ae547 Element\_identification is tdp\_element\_item for many Tdp\_element\_list\_item objects
- ae548 Element\_identification is tdp\_indenture for one Tdp\_indentured\_tdp\_element
- ae549 Element\_identification is tdp\_indenture for many Tdp\_indentured\_tdp\_element objects

#### 4.1.42 Element\_type

- ae550 Element\_type
- ae551 Element\_type with element\_code
- ae552 Element\_type with type\_of\_coding\_scheme not present
- ae553 Element\_type with type\_of\_coding\_scheme
- ae554 Element\_type has code\_administrator of zero Company
- ae555 Element\_type has code\_administrator of one Company
- ae556 Element\_type is element\_classifications for one Alternate\_element\_identification
- ae557 Element\_type is element\_classifications for many Alternate\_element\_identification objects
- ae558 Element\_type is element\_classifications for one Element\_identification
- ae559 Element\_type is element\_classifications for many Element\_identification objects

#### 4.1.43 Exchange\_file

- ae560 Exchange\_file
- ae561 Exchange\_file with included\_in\_exchange = already delivered
- ae562 Exchange\_file with included\_in\_exchange = available for access
- ae563 Exchange\_file with included\_in\_exchange = fully included
- ae564 Exchange\_file with included\_in\_exchange = not deliverable
- ae565 Exchange\_file with included\_in\_exchange = not delivered yet
- ae566 Exchange\_file with included\_in\_exchange = not received
- ae567 Exchange\_file with included\_in\_exchange = partially included
- ae568 Exchange\_file with included\_in\_exchange = receipt accepted
- ae569 Exchange\_file with included\_in\_exchange = receipt acknowledged
- ae570 Exchange\_file with included\_in\_exchange = receipt partially rejected
- ae571 Exchange\_file with included\_in\_exchange = receipt rejected
- ae572 Exchange\_file with included\_in\_exchange = resubmission
- ae573 Exchange\_file has destination\_system of zero System\_declaration
- ae574 Exchange\_file has destination\_system of one System\_declaration
- ae575 Exchange\_file is entry\_files for one Data\_definition\_entry\_item

- ae576 Exchange\_file is entry\_files for many Data\_definition\_entry\_item objects
- ae577 Exchange\_file is entry\_files for one Data\_definition\_entry\_tdp\_element
- ae578 Exchange\_file is entry\_files for many Data\_definition\_entry\_tdp\_element objects
- ae579 Exchange\_file is file\_entries for one Simple\_list\_of\_files
- ae580 Exchange\_file is file\_entries for many Simple\_list\_of\_files objects

#### **4.1.44 Explicit\_graphics**

- ae581 Explicit\_graphics
- ae582 Explicit\_graphics has table\_geometry of one Geometry
- ae583 Explicit\_graphics is graphics\_declaration for one Page\_parameters
- ae584 Explicit\_graphics is graphics\_declaration for many Page\_parameters objects

#### **4.1.45 External\_graphics\_file**

- ae585 External\_graphics\_file
- ae586 External\_graphics\_file with file\_loadpoint\_x
- ae587 External\_graphics\_file with file\_loadpoint\_y
- ae588 External\_graphics\_file has file\_id of one File
- ae589 External\_graphics\_file is graphics\_declaration for one Page\_parameters
- ae590 External\_graphics\_file is graphics\_declaration for many Page\_parameters objects

#### **4.1.46 Field\_content\_holder**

- ae591 Field\_content\_holder as Field\_content\_holder\_singular
- ae592 Field\_content\_holder as Field\_content\_holder\_tabulation
- ae593 Field\_content\_holder with field\_justification
- ae594 Field\_content\_holder with text\_style
- ae595 Field\_content\_holder has location of one Field\_location

#### **4.1.47 Field\_content\_holder\_singular**

- ae596 Field\_content\_holder\_singular
- ae597 Field\_content\_holder\_singular with field\_text
- ae598 Field\_content\_holder\_singular is single\_block\_content\_presentation for one Header\_block
- ae599 Field\_content\_holder\_singular is single\_block\_content\_presentation for many Header\_block objects

#### **4.1.48 Field\_content\_holder\_tabulation**

- ae600 Field\_content\_holder\_tabulation
- ae601 Field\_content\_holder\_tabulation with one field\_text
- ae602 Field\_content\_holder\_tabulation with many field\_text elements
- ae603 Field\_content\_holder\_tabulation is group\_parent\_content\_presentation for one Group\_parent\_content\_holder
- ae604 Field\_content\_holder\_tabulation is group\_parent\_content\_presentation for many Group\_parent\_content\_holder objects

#### 4.1.49 Field\_location

- ae605 Field\_location
- ae606 Field\_location is location for one Field\_content\_holder
- ae607 Field\_location is location for many Field\_content\_holder objects
- ae608 Field\_location is location for one Field\_title
- ae609 Field\_location is location for many Field\_title objects

#### 4.1.50 Field\_location\_definition

- ae610 Field\_location\_definition
- ae611 Field\_location\_definition has field\_load\_point of one Load\_point

#### 4.1.51 Field\_title

- ae612 Field\_title
- ae613 Field\_title with field\_justification
- ae614 Field\_title with field\_style
- ae615 Field\_title with field\_text
- ae616 Field\_title has location of one Field\_location
- ae617 Field\_title is single\_block\_titles for one Header\_block
- ae618 Field\_title is single\_block\_titles for many Header\_block objects
- ae619 Field\_title is single\_column\_header\_titles for one Column\_header
- ae620 Field\_title is single\_column\_header\_titles for many Column\_header objects
- ae621 Field\_title is single\_group\_parent\_column\_header\_titles for one Group\_parent\_column\_header
- ae622 Field\_title is single\_group\_parent\_column\_header\_titles for many Group\_parent\_column\_header objects
- ae623 Field\_title is single\_group\_parent\_header\_titles for one Group\_parent\_header
- ae624 Field\_title is single\_group\_parent\_header\_titles for many Group\_parent\_header objects
- ae625 Field\_title is single\_tabulation\_header\_titles for one Tabulation\_header
- ae626 Field\_title is single\_tabulation\_header\_titles for many Tabulation\_header objects

#### 4.1.52 File

- ae627 File
- ae628 File as Accessed\_file
- ae629 File as Exchange\_file
- ae630 File as Source\_file
- ae631 File with context\_file\_name not present
- ae632 File with context\_file\_name
- ae633 File with native\_format\_file\_name not present
- ae634 File with native\_format\_file\_name
- ae635 File has change\_status of zero Change\_identification
- ae636 File has change\_status of one Change\_identification
- ae637 File has context\_file\_format of zero File\_format
- ae638 File has context\_file\_format of one File\_format
- ae639 File has distribution\_authorizations of zero Distribution\_notice
- ae640 File has distribution\_authorizations of one Distribution\_notice
- ae641 File has distribution\_authorizations of many Distribution\_notice objects

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- ae642 File has security\_identifications of zero Security\_classification
- ae643 File has security\_identifications of one Security\_classification
- ae644 File has security\_identifications of many Security\_classification objects
- ae645 File has size of zero Size\_characteristics
- ae646 File has size of one Size\_characteristics
- ae647 File has source\_system of zero System\_declaration
- ae648 File has source\_system of one System\_declaration
- ae649 File is file\_id for one External\_graphics\_file
- ae650 File is file\_id for many External\_graphics\_file objects

### 4.1.53 File\_format

- ae651 File\_format
- ae652 File\_format with change\_level not present
- ae653 File\_format with change\_level
- ae654 File\_format with format\_code not present
- ae655 File\_format with format\_code
- ae656 File\_format with format\_standard not present
- ae657 File\_format with format\_standard
- ae658 File\_format with revision\_level not present
- ae659 File\_format with revision\_level
- ae660 File\_format has release\_date of zero Date
- ae661 File\_format has release\_date of one Date
- ae662 File\_format is context\_file\_format for one File
- ae663 File\_format is context\_file\_format for many File objects
- ae664 File\_format is entry\_format for one Data\_definition\_entry\_tdp\_element
- ae665 File\_format is entry\_format for many Data\_definition\_entry\_tdp\_element objects

### 4.1.54 Foreign\_defined\_item

- ae666 Foreign\_defined\_item

### 4.1.55 Geometry

- ae667 Geometry
- ae668 Geometry is annotation\_geometry for one Annotation
- ae669 Geometry is annotation\_geometry for many Annotation objects
- ae670 Geometry is table\_geometry for one Explicit\_graphics
- ae671 Geometry is table\_geometry for many Explicit\_graphics objects
- ae672 Geometry is part\_shape\_representation for one Shape\_model
- ae673 Geometry is part\_shape\_representation for many Shape\_model objects

### 4.1.56 Group\_parent\_column\_header

- ae674 Group\_parent\_column\_header
- ae675 Group\_parent\_column\_header has single\_group\_parent\_column\_header\_titles of one Field\_title
- ae676 Group\_parent\_column\_header has single\_group\_parent\_column\_header\_titles of many Field\_title objects
- ae677 Group\_parent\_column\_header is tabulation\_group\_parent\_headings for one Tabulation

ae678 Group\_parent\_column\_header is tabulation\_group\_parent\_headings for many Tabulation objects

#### 4.1.57 Group\_parent\_content\_holder

ae679 Group\_parent\_content\_holder

ae680 Group\_parent\_content\_holder has group\_parent\_content\_presentation of one Field\_content\_holder\_tabulation

ae681 Group\_parent\_content\_holder is parent\_columns for one Tabulation

ae682 Group\_parent\_content\_holder is parent\_columns for many Tabulation objects

#### 4.1.58 Group\_parent\_header

ae683 Group\_parent\_header

ae684 Group\_parent\_header has single\_group\_parent\_header\_titles of one Field\_title

ae685 Group\_parent\_header has single\_group\_parent\_header\_titles of many Field\_title objects

ae686 Group\_parent\_header is group\_parent\_headings for one Tabulation

ae687 Group\_parent\_header is group\_parent\_headings for many Tabulation objects

#### 4.1.59 Header

ae688 Header

ae689 Header with document\_abstract not present

ae690 Header with document\_abstract

ae691 Header with document\_keywords not present

ae692 Header with document\_keywords of one element

ae693 Header with document\_keywords of many elements

ae694 Header with languages not present

ae695 Header with languages of one element

ae696 Header with languages of many elements

ae697 Header with sheet\_count not present

ae698 Header with sheet\_count

ae699 Header has header\_configuration of one Header\_configuration\_with\_element\_identification

ae700 Header has size\_of\_sheet of zero Size\_characteristics\_full\_size

ae701 Header has size\_of\_sheet of one Size\_characteristics\_full\_size

ae702 Header is common\_header for one Data\_definition\_exchange\_header

ae703 Header is common\_header for one Data\_list\_header

ae704 Header is common\_header for one Indentured\_data\_list\_header

ae705 Header is common\_header for one Parts\_list\_header

ae706 Header is heading for one Drawing

ae707 Header is list\_entry for one Data\_list\_entry

ae708 Header is list\_entry for many Data\_list\_entry objects

ae709 Header is list\_entry for one Index\_list\_entry

ae710 Header is list\_entry for many Index\_list\_entry objects

ae711 Header is product\_header for one Product\_data\_set\_with\_format

#### 4.1.60 Header\_block

ae712 Header\_block

ae713 Header\_block has single\_block\_content\_presentation of zero Field\_content\_holder\_singular

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- ae714 Header\_block has single\_block\_content\_presentation of one Field\_content\_holder\_singular
- ae715 Header\_block has single\_block\_content\_presentation of many Field\_content\_holder\_singular objects
- ae716 Header\_block has single\_block\_titles of zero Field\_title
- ae717 Header\_block has single\_block\_titles of one Field\_title
- ae718 Header\_block has single\_block\_titles of many Field\_title objects
- ae719 Header\_block is header\_blocks\_presentation for one Header\_presentation
- ae720 Header\_block is header\_blocks\_presentation for many Header\_presentation objects

### 4.1.61 Header\_configuration\_with\_element\_identification

- ae721 Header\_configuration\_with\_element\_identification
- ae7220 Header\_configuration\_with\_element\_identification has data\_configuration of zero Configuration
- ae722 Header\_configuration\_with\_element\_identification has data\_configuration of one Configuration
- ae723 Header\_configuration\_with\_element\_identification has identification of one Element\_identification
- ae724 Header\_configuration\_with\_element\_identification is data\_configuration for one Product\_data\_set\_with\_shading
- ae725 Header\_configuration\_with\_element\_identification is data\_configuration for one Product\_data\_set\_without\_format
- ae726 Header\_configuration\_with\_element\_identification is header\_configuration for one Header

### 4.1.62 Header\_presentation

- ae727 Header\_presentation
- ae728 Header\_presentation has header\_blocks\_presentation of one Header\_block
- ae729 Header\_presentation has header\_blocks\_presentation of many Header\_block objects
- ae730 Header\_presentation has header\_tabulation\_presentation of zero Tabulation
- ae731 Header\_presentation has header\_tabulation\_presentation of one Tabulation
- ae732 Header\_presentation has header\_tabulation\_presentation of many Tabulation objects
- ae733 Header\_presentation is header\_page1\_format for one List\_presentation
- ae734 Header\_presentation is header\_page1\_format for many List\_presentation objects
- ae735 Header\_presentation is header\_pagen\_format for one List\_presentation
- ae736 Header\_presentation is header\_pagen\_format for many List\_presentation objects

### 4.1.63 Indentured\_data\_list

- ae737 Indentured\_data\_list
- ae738 Indentured\_data\_list has body of one Indentured\_data\_list\_body
- ae739 Indentured\_data\_list has header of one Indentured\_data\_list\_header

### 4.1.64 Indentured\_data\_list\_body

- ae740 Indentured\_data\_list\_body
- ae741 Indentured\_data\_list\_body has indentured\_tabulation of one Indentured\_data\_list\_tabulation
- ae742 Indentured\_data\_list\_body has notes\_list of zero Notation
- ae743 Indentured\_data\_list\_body has notes\_list of one Notation
- ae744 Indentured\_data\_list\_body has notes\_list of many Notation objects

- ae745 Indentured\_data\_list\_body has revision\_history of zero Revision
- ae746 Indentured\_data\_list\_body has revision\_history of one Revision
- ae747 Indentured\_data\_list\_body has revision\_history of many Revision objects
- ae748 Indentured\_data\_list\_body has standardization\_documents\_list of zero Element\_identification
- ae749 Indentured\_data\_list\_body has standardization\_documents\_list of one Element\_identification
- ae750 Indentured\_data\_list\_body has standardization\_documents\_list of many  
Element\_identification objects
- ae751 Indentured\_data\_list\_body is body for one Indentured\_data\_list

#### 4.1.65 Indentured\_data\_list\_entry

- ae752 Indentured\_data\_list\_entry
- ae753 Indentured\_data\_list\_entry with entry\_item\_change\_level not present
- ae754 Indentured\_data\_list\_entry with entry\_item\_change\_level
- ae755 Indentured\_data\_list\_entry with indenture\_level not present
- ae756 Indentured\_data\_list\_entry with indenture\_level
- ae757 Indentured\_data\_list\_entry has available\_from of zero source\_identification
- ae758 Indentured\_data\_list\_entry has available\_from of one source\_identification as  
Contract\_submission
- ae759 Indentured\_data\_list\_entry has available\_from of many source\_identification as  
Contract\_submission objects
- ae760 Indentured\_data\_list\_entry has available\_from of one source\_identification as  
Reference\_document
- ae761 Indentured\_data\_list\_entry has available\_from of many source\_identification as  
Reference\_document objects
- ae762 Indentured\_data\_list\_entry has effective\_on of zero Effectivity
- ae763 Indentured\_data\_list\_entry has effective\_on of one Effectivity
- ae764 Indentured\_data\_list\_entry has entry of one list\_entry\_select as  
Item\_parent\_to\_item\_child\_relationship
- ae765 Indentured\_data\_list\_entry has entry of one list\_entry\_select as  
Item\_parent\_to\_tdp\_element\_child\_relationship
- ae766 Indentured\_data\_list\_entry has entry of one list\_entry\_select as  
Tdp\_element\_parent\_to\_item\_child\_relationship
- ae767 Indentured\_data\_list\_entry has entry of one list\_entry\_select as  
Tdp\_element\_parent\_to\_tdp\_element\_child\_relationship
- ae7671 Indentured\_data\_list\_entry has entry of one list\_entry\_select as Tdp\_indentured\_item
- ae7672 Indentured\_data\_list\_entry has entry of one list\_entry\_select as Tdp\_indentured\_tdp\_element
- ae768 Indentured\_data\_list\_entry has entry\_configuration of zero Configuration
- ae769 Indentured\_data\_list\_entry has entry\_configuration of one Configuration
- ae770 Indentured\_data\_list\_entry has entry\_notes of zero Notation
- ae771 Indentured\_data\_list\_entry has entry\_notes of one Notation
- ae772 Indentured\_data\_list\_entry has entry\_notes of many Notation objects
- ae7721 Indentured\_data\_list\_entry has retrofit of zero Retrofit\_usage
- ae7722 Indentured\_data\_list\_entry has retrofit of one Retrofit\_usage
- ae773 Indentured\_data\_list\_entry has special\_conditions of zero Special\_condition
- ae774 Indentured\_data\_list\_entry has special\_conditions of one Special\_condition
- ae775 Indentured\_data\_list\_entry has special\_conditions of many Special\_condition objects
- ae776 Indentured\_data\_list\_entry has superseded\_entry of zero Element\_identification
- ae777 Indentured\_data\_list\_entry has superseded\_entry of one Element\_identification
- ae778 Indentured\_data\_list\_entry is tabulation\_of\_entries for one Indentured\_data\_list\_tabulation

ae779 Indentured\_data\_list\_entry is tabulation\_of\_entries for many Indentured\_data\_list\_tabulation objects

#### **4.1.66 Indentured\_data\_list\_header**

ae780 Indentured\_data\_list\_header

ae781 Indentured\_data\_list\_header has common\_header of one Header

ae782 Indentured\_data\_list\_header has procurement\_references of zero identification\_select

ae783 Indentured\_data\_list\_header has procurement\_references of one identification\_select as Element\_identification

ae784 Indentured\_data\_list\_header has procurement\_references of many identification\_select as Element\_identification objects

ae785 Indentured\_data\_list\_header has procurement\_references of one identification\_select as Item\_identification

ae786 Indentured\_data\_list\_header has procurement\_references of many identification\_select as Item\_identification objects

ae787 Indentured\_data\_list\_header is header for one Indentured\_data\_list

#### **4.1.67 Indentured\_data\_list\_tabulation**

ae788 Indentured\_data\_list\_tabulation

ae789 Indentured\_data\_list\_tabulation has method\_of\_entry\_tabulation of one indentured\_list\_method as Indentured\_list\_by\_document

ae790 Indentured\_data\_list\_tabulation has method\_of\_entry\_tabulation of one indentured\_list\_method as Indentured\_list\_by\_part

ae791 Indentured\_data\_list\_tabulation has method\_of\_entry\_tabulation of one indentured\_list\_method as Indentured\_list\_by\_part\_with\_document\_references\_to\_parts

ae792 Indentured\_data\_list\_tabulation has tabulation\_of\_entries of one Indentured\_data\_list\_entry

ae793 Indentured\_data\_list\_tabulation has tabulation\_of\_entries of many Indentured\_data\_list\_entry objects

ae794 Indentured\_data\_list\_tabulation is indentured\_tabulation for one Indentured\_data\_list\_body

#### **4.1.68 Indentured\_list\_by\_document**

ae795 Indentured\_list\_by\_document

ae796 Indentured\_list\_by\_document has tdp\_indentured\_tdp\_elements of one Tdp\_indentured\_tdp\_element

ae797 Indentured\_list\_by\_document has tdp\_indentured\_tdp\_elements of many Tdp\_indentured\_tdp\_element objects

ae798 Indentured\_list\_by\_document is method\_of\_entry\_tabulation for one Indentured\_data\_list\_tabulation

ae799 Indentured\_list\_by\_document is method\_of\_entry\_tabulation for many Indentured\_data\_list\_tabulation objects

#### **4.1.69 Indentured\_list\_by\_part**

ae800 Indentured\_list\_by\_part

ae801 Indentured\_list\_by\_part has tdp\_indentured\_items of one Tdp\_indentured\_item

ae802 Indentured\_list\_by\_part has tdp\_indentured\_items of many Tdp\_indentured\_item objects

- ae803 Indentured\_list\_by\_part is method\_of\_entry\_tabulation for one Indentured\_data\_list\_tabulation
- ae804 Indentured\_list\_by\_part is method\_of\_entry\_tabulation for many Indentured\_data\_list\_tabulation objects

#### 4.1.70 Indentured\_list\_by\_part\_with\_document\_references\_to\_parts

- ae805 Indentured\_list\_by\_part\_with\_document\_references\_to\_parts
- ae806 Indentured\_list\_by\_part\_with\_document\_references\_to\_parts has tdp\_indentured of one item\_or\_element as Tdp\_indentured\_item
- ae807 Indentured\_list\_by\_part\_with\_document\_references\_to\_parts has tdp\_indentured of many item\_or\_element as Tdp\_indentured\_item objects
- ae808 Indentured\_list\_by\_part\_with\_document\_references\_to\_parts has tdp\_indentured of one item\_or\_element as Tdp\_indentured\_tdp\_element
- ae809 Indentured\_list\_by\_part\_with\_document\_references\_to\_parts has tdp\_indentured of many item\_or\_element as Tdp\_indentured\_tdp\_element objects
- ae810 Indentured\_list\_by\_part\_with\_document\_references\_to\_parts is method\_of\_entry\_tabulation for one Indentured\_data\_list\_tabulation
- ae811 Indentured\_list\_by\_part\_with\_document\_references\_to\_parts is method\_of\_entry\_tabulation for many Indentured\_data\_list\_tabulation objects

#### 4.1.71 Index\_list

- ae812 Index\_list
- ae813 Index\_list has body of one Index\_list\_body
- ae814 Index\_list has list\_header of one Index\_list\_header

#### 4.1.72 Index\_list\_body

- ae815 Index\_list\_body
- ae816 Index\_list\_body has index\_list\_entries of one Index\_list\_entry
- ae817 Index\_list\_body has index\_list\_entries of many Index\_list\_entry objects
- ae818 Index\_list\_body has list\_notes of zero Notation
- ae819 Index\_list\_body has list\_notes of one Notation
- ae820 Index\_list\_body has list\_notes of many Notation objects
- ae821 Index\_list\_body has revision\_history of zero Revision
- ae822 Index\_list\_body has revision\_history of one Revision
- ae823 Index\_list\_body has revision\_history of many Revision objects
- ae824 Index\_list\_body is body for one Index\_list

#### 4.1.73 Index\_list\_entry

- ae825 Index\_list\_entry
- ae826 Index\_list\_entry with entry\_item\_change\_level not present
- ae827 Index\_list\_entry with entry\_item\_change\_level
- ae828 Index\_list\_entry has entry\_notes of zero Notation
- ae829 Index\_list\_entry has entry\_notes of one Notation
- ae830 Index\_list\_entry has entry\_notes of many Notation objects
- ae831 Index\_list\_entry has list\_entry of one Header
- ae832 Index\_list\_entry is index\_list\_entries for one Index\_list\_body

ae833 Index\_list\_entry is index\_list\_entries for many Index\_list\_body objects

#### 4.1.74 Index\_list\_header

ae834 Index\_list\_header

ae835 Index\_list\_header has common\_header of one Header

ae836 Index\_list\_header is list\_header for one Index\_list

#### 4.1.75 Item

ae837 Item

ae838 Item with item\_contexts not present

ae839 Item with item\_contexts of one Label

ae840 Item with item\_contexts of many Label elements

ae841 Item has alternates of zero Alternate\_item

ae842 Item has alternates of one Alternate\_item

ae843 Item has alternates of many Alternate\_item objects

ae844 Item has conditions\_defined\_through\_constrained\_document of zero Reference\_document\_usage

ae845 Item has conditions\_defined\_through\_constrained\_document of one Reference\_document\_usage

ae846 Item has conditions\_defined\_through\_constrained\_document of many Reference\_document\_usage objects

ae847 Item has conditions\_defined\_through\_simple\_reference of zero Reference\_document

ae848 Item has conditions\_defined\_through\_simple\_reference of one Reference\_document

ae849 Item has conditions\_defined\_through\_simple\_reference of many Reference\_document objects

ae850 Item has identification of one Item\_identification

ae851 Item has item\_configuration of zero Configuration

ae852 Item has item\_configuration of one Configuration

ae853 Item has item\_weight of zero Weight

ae854 Item has item\_weight of one Weight

ae855 Item has notes of zero Notation

ae856 Item has notes of one Notation

ae857 Item has notes of many Notation objects

ae858 Item has special\_conditions of zero Special\_condition

ae859 Item has special\_conditions of one Special\_condition

ae860 Item has special\_conditions of many Special\_condition objects

ae861 Item is being\_defined\_for for one Item\_usage

ae862 Item is being\_defined\_for for many Item\_usage objects

ae8621 Item is interchange\_item for one Alternate\_item

ae8622 Item is interchange\_item for many Alternate\_item objects

ae863 Item is item\_that\_is\_acting\_as\_stock for one Make\_from\_an\_item

ae864 Item is item\_that\_is\_acting\_as\_stock for many Make\_from\_an\_item objects

ae865 Item is material for one Stock\_material

ae866 Item is material for many Stock\_material objects

ae867 Item is related\_item for one Tdp\_element\_and\_item\_association

ae868 Item is related\_item for many Tdp\_element\_and\_item\_association objects

#### 4.1.76 Item\_identification

- ae869 Item\_identification
- ae870 Item\_identification with identifying\_number of one Identifier
- ae871 Item\_identification has identifying\_number of one item\_identifying\_number\_select as Drawing\_suffix\_number\_combination
- ae872 Item\_identification with nomenclature\_or\_name not present
- ae873 Item\_identification with nomenclature\_or\_name
- ae874 Item\_identification has alternate\_identifications of zero Alternate\_identification\_of\_item
- ae875 Item\_identification has alternate\_identifications of one Alternate\_identification\_of\_item
- ae876 Item\_identification has alternate\_identifications of many Alternate\_identification\_of\_item objects
- ae877 Item\_identification has change of zero Change\_identification
- ae878 Item\_identification has change of one Change\_identification
- ae879 Item\_identification has classifications of zero Item\_type
- ae880 Item\_identification has classifications of one Item\_type
- ae881 Item\_identification has classifications of many Item\_type objects
- ae882 Item\_identification has design\_activity of one Design\_authority
- ae883 Item\_identification has source\_information of zero Source\_information\_type
- ae884 Item\_identification has source\_information of one Source\_information\_type
- ae885 Item\_identification is applicable\_to for one Reason
- ae886 Item\_identification is applicable\_to for many Reason objects
- ae887 Item\_identification is assembly\_item\_list\_applies\_to for one Item\_list\_drawing
- ae888 Item\_identification is assembly\_item\_list\_applies\_to for many Item\_list\_drawing objects
- ae889 Item\_identification is child for one Item\_parent\_to\_item\_child\_relationship
- ae890 Item\_identification is child for many Item\_parent\_to\_item\_child\_relationship objects
- ae891 Item\_identification is child for one Tdp\_element\_parent\_to\_item\_child\_relationship
- ae892 Item\_identification is child for many Tdp\_element\_parent\_to\_item\_child\_relationship objects
- ae8921 Item\_identification is design\_item for one Product\_configuration
- ae8922 Item\_identification is design\_item for many Product\_configuration objects
- ae893 Item\_identification is for\_item for one Data\_list\_tabulation
- ae894 Item\_identification is for\_item for many Data\_list\_tabulation objects
- ae895 Item\_identification is for\_item for one Data\_list\_tabulation
- ae896 Item\_identification is identification for one Item
- ae897 Item\_identification is identification for many Item objects
- ae898 Item\_identification is list\_for for one Item\_list
- ae899 Item\_identification is list\_for for many Item\_list objects
- ae900 Item\_identification is parent for one Item\_parent\_to\_item\_child\_relationship
- ae901 Item\_identification is parent for many Item\_parent\_to\_item\_child\_relationship objects
- ae902 Item\_identification is parent for one Item\_parent\_to\_tdp\_element\_child\_relationship
- ae903 Item\_identification is parent for many Item\_parent\_to\_tdp\_element\_child\_relationship objects
- ae904 Item\_identification is procurement\_references for one Data\_definition\_exchange\_header
- ae905 Item\_identification is procurement\_references for many Data\_definition\_exchange\_header objects
- ae906 Item\_identification is procurement\_references for one Indentured\_data\_list\_header
- ae907 Item\_identification is procurement\_references for many Indentured\_data\_list\_header objects
- ae908 Item\_identification is tdp\_indenture for one Tdp\_indentured\_item
- ae909 Item\_identification is tdp\_indenture for many Tdp\_indentured\_item objects

#### 4.1.77 Item\_list

- ae910 Item\_list
- ae911 Item\_list with type\_of\_component\_list of one Text
- ae912 Item\_list with type\_of\_component\_list = assembly\_defined\_on\_drawing\_component\_list
- ae913 Item\_list with type\_of\_component\_list = installation\_drawing\_component\_list
- ae914 Item\_list with type\_of\_component\_list =  
item\_not\_defined\_on\_drawing\_next\_higher\_assembly\_component\_list
- ae915 Item\_list with type\_of\_component\_list = made\_from\_component\_list\_of\_one
- ae916 Item\_list with type\_of\_component\_list = net\_change\_list
- ae917 Item\_list with type\_of\_component\_list = synthetic\_part\_number\_component\_list
- ae918 Item\_list has component\_of of one Item\_usage
- ae919 Item\_list has component\_of of many Item\_usage objects
- ae920 *(deprecated)*
- ae921 Item\_list has list\_for of one item\_list\_applies\_to\_select as Item\_identification
- ae922 Item\_list has list\_for of one item\_list\_applies\_to\_select as Item\_list\_drawing
- ae923 Item\_list is parts\_tabulations for one Parts\_list\_body
- ae924 Item\_list is parts\_tabulations for many Parts\_list\_body objects

#### 4.1.78 Item\_list\_drawing

- ae925 Item\_list\_drawing
- ae926 Item\_list\_drawing has assembly\_item\_list\_applies\_to of zero Item\_identification
- ae927 Item\_list\_drawing has assembly\_item\_list\_applies\_to of one Item\_identification
- ae928 Item\_list\_drawing has drawing\_number of one Element\_identification
- ae929 Item\_list\_drawing is list\_for for one Item\_list
- ae930 Item\_list\_drawing is list\_for for many Item\_list objects

#### 4.1.79 Item\_parent\_to\_item\_child\_relationship

- ae931 Item\_parent\_to\_item\_child\_relationship
- ae932 Item\_parent\_to\_item\_child\_relationship has child of one Item\_identification
- ae933 Item\_parent\_to\_item\_child\_relationship has parent of one Item\_identification
- ae934 Item\_parent\_to\_item\_child\_relationship is entry for one Indentured\_data\_list\_entry
- ae935 Item\_parent\_to\_item\_child\_relationship is entry for many Indentured\_data\_list\_entry objects
- ae936 Item\_parent\_to\_item\_child\_relationship is indentured\_entry for one  
Data\_definition\_indentured\_entry
- ae937 Item\_parent\_to\_item\_child\_relationship is indentured\_entry for many  
Data\_definition\_indentured\_entry objects

#### 4.1.80 Item\_parent\_to\_tdp\_element\_child\_relationship

- ae938 Item\_parent\_to\_tdp\_element\_child\_relationship
- ae939 Item\_parent\_to\_tdp\_element\_child\_relationship has child of one Element\_identification
- ae940 Item\_parent\_to\_tdp\_element\_child\_relationship has parent of one Item\_identification
- ae941 Item\_parent\_to\_tdp\_element\_child\_relationship is entry for one Indentured\_data\_list\_entry
- ae942 Item\_parent\_to\_tdp\_element\_child\_relationship is entry for many Indentured\_data\_list\_entry  
objects
- ae943 Item\_parent\_to\_tdp\_element\_child\_relationship is indentured\_entry for one  
Data\_definition\_indentured\_entry

ae944 Item\_parent\_to\_tdp\_element\_child\_relationship is indentured\_entry for many  
Data\_definition\_indentured\_entry objects

#### 4.1.81 Item\_type

ae945 Item\_type  
ae946 Item\_type with item\_code  
ae947 Item\_type with type\_of\_coding\_scheme not present  
ae948 Item\_type with type\_of\_coding\_scheme  
ae949 Item\_type has code\_administrator of zero Company  
ae950 Item\_type has code\_administrator of one Company  
ae9501 Item\_type is classifications for one Alternate\_identification\_of\_item  
**ae9502 Item\_type is classifications for many Alternate\_identification\_of\_item objects**  
ae951 Item\_type is classifications for one Item\_identification  
ae952 Item\_type is classifications for many Item\_identification objects

#### 4.1.82 Item\_usage

ae953 Item\_usage  
ae954 Item\_usage as Foreign\_defined\_item  
ae955 Item\_usage as Locally\_defined\_item  
ae956 Item\_usage has being\_defined\_for of one Item  
ae957 Item\_usage has effective\_on of zero Effectivity  
ae958 Item\_usage has effective\_on of one Effectivity  
ae959 Item\_usage has list\_item of zero List\_item\_usage  
ae960 Item\_usage has list\_item of one List\_item\_usage  
ae961 Item\_usage has quantity\_used\_in\_next\_higher\_assembly of zero Quantity  
ae962 Item\_usage has quantity\_used\_in\_next\_higher\_assembly of one Quantity  
ae963 Item\_usage has retrofit of zero Retrofit\_usage  
ae964 Item\_usage has retrofit of one Retrofit\_usage  
ae965 Item\_usage has special\_conditions of zero Special\_condition  
ae966 Item\_usage has special\_conditions of one Special\_condition  
ae967 Item\_usage has special\_conditions of many Special\_condition objects  
ae968 Item\_usage is component\_of for one Item\_list  
ae969 Item\_usage is interchange\_item for one Alternate\_item  
ae970 Item\_usage is interchange\_item for many Alternate\_item objects

#### 4.1.83 List\_item\_usage

ae971 List\_item\_usage  
ae972 List\_item\_usage with drawing\_zones not present  
ae973 List\_item\_usage with drawing\_zones of one Identifier  
ae974 List\_item\_usage with drawing\_zones of many Identifier elements  
ae975 List\_item\_usage with entry\_item\_change\_level not present  
ae976 List\_item\_usage with entry\_item\_change\_level  
ae977 List\_item\_usage with find\_number not present  
ae978 List\_item\_usage with find\_number  
ae979 List\_item\_usage with item\_type not present  
ae980 List\_item\_usage with item\_type  
ae981 List\_item\_usage with reference\_designators not present

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- ae982 List\_item\_usage with reference\_designators of one Identifier
- ae983 List\_item\_usage with reference\_designators of many Identifier elements
- ae984 List\_item\_usage has entry\_notes of zero Notation
- ae985 List\_item\_usage has entry\_notes of one Notation
- ae986 List\_item\_usage has entry\_notes of many Notation objects
- ae987 List\_item\_usage is list\_item for one Item\_usage

### 4.1.84 List\_presentation

- ae988 List\_presentation
- ae989 List\_presentation with unit\_of\_length
- ae990 List\_presentation has body\_page1\_format of one Body\_presentation
- ae991 List\_presentation has body\_pagen\_format of zero Body\_presentation
- ae992 List\_presentation has body\_pagen\_format of one Body\_presentation
- ae993 List\_presentation has body\_pagen\_format of many Body\_presentation objects
- ae994 List\_presentation has header\_page1\_format of one Header\_presentation
- ae995 List\_presentation has header\_pagen\_format of zero Header\_presentation
- ae996 List\_presentation has header\_pagen\_format of one Header\_presentation
- ae997 List\_presentation has header\_pagen\_format of many Header\_presentation objects
- ae998 List\_presentation has page\_format of one Page\_presentation
- ae999 List\_presentation is presentation for one Associated\_list
- ae1000 List\_presentation is presentation for many Associated\_list objects
- ae1001 List\_presentation is presentation for one Data\_definition\_exchange
- ae1002 List\_presentation is presentation for many Data\_definition\_exchange objects

### 4.1.85 Load\_point

- ae1003 Load\_point
- ae1004 Load\_point with load\_point\_x
- ae1005 Load\_point with load\_point\_y
- ae1006 Load\_point is field\_load\_point for one Field\_location\_definition
- ae1007 Load\_point is field\_load\_point for many Field\_location\_definition objects
- ae1008 Load\_point is string\_load\_point for one String\_location\_definition
- ae1009 Load\_point is string\_load\_point for many String\_location\_definition objects

### 4.1.86 Locally\_defined\_item

- ae1010 Locally\_defined\_item
- ae1011 Locally\_defined\_item as Assembly
- ae1012 Locally\_defined\_item as Made\_from\_stock\_material
- ae1013 Locally\_defined\_item as Make\_from\_an\_item

### 4.1.87 Lot\_effectivity

- ae1014 Lot\_effectivity
- ae1015 Lot\_effectivity with lot\_identification
- ae1016 Lot\_effectivity with lot\_size
- ae1017 Lot\_effectivity with lot\_unit\_of\_measure

#### 4.1.88 Made\_from\_stock\_material

ae1018 Made\_from\_stock\_material  
 ae1019 Made\_from\_stock\_material with quantity\_of\_item\_made\_from\_stock not present  
 ae1020 Made\_from\_stock\_material with quantity\_of\_item\_made\_from\_stock  
 ae1021 Made\_from\_stock\_material has specified\_by of zero Reference\_document\_usage  
 ae1022 Made\_from\_stock\_material has specified\_by of one Reference\_document\_usage  
 ae1023 Made\_from\_stock\_material has specified\_by of many Reference\_document\_usage objects  
 ae1024 Made\_from\_stock\_material has size of zero Stock\_size  
 ae1025 Made\_from\_stock\_material has size of one Stock\_size  
 ae1026 Made\_from\_stock\_material has stock of zero Stock\_material  
 ae1027 Made\_from\_stock\_material has stock of one Stock\_material

#### 4.1.89 Make\_from\_an\_item

ae1028 Make\_from\_an\_item  
 ae1029 Make\_from\_an\_item with quantity\_of\_item\_made\_from\_other\_item not present  
 ae1030 Make\_from\_an\_item with quantity\_of\_item\_made\_from\_other\_item  
 ae1031 Make\_from\_an\_item has item\_that\_is\_acting\_as\_stock of one Item

#### 4.1.90 Notation

ae1032 Notation  
 ae1033 Notation with note  
 ae1034 Notation with note\_parameter not present  
 ae1035 Notation with note\_parameter of one Text  
 ae1036 Notation with note\_parameter of many Text elements  
 ae1037 Notation with note\_title not present  
 ae1038 Notation with note\_title  
 ae1039 Notation with reference\_code not present  
 ae1040 Notation with reference\_code  
 ae1041 Notation with type\_of\_notation not present  
 ae1042 Notation with type\_of\_notation of one Label  
 ae1043 Notation with type\_of\_notation of many Label elements  
 ae1044 Notation has referenced\_document\_in\_note of zero Element\_identification  
 ae1045 Notation has referenced\_document\_in\_note of one Element\_identification  
 ae1046 Notation has referenced\_document\_in\_note of many Element\_identification objects  
 ae1047 Notation is data\_list\_notes for one Data\_list\_body  
 ae1048 Notation is data\_list\_notes for many Data\_list\_body objects  
 ae1049 Notation is entry\_notes for one Data\_definition\_entry\_item  
 ae1050 Notation is entry\_notes for many Data\_definition\_entry\_item objects  
 ae1051 Notation is entry\_notes for one Data\_definition\_entry\_tdp\_element  
 ae1052 Notation is entry\_notes for many Data\_definition\_entry\_tdp\_element objects  
 ae1053 Notation is entry\_notes for one Data\_list\_entry  
 ae1054 Notation is entry\_notes for many Data\_list\_entry objects  
 ae1055 Notation is entry\_notes for one Indentured\_data\_list\_entry  
 ae1056 Notation is entry\_notes for many Indentured\_data\_list\_entry objects  
 ae1057 Notation is entry\_notes for one Index\_list\_entry  
 ae1058 Notation is entry\_notes for many Index\_list\_entry objects  
 ae1059 Notation is entry\_notes for one List\_item\_usage

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ae1060 Notation is entry\_notes for many List\_item\_usage objects  
ae1061 Notation is list\_notes for one Index\_list\_body  
ae1062 Notation is list\_notes for many Index\_list\_body objects  
ae1063 Notation is list\_notes for one Parts\_list\_body  
ae1064 Notation is list\_notes for many Parts\_list\_body objects  
ae1065 Notation is notes for one Item  
ae1066 Notation is notes for many Item objects  
ae1067 Notation is notes for one Other\_list\_body  
ae1068 Notation is notes for many Other\_list\_body objects  
ae1069 Notation is notes\_list for one Data\_definition\_exchange\_body  
ae1070 Notation is notes\_list for many Data\_definition\_exchange\_body objects  
ae1071 Notation is notes\_list for one Indentured\_data\_list\_body  
ae1072 Notation is notes\_list for many Indentured\_data\_list\_body objects  
ae1073 Notation is retrofit\_description for one Retrofit\_usage  
ae1074 Notation is retrofit\_description for many Retrofit\_usage objects

### 4.1.91 Number\_with\_units

ae1075 Number\_with\_units  
ae1076 Number\_with\_units with units\_of  
ae1077 Number\_with\_units with value\_of  
ae1078 Number\_with\_units is a\_length for one Stock\_size\_parameters  
ae1079 Number\_with\_units is a\_length for many Stock\_size\_parameters objects  
ae1080 Number\_with\_units is a\_value for one Volume  
ae1081 Number\_with\_units is a\_value for many Volume objects  
ae1082 Number\_with\_units is diameter for one Stock\_size\_parameters  
ae1083 Number\_with\_units is diameter for many Stock\_size\_parameters objects  
ae1084 Number\_with\_units is height for one Stock\_size\_parameters  
ae1085 Number\_with\_units is height for many Stock\_size\_parameters objects  
ae1086 Number\_with\_units is radius for one Stock\_size\_parameters  
ae1087 Number\_with\_units is radius for many Stock\_size\_parameters objects  
ae1088 Number\_with\_units is wall\_thickness for one Stock\_size\_parameters  
ae1089 Number\_with\_units is wall\_thickness for many Stock\_size\_parameters objects  
ae1090 Number\_with\_units is width for one Stock\_size\_parameters  
ae1091 Number\_with\_units is width for many Stock\_size\_parameters objects

### 4.1.92 Other\_list

ae1092 Other\_list  
ae1093 Other\_list has list\_body of one Other\_list\_body  
ae1094 Other\_list has list\_header of one Other\_list\_header

### 4.1.93 Other\_list\_body

ae1095 Other\_list\_body  
ae1096 Other\_list\_body has list\_body\_tables of zero Other\_list\_body\_table  
ae1097 Other\_list\_body has list\_body\_tables of one Other\_list\_body\_table  
ae1098 Other\_list\_body has list\_body\_tables of many Other\_list\_body\_table objects  
ae1099 Other\_list\_body has notes of zero Notation  
ae1100 Other\_list\_body has notes of one Notation

ae1101 Other\_list\_body has notes of many Notation objects  
 ae1102 Other\_list\_body has revision\_history of zero Revision  
 ae1103 Other\_list\_body has revision\_history of one Revision  
 ae1104 Other\_list\_body has revision\_history of many Revision objects  
 ae1105 Other\_list\_body is list\_body for one Other\_list

#### 4.1.94 Other\_list\_body\_table

ae1106 Other\_list\_body\_table  
 ae1107 Other\_list\_body\_table with description\_of\_tabulation not present  
 ae1108 Other\_list\_body\_table with description\_of\_tabulation  
 ae1109 Other\_list\_body\_table with tabulation\_column\_descriptions not present  
 ae1110 Other\_list\_body\_table with one tabulation\_column\_descriptions  
 ae1111 Other\_list\_body\_table with many tabulation\_column\_descriptions elements  
 ae1112 Other\_list\_body\_table has tabulation\_rows of one Tabulation\_entry  
 ae1113 Other\_list\_body\_table has tabulation\_rows of many Tabulation\_entry objects  
 ae1114 Other\_list\_body\_table is list\_body\_tables for one Other\_list\_body  
 ae1115 Other\_list\_body\_table is list\_body\_tables for many Other\_list\_body objects

#### 4.1.95 Other\_list\_header

ae1116 Other\_list\_header  
 ae1117 Other\_list\_header has common\_header of one Header  
 ae1118 Other\_list\_header is list\_header for one Other\_list

#### 4.1.96 Other\_reference\_document

ae1119 Other\_reference\_document  
 ae1120 Other\_reference\_document is authorizing\_documents for one Revision  
 ae1121 Other\_reference\_document is authorizing\_documents for many Revision objects  
 ae1122 Other\_reference\_document is defining\_document for one Retrofit\_usage  
 ae1123 Other\_reference\_document is defining\_document for many Retrofit\_usage objects  
 ae1124 Other\_reference\_document is outstanding\_changes for one Alternate\_element\_identification  
 ae1125 Other\_reference\_document is outstanding\_changes for many  
     Alternate\_element\_identification objects  
 ae1126 Other\_reference\_document is outstanding\_changes for one Element\_identification  
 ae1127 Other\_reference\_document is outstanding\_changes for many Element\_identification objects  
 ae1128 Other\_reference\_document is revision\_authorization\_identifications for one  
     Change\_identification  
 ae1129 Other\_reference\_document is revision\_authorization\_identifications for many  
     Change\_identification objects

#### 4.1.97 Page\_parameters

ae1130 Page\_parameters  
 ae1131 Page\_parameters with page\_anchor\_x  
 ae1132 Page\_parameters with page\_anchor\_y  
 ae1133 Page\_parameters with page\_size\_code not present  
 ae1134 Page\_parameters with page\_size\_code  
 ae1135 Page\_parameters with paper\_size not present

ae1136 Page\_parameters with paper\_size  
ae1137 Page\_parameters has graphics\_declaration of zero graphics\_parameters  
ae1138 Page\_parameters has graphics\_declaration of one graphics\_parameters as Explicit\_graphics  
ae1139 Page\_parameters has graphics\_declaration of one graphics\_parameters as External\_graphics\_file  
ae1140 Page\_parameters is page\_master\_parameters for one Page\_presentation  
ae1141 Page\_parameters is page\_master\_parameters for many Page\_presentation objects  
ae1142 Page\_parameters is page1\_parameters for one Page\_presentation  
ae1143 Page\_parameters is page1\_parameters for many Page\_presentation objects  
ae1144 Page\_parameters is pagen\_parameters for one Page\_presentation  
ae1145 Page\_parameters is pagen\_parameters for many Page\_presentation objects

#### **4.1.98 Page\_presentation**

ae1146 Page\_presentation  
ae1147 Page\_presentation has page\_master\_parameters of one Page\_parameters  
ae1148 Page\_presentation has page1\_parameters of zero Page\_parameters  
ae1149 Page\_presentation has page1\_parameters of one Page\_parameters  
ae1150 Page\_presentation has pagen\_parameters of zero Page\_parameters  
ae1151 Page\_presentation has pagen\_parameters of one Page\_parameters  
ae1152 Page\_presentation has pagen\_parameters of many Page\_parameters objects

#### **4.1.99 Parts\_list**

ae1153 Parts\_list  
ae1154 Parts\_list has list\_body of one Parts\_list\_body  
ae1155 Parts\_list has list\_header of one Parts\_list\_header

#### **4.1.100 Parts\_list\_body**

ae1156 Parts\_list\_body  
ae1157 Parts\_list\_body has list\_notes of zero Notation  
ae1158 Parts\_list\_body has list\_notes of one Notation  
ae1159 Parts\_list\_body has list\_notes of many Notation objects  
ae1160 Parts\_list\_body has parts\_tabulations of one Item\_list  
ae1161 Parts\_list\_body has parts\_tabulations of many Item\_list objects  
ae1162 Parts\_list\_body has referenced\_tdp\_elements of zero Tdp\_element\_list\_item  
ae1163 Parts\_list\_body has referenced\_tdp\_elements of one Tdp\_element\_list\_item  
ae1164 Parts\_list\_body has referenced\_tdp\_elements of many Tdp\_element\_list\_item objects  
ae1165 Parts\_list\_body has revision\_history of zero Revision  
ae1166 Parts\_list\_body has revision\_history of one Revision  
ae1167 Parts\_list\_body has revision\_history of many Revision objects  
ae1168 Parts\_list\_body is list\_body for one Parts\_list

#### **4.1.101 Parts\_list\_header**

ae1169 Parts\_list\_header  
ae1170 Parts\_list\_header has common\_header of one Header  
ae1171 Parts\_list\_header is list\_header for one Parts\_list

#### 4.1.102 Person

ae1172 Person  
 ae1173 Person with first\_name not present  
 ae1174 Person with first\_name  
 ae1175 Person with last\_name not present  
 ae1176 Person with last\_name  
 ae1177 Person with middle\_name not present  
 ae1178 Person with middle\_name  
 ae1179 Person with title not present  
 ae1180 Person with title  
 ae1181 Person with unique\_identifier  
 ae1182 Person is person\_identification for one Person\_and\_organization  
 ae1183 Person is person\_identification for many Person\_and\_organization objects  
 ae1184 Person is person\_responsible for one Design\_authority  
 ae1185 Person is person\_responsible for many Design\_authority objects  
 ae1186 Person is person\_responsible for one Release\_authentication  
 ae1187 Person is person\_responsible for many Release\_authentication objects  
 ae1188 Person is target\_person for one System\_destination  
 ae1189 Person is target\_person for many System\_destination objects

#### 4.1.103 Person\_and\_organization

ae1190 Person\_and\_organization  
 ae1191 Person\_and\_organization with electronic\_mail\_address not present  
 ae1192 Person\_and\_organization with electronic\_mail\_address  
 ae1193 Person\_and\_organization with person\_address not present  
 ae1194 Person\_and\_organization with person\_address  
 ae1195 Person\_and\_organization has organization of zero Company  
 ae1196 Person\_and\_organization has organization of one Company  
 ae1197 Person\_and\_organization has person\_identification of zero Person  
 ae1198 Person\_and\_organization has person\_identification of one Person  
 ae1199 Person\_and\_organization is distribution\_authority for one Distribution\_notice  
 ae1200 Person\_and\_organization is distribution\_authority for many Distribution\_notice objects  
 ae1201 Person\_and\_organization is person\_organization for one Approval  
 ae1202 Person\_and\_organization is person\_organization for many Approval objects  
 ae1203 Person\_and\_organization is revision\_approval for one Revision  
 ae1204 Person\_and\_organization is revision\_approval for many Revision objects

#### 4.1.104 Product\_configuration

ae1205 Product\_configuration  
 ae1206 Product\_configuration with configuration\_id  
 ae1207 Product\_configuration has approval\_of\_configuration of zero Approval  
 ae1208 Product\_configuration has approval\_of\_configuration of one Approval  
 ae1209 Product\_configuration has approval\_of\_configuration of many Approval objects  
 ae12091 Product\_configuration has design\_item of zero Item\_identification  
 ae12092 Product\_configuration has design\_item of one Item\_identification  
 ae1210 Product\_configuration has product\_name of one Product\_model  
 ae1211 Product\_configuration is end\_item\_system\_designation for one Configuration

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ae1212 Product\_configuration is end\_item\_system\_designation for many Configuration objects

ae1213 Product\_configuration is product for one Effectivity

ae1214 Product\_configuration is product for many Effectivity objects

### 4.1.105 Product\_data\_set

ae1215 Product\_data\_set as Product\_data\_set\_with\_format

ae1216 Product\_data\_set as Product\_data\_set\_with\_shading

ae1217 Product\_data\_set as Product\_data\_set\_without\_format

ae1218 Product\_data\_set has file\_configuration of zero Source\_file

ae1219 Product\_data\_set has file\_configuration of one Source\_file

ae1220 Product\_data\_set has file\_configuration of many Source\_file objects

ae1221 Product\_data\_set has related of zero drawing\_or\_product\_data\_set

ae1222 Product\_data\_set has related of one drawing\_or\_product\_data\_set as Drawing

ae1223 Product\_data\_set has related of one drawing\_or\_product\_data\_set as Product\_data\_set

ae1224 Product\_data\_set is related for one Product\_data\_set

ae1225 Product\_data\_set is related for many Product\_data\_set objects

### 4.1.106 Product\_data\_set\_with\_format

ae1226 Product\_data\_set\_with\_format

ae1227 Product\_data\_set\_with\_format has presentation\_of\_product\_data\_set of zero  
Product\_presentation

ae1228 Product\_data\_set\_with\_format has presentation\_of\_product\_data\_set of one  
Product\_presentation

ae1229 Product\_data\_set\_with\_format has presentation\_of\_product\_data\_set of many  
Product\_presentation objects

ae1230 Product\_data\_set\_with\_format has product\_header of one Header

### 4.1.107 Product\_data\_set\_with\_shading

ae1231 Product\_data\_set\_with\_shading

ae1232 Product\_data\_set\_with\_shading has a\_shaded\_model of one Shaded\_shape\_model

ae1233 Product\_data\_set\_with\_shading has data\_configuration of one  
Header\_configuration\_with\_element\_identification

### 4.1.108 Product\_data\_set\_without\_format

ae1234 Product\_data\_set\_without\_format

ae1235 Product\_data\_set\_without\_format has a\_model of zero Shape\_model

ae1236 Product\_data\_set\_without\_format has a\_model of one Shape\_model

ae1237 Product\_data\_set\_without\_format has data\_configuration of one  
Header\_configuration\_with\_element\_identification

### 4.1.109 Product\_model

ae1238 Product\_model

ae1239 Product\_model with model\_name

ae1240 Product\_model is product\_name for one Product\_configuration

ae1241 Product\_model is product\_name for many Product\_configuration objects