Book Specification

papiNet Standard - Version 2.31

Documentation

Global Standard for the Paper and Forest Products Supply Chain

January 2009

Production Release

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Table of Contents

Book Specification Documentation

An Overview of the BookSpecification Message

The BookSpecification message is designed for use within the Book Industry, consisting of publishers, printers, and component suppliers. The Specification Message was developed to capture product specifications exclusive to book manufacturing industry products, most commonly, single book products, however the Specification Message is comprehensive in scope and can be utilized to define book set products, packages and media. The BookSpecification message is NOT designed to contain any product content.

The structure of the message utilizes existing papiNet constructs where ever possible, and in addition, contains the unique Book Industry specific data elements. The message has also been designed to capture detailed product specifications as optional elements. It will be useful to become acquainted with certain papiNet documents such as the Data Dictionary Part A Elements and Part B Attributes. These can be found at the papiNet site, www.papinet.org.

The buyer establishes product specifications and captures the data in a Specification Message that is sent to the supplier. The buyer references the Specification Message identifier in order to provide the additional required information needed by the supplier to process specific transactions such as:
- Request for quote (RFQ)
- Purchase Order (PO)

The Scope of the BookSpecification Message

The BookSpecification Message represents established product specifications that can be referenced by multiple transactions in the manufacturing life cycle of a product from RFQ through invoice and subsequent reprints and/or reorders. It captures unique book manufacturing industry data elements as established by the buyer that are needed by the supplier for manufacturing.

The recommended usage is creation and initiation of the BookSpecification message by the buyer, sent in conjunction with and referenced by a transaction that requires response such as the RFQ or PO.

The Specification Message may accompany either the RFQ or PO Transaction and differs from other Book Industry Transactions. The message does not require a response from the supplier; however a business acknowledgement transaction may be used for this purpose if required by the trading partner.

Changes to the BookSpecification message by the buyer are made by issuance of a new specification message or issuing an amended BookSpecification message.

SpecType [attribute]

Used to identify what type of BookSpecification message this transaction is.
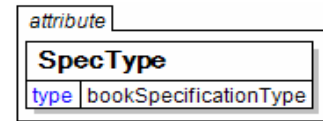
This item is restricted to the following list.

SpecOrder

Used when the BookSpecification message is intended for use with the Purchase Order transaction.

SpecRFQ

Used when the BookSpecification message is intended for use with the Request for Quote (Estimate) transaction.

SupplierSpec

Used when the BookSpecification message is intended for use by the Supplier only and is not generated by, or transmitted to the Buyer.

Business Rules for the BookSpecification Message

At the highest level, data elements that are required represent the minimal amount of data needed to process the corresponding RFQ or Purchase Order transaction. The following is a list of the highest level fields required for the BookSpecification message:

- SpecType (attribute)
- SpecStatusType (attribute)
- Spec General (group element): Within the Spec General the following fields are required:
  - Spec Information (group element)
  - Sender Party (group element)
  - Receiver Party (group element)
  - SpecificationNumber (element)
  - Spec Version (element)
  - Spec Issue Date (group element)

At a minimum, one (or more) of the following line items of the transaction must be completed at the highest level and are repeatable as necessary.

- SpecBinding
- SpecPackaging
- SpecAssembly
- SpecComponent (Press and/or non-press group)

Following are the business rules that apply to the specification message:

General Business Rules

Identifier	Business Rule
Spec_001	The BookSpecification message's SpecificationNumber is always to be referenced in the corresponding PurchaseOrder or RFQ message's PurchaseOrderReference element. This ensures the linkage between the PO / RFQ and its corresponding BookSpecification.
Spec_002	Purchase order instructions may vary from the BookSpecification message and will be treated as an override associated solely with that PO.
Spec_003	[obsolete]
Spec_004	ProductIdentifier, Agency, and ProductIdentifierType field values are the same field values populated in the associated message types (PO, RFQ) and are used for linking the two messages.
Spec_005	Agency for the book specification message is XBITS.
Spec_006	Changes to the spec can be initiated only by the buyer.
Spec_007	At a minimum, one (or more) of the following line items of the transaction must be completed at the highest level and are repeatable as necessary. • SpecBinding • SpecPackaging • SpecAssembly

Processing the BookSpecification Message

A buyer sends a BookSpecification message in conjunction with an RFQ or PO, referencing the specification message number/version. The supplier will then initiate a response to the accompanying RFQ or PO including the reference to the specification message number/version by the initiation of the Quote (from RFQ) or PO Confirmation (from PO).

• Acceptance

Acceptance of the BookSpecification message is handled by the acceptance of the associated PO or RFQ and implies acceptance of the linked BookSpecification message.

• Rejection

Rejection of the BookSpecification message is handled by rejection of the PO or RFQ indicating the reason for rejection.

- Confirmation

  Confirmation of the BookSpecification message is not required; however a business acknowledgement transaction could be utilized if the BookSpecification message was sent to the supplier without an associated RFQ or PO.

Status Values Used When Processing the BookSpecification Message

The SpecStatusType attribute communicates the status of the BookSpecification message using the following choices:

- Original

  Indicates the original issue of the BookSpecification message by the buyer
- Replacement

  Indicates that the buyer has made changes to a field or fields within the BookSpecification message
- Amended

  Indicates only change fields have been sent.
- Cancel

  Indicates the BookSpecification message has been cancelled.

Buyer sends a BookSpecification message and a PO to the supplier with the BookSpecification message StatusType of "Original". The supplier processes the message data internally and then sends a PO Confirmation message in reply to the buyer.

Buyer sends a BookSpecification message to the supplier with the StatusType "Replacement". The supplier replaces all data of the "Original" BookSpecification message with all data contained in the "Replacement" BookSpecification message. (Precondition: the supplier has previously received an "Original" BookSpecification message).

Rejection of a BookSpecification message by the supplier is accomplished by rejection of the corresponding PO or RFQ. The BusinessAcknowledgement may also be used to reject/accept the BookSpecification message.

Buyer may elect to issue the complete or applicable partial BookSpecification message to all supplier parties along with the appropriate PO or RFQ message.

Book Specification Structure
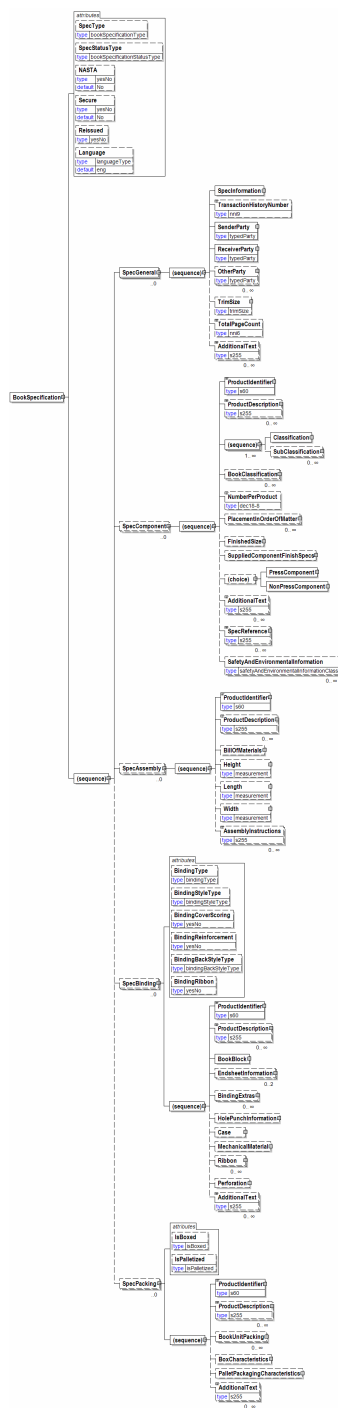
Understanding the Diagrams and Content

This section provides a graphical view of the schema structures, a discussion of the item's children. You can find additional information about papiNet and the standard at www.papiNet.org.

The graphics contain content model indicators, cardinality indicators, and data type information.

Associated with each graphic are the definitions for the parent item and any associated child items. All attributes are listed first, followed by the elements.

The following information should help you interpret and understand this standard. Please note the following:

- Content Model and Cardinality operate together to determine if the element or attribute are required in the instance document.
- The same attribute can never appear multiple times in the same element so, you will never see a multiple cardinality indicator.

Content model indicators:

There are three possible types of content: "sequence", "choice", and "all". The papiNet standard currently does not use the "all" construct.

- (sequence)

  The sequence of the items to the right of the graphic (or below the text) is required.
- (choice)

  A choice of the items to the right of the graphic (or below the text) is permitted.
- (all)

  All the items to the right of the graphic are required.

Cardinality indicators:

- Dotted line around element or attribute.

  A single instance of the item can optionally exist.
- Dotted line around item with range indicated below.

  Multiple instances of the item can optionally exist.
- Solid line around item.

  A single instance of the item must exist.
- Solid line around item with range indicated below

  At least one instance must exist; multiple instances can optionally exist.

Datatype indication:

When a data type is assigned to an element (either a simple type or complex type the name of the data type is presented beneath the item name in the graphic.

- In some cases additional information about the data type is presented (the default value).

Elements can either have content that is textual/numeric in nature or content that is made up of additional elements and/or attributes.

- When the content is textual/numeric in nature "three straight horizontal lines" will appear in the upper left-hand corner of the graphic. Pay attention to these elements because they are where you will be entering

your information.

- When the content is made up of additional elements and/or attributes a "gray-box" will appear on the right-hand side of the graphic.
- If the graphic shows both the horizontal lines and the gray-box then, in the papiNet standard, the content below the element are attributes.

Book Specification Root Element

The BookSpecification message represents established product specifications that can be referenced by multiple transactions in the manufacturing life cycle of a product from RFQ through invoice and subsequent reprints and/or reorders. It captures unique book manufacturing industry data elements as established by the buyer that are needed by the supplier for manufacturing.

SpecType [attribute]

SpecType is optional. A single instance might exist.

Used to identify what type of BookSpecification message this transaction is.

Refer to SpecType definition for any enumerations.

SpecStatusType [attribute]

SpecStatusType is optional. A single instance might exist.

Identifies the status of the entire BookSpecification message (in other words, at the root level).

Refer to SpecStatusType definition for any enumerations.

NASTA [attribute]

NASTA is optional. A single instance might exist.

Used to indicate the specification must conform to the NASTA requirements.

Refer to NASTA definition for any enumerations.
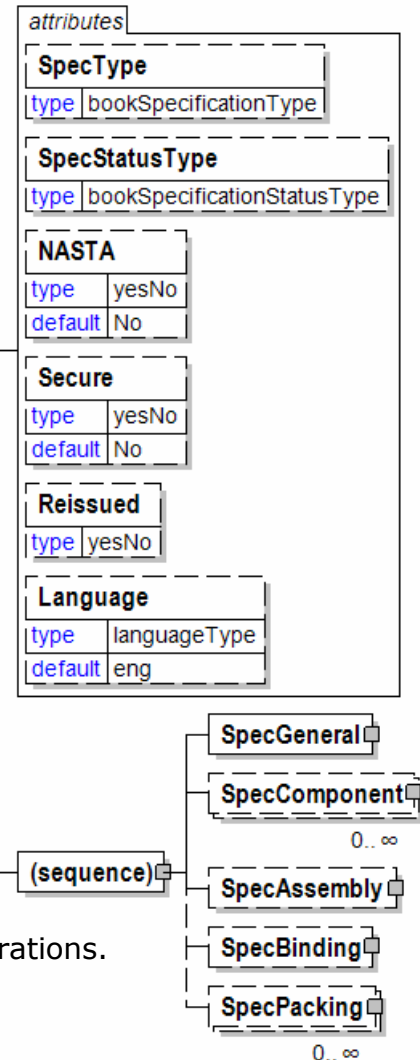
Secure [attribute]

Secure is optional. A single instance might exist.

This attribute indicates that the product requires a secure manufacturing plant. For example when manufacturing ACT booklets and other testing products.

Refer to Secure definition for any enumerations.

Reissued [attribute]

Reissued is optional. A single instance might exist.

Either "Yes" or "No".

Refer to Reissued definition for any enumerations.

Language [attribute]

Language is optional. A single instance might exist.

XML has embraced 2 and 3 digit language codes through the application of an addendum to the standard.

Refer to Language definition for any enumerations.

(sequence)

The sequence of items below is mandatory. A single instance is required.

SpecGeneral

SpecGeneral is mandatory. A single instance is required.

Spec General

SpecComponent

SpecComponent is optional. Multiple instances might exist.

Group element used to identify all the necessary component information for this book specification.
  • Each occurrence of this construct identifies a single component.

SpecAssembly

SpecAssembly is optional. A single instance might exist.

SpecAssembly contains assemblies that are used in the manufacturing of books.

SpecBinding

SpecBinding is optional. A single instance might exist.

SpecBinding describes the binding process.

SpecPacking

SpecPacking is optional. Multiple instances might exist.

SpecPacking defines the book packaging parameters.

Primary Elements

SpecGeneral

Spec General

(sequence)

The contents of (sequence) are mandatory. A single instance is required.

SpecInformation

SpecInformation is mandatory. A single instance is required.

Construct is used to uniquely identify this book specification.

- Note: ProductIdentifier, ProductDescription, and Classification removed in Version V2R30 and replaced with SpecificationNumber to more accurately reflect the business process.

TransactionHistoryNumber

TransactionHistoryNumber is optional. A single instance might exist.

A sequential number that keeps track of the version of a document being sent by the document originator except in the case where TransactionHistoryConfirmation is used, in which case the TransactionHistoryNumber refers to the trigger transaction for which the confirmation is being sent.

SenderParty

SenderParty is mandatory. A single instance is required.

The business entity issuing the business document, the source of the document.
- This is the same entity as the "From" party in the ebXML message service envelope. The entity responsible for the content. If the sender party has out sourced the transmission function to a third party the sender party is the original party not the party performing the transmission service.

ReceiverParty

ReceiverParty is mandatory. A single instance is required.

The business entity for whom the business document is intended, the destination of the document.
- This is the same entity as the "To" party in the ebXML message service envelop. The entity interested in the content. If the receiver party has outsourced the message receipt function to a third party the receiver party is the intended party not the party performing the receiving process.

OtherParty

OtherParty is optional. Multiple instances might exist.
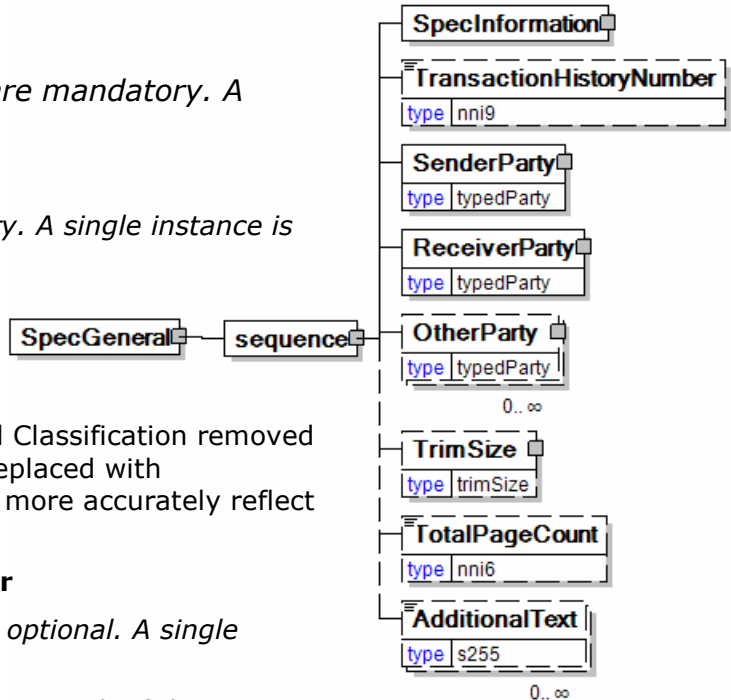
An organisation or business entity other than those specifically detailed within a business document.

TrimSize

TrimSize is optional. A single instance might exist.

Trim size.

TotalPageCount

TotalPageCount is optional. A single instance might exist.

Element used to communicate the book's approximate total number of pages within each unit of the book. Total page count is more or less a reference to the "size" of the book that the customer designates. For instance, they will refer to a book as 800 pages when in fact it is 792 actual text pages with 8 pages of various inserts. This value should not be used to drive any of the other values for the component parts, but may in fact be exactly equal to the number of pages in one of the components designated as "Text".

AdditionalText

AdditionalText is optional. Multiple instances might exist.

A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

SpecComponent

Group element used to identify all the
necessary component information for
this book specification.

- Each occurrence of this construct
  identifies a single component.

(sequence)

*The sequence of items below is
mandatory. A single instance is
required.*

ProductIdentifier

*ProductIdentifier is mandatory. A single
instance is required.*

Used to communicate the code of the
article, in a variety of formats designated
by the type.

ProductDescription

*ProductDescription is optional. Multiple
instances might exist.*

An element used to communicate a
human readable description of the
product in the language specified by the
Language attribute.

(sequence)

*The sequence of items below is
mandatory. One instance is required,
multiple instances might exist.*

Classification

*Classification is mandatory. A single
instance is required.*

A group item that details the product
classification according to a particular organization's scheme. An item across
multiple classifications would still be recognized as the same item. Examples of
some product classifications are: Containerboard, Pulp-Dissolving, or Newsprint.

SubClassification

SubClassification is optional. Multiple instances might exist.

SubClassification provides additional classification information.
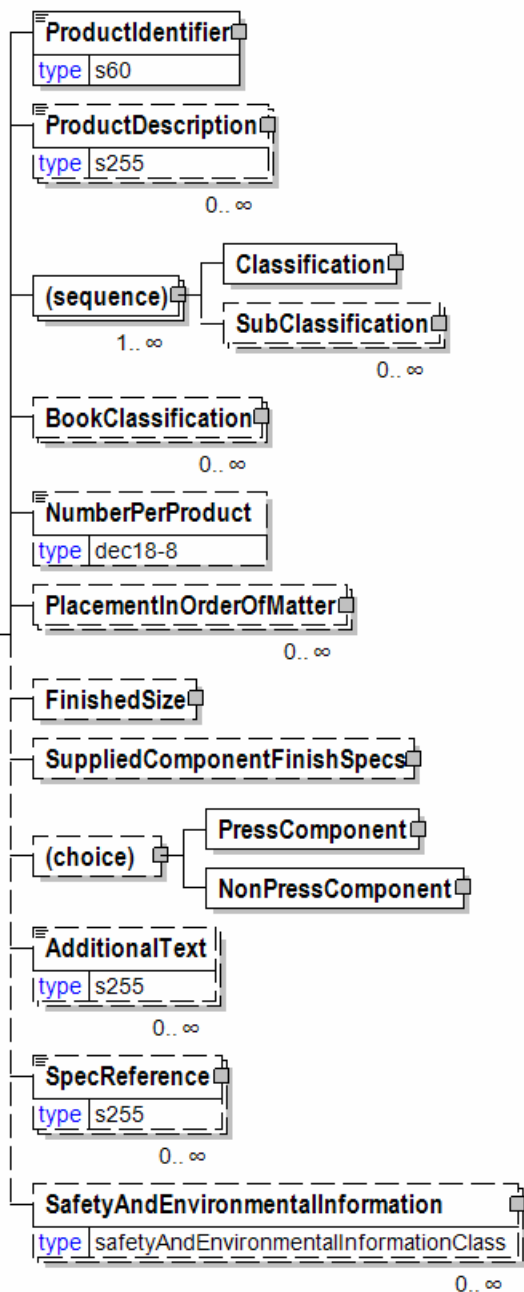
BookClassification

BookClassification is optional. Multiple instances might exist.

Category under which the product or a component within the product is classified.

NumberPerProduct

NumberPerProduct is optional. A single instance might exist.

The number of components or items per assembly or constructed product

PlacementInOrderOfMatter

PlacementInOrderOfMatter is optional. Multiple instances might exist.

Element used to identify where the component is to be placed amongst other components when assembling a book.

FinishedSize

FinishedSize is optional. A single instance might exist.

Finished size

SuppliedComponentFinishSpecs

SuppliedComponentFinishSpecs is optional. A single instance might exist.

Supplied Component Finish Specs

(choice)

[choice] is optional because of choice construct.

> **PressComponent**
>
> *PressComponent is optional because of choice construct.*
>
> Press Component.
>
> **NonPressComponent**
>
> *NonPressComponent is optional because of choice construct.*
>
> Non-press component.

AdditionalText

AdditionalText is optional. Multiple instances might exist.

A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

SpecReference

SpecReference is optional. Multiple instances might exist.

Used to identify any external or associated documents, identifiers, etc.

SafetyAndEnvironmentalInformation

SafetyAndEnvironmentalInformation is optional. Multiple instances might exist.

Name of certification type, if any, on the goods (For example, FSC, PEFC). SafetyAndEnvironmental needs a value or measurement to communicate the

percentage of the product is certified (for example, 75% is certified by the indicated agency).

SpecAssembly

SpecAssembly contains assemblies that are used in the manufacturing of books.

(sequence)

The contents of (sequence) are mandatory. A single instance is required.

ProductIdentifier

ProductIdentifier is mandatory. A single instance is required.

Used to communicate the code of the article, in a variety of formats designated by the type.

ProductDescription

ProductDescription is optional. Multiple instances might exist.

An element used to communicate a human readable description of the product in the language specified by the Language attribute.

BillOfMaterials

BillOfMaterials is optional. A single instance might exist.

A specification of the components and other items that are used to produced the item in question.

Height

Height is optional. A single instance might exist.

The following approach is used in the timber/lumber related constructs.

Length

Length is optional. A single instance might exist.

The following approach is used in the timber/lumber related constructs.
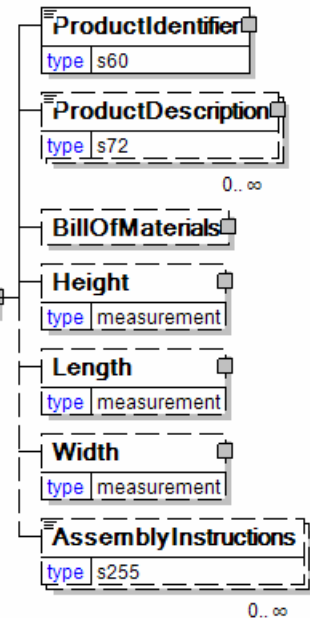
Width

Width is optional. A single instance might exist.

The following approach is used in the timber/lumber related constructs.

AssemblyInstructions

AssemblyInstructions is optional. Multiple instances might exist.

Instructions for assembly.

SpecBinding

SpecBinding describes the binding process.

BindingType [attribute]

BindingType is optional. A single instance might exist.

Binding type

Refer to BindingType definition for any enumerations.

BindingStyleType [attribute]

BindingStyleType is optional. A single instance might exist.

Indicates the style of binding used.

Refer to BindingStyleType definition for any enumerations.

BindingCoverScoring [attribute]

BindingCoverScoring is optional. A single instance might exist.

Binding cover scoring

Refer to BindingCoverScoring definition for any enumerations.

BindingReinforcement [attribute]

BindingReinforcement is optional. A single instance might exist.

Binding reinforcement

Refer to BindingReinforcement definition for any enumerations.

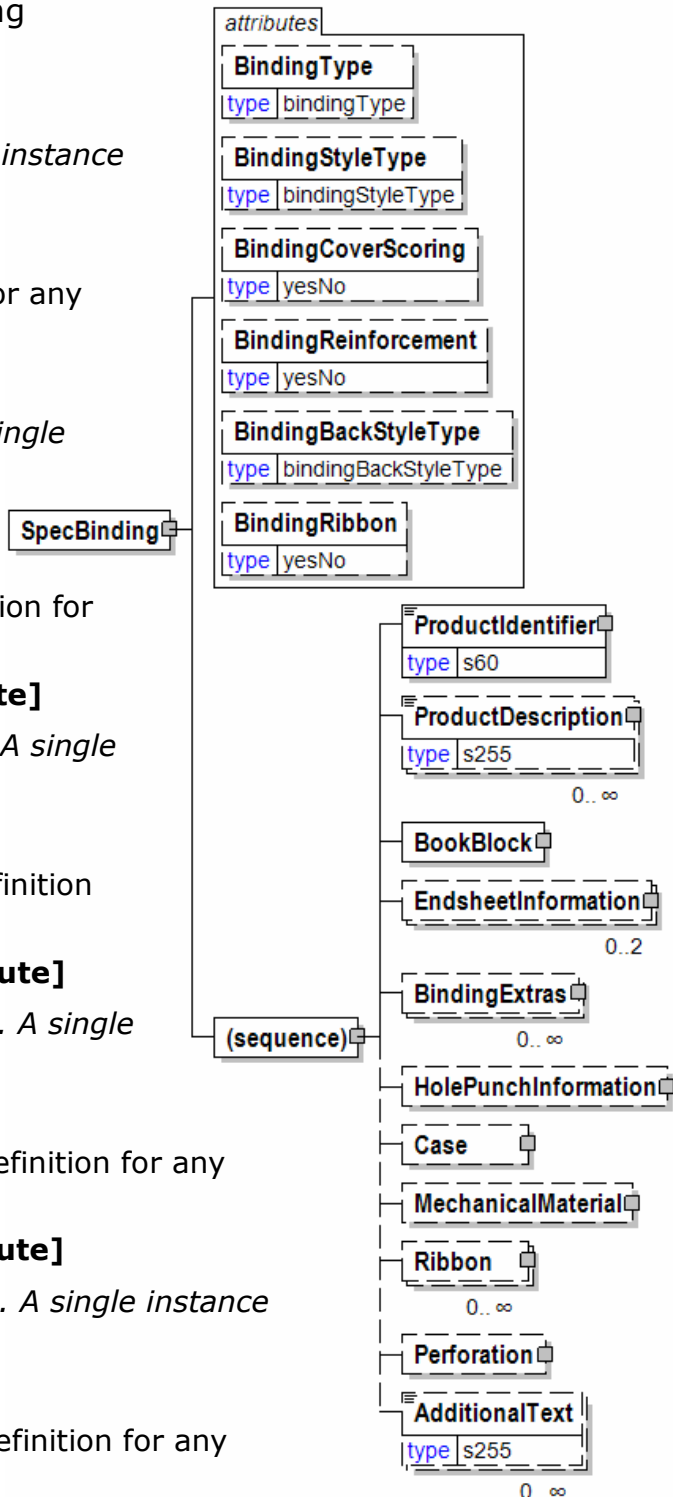### BindingBackStyleType [attribute]

BindingBackStyleType is optional. A single instance might exist.

Binding back style type

Refer to BindingBackStyleType definition for any enumerations.

BindingRibbon [attribute]

BindingRibbon is optional. A single instance might exist.

Binding ribbon

Refer to BindingRibbon definition for any enumerations.

(sequence)

The sequence of items below is mandatory. A single instance is required.

ProductIdentifier

ProductIdentifier is mandatory. A single instance is required.

Used to communicate the code of the article, in a variety of formats designated by the type.

ProductDescription

ProductDescription is optional. Multiple instances might exist.

An element used to communicate a human readable description of the product in the language specified by the Language attribute.

BookBlock

BookBlock is mandatory. A single instance is required.

Book block information

EndsheetInformation

EndsheetInformation is optional.

End sheet information.

BindingExtras

BindingExtras is optional. Multiple instances might exist.

Binding extras

HolePunchInformation

HolePunchInformation is optional. A single instance might exist.

Hole Punch Information.

Case

Case is optional. A single instance might exist.

Case information

MechanicalMaterial

MechanicalMaterial is optional. A single instance might exist.

Mechanical material information

Ribbon

Ribbon is optional. Multiple instances might exist.

Ribbon information.

Perforation

Perforation is optional. A single instance might exist.

Perforation information

AdditionalText

AdditionalText is optional. Multiple instances might exist.

A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

SpecPacking

SpecPacking defines the book packaging parameters.

IsBoxed [attribute]

IsBoxed is optional. A single instance might exist.

Refer to IsBoxed definition for any enumerations.

IsPalletized [attribute]

IsPalletized is optional. A single instance might exist.

The buyer's directions for how the item is to be palletized.

Refer to IsPalletized definition for any enumerations.

(sequence)

The sequence of items below is mandatory. A single instance is required.

ProductIdentifier

ProductIdentifier is mandatory. A single instance is required.

Used to communicate the code of the article, in a variety of formats designated by the type.

ProductDescription

ProductDescription is optional. Multiple instances might exist.

An element used to communicate a human readable description of the product in the language specified by the Language attribute.

BookUnitPacking

BookUnitPacking is optional. Multiple instances might exist.
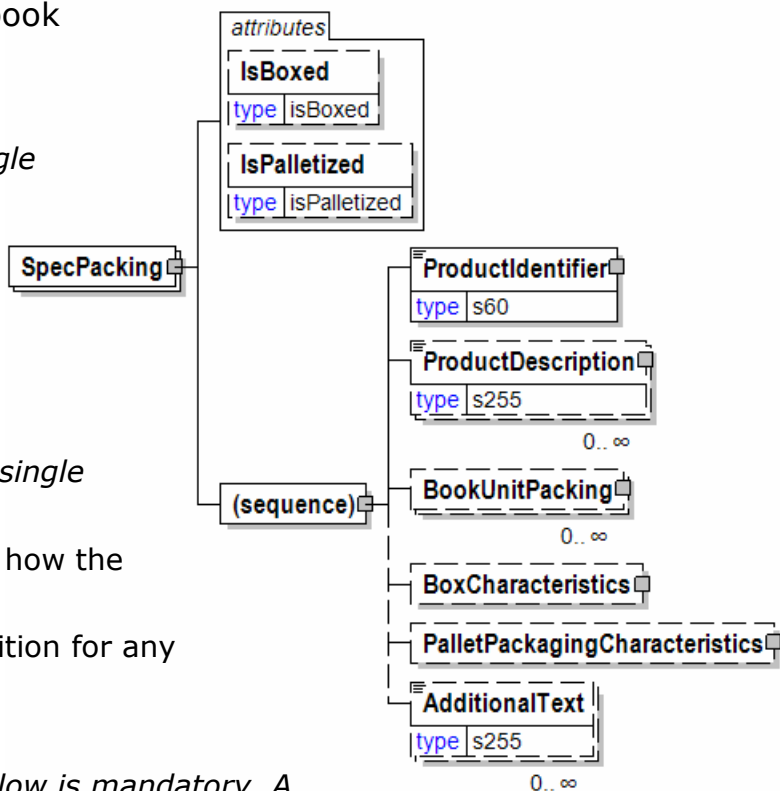
Book unit packing information

BoxCharacteristics

BoxCharacteristics is optional. A single instance might exist.

BoxCharacteristics is a group element that contains information about the box (or carton)

PalletPackagingCharacteristics

PalletPackagingCharacteristics is optional. A single instance might exist.

PalletPackagingCharacteristics details the characteristics of the packaging for a pallet.

AdditionalText

AdditionalText is optional. Multiple instances might exist.

A text field that is used to communicate information not previously defined or for special instructions. To be used only for circumstances not covered by specific elements.

Book Specification Business Scenarios

Scenario A

Scenario	Example of an educational text book with:
	• spiral coated-wire binding
	• 10 7/8 x 12 1/16 inch trim size
	• 720 pages
	  • the first 2 signatures print on 60 LB paper
	  • the remaining on 45 pound
	    • contains 3 printed tab-dividers
	
	The front cover is paper and the back cover is hard with a white end sheets and oversized (11 1/2 inch width) to protect the tab-dividers.

Spreadsheet	BookSpecification_ScenarioA.xls
XML File	None

Scenario B

Scenario	Example of an educational text book with: • plastic-spiral binding • 10 x 12 inch trim size • 480 pages and a set of 6 tab-dividers. The front and back covers are hard with white end sheets and oversized (10 5/8 inch width) to protect the tab dividers.
Spreadsheet	BookSpecification_ScenarioB.xls
XML File	BookSpecification_ScenarioB.xml

Scenario C

Scenario	Example of the Jacket specification for a hardcover book: • 5 1/2 x 8 1/4 inch trim size • 30`4 pages
Spreadsheet	BookSpecification_ScenarioC.xls
XML File	None

Scenario D

Scenario	Example of an educational Hardcover text book:

	• 7 x 9 inch trim size
	• 768 pages
	   • the first signature is 2/Color
	   • the remaining signatures are 4/Color printing on 45 LB paper
	      • contains 3 furnished inserts and a dust jacket

Spreadsheet	BookSpecification_ScenarioD.xls
XML File	None

Scenario E

Scenario	Example of the Assembly of the Notch Text book with: • a CD • Pass code card • and label
Spreadsheet	BookSpecification_ScenarioE.xls
XML File	None

Scenario F

Scenario	Example of a hardcover book: • 5 1/2 x 8 1/4 inch trim size • 304 pages • 1/Color printing on 50 LB paper • a furnished dust jacket.
Spreadsheet	What is the result when this scenario is successfully completed.
XML File	Who starts the process?

Scenario G

Scenario	Example of a paper cover catalogue • 8 3/8 x 10 7/8 inch trim size • 1280 pages • 1/Color, 5-hole drilled
Spreadsheet	BookSpecification_ScenarioG.xls
XML File	None

Scenario H

Scenario	Paperback book specification
Spreadsheet	None
XML File	BookSpecification_ScenarioH.xml

Scenario I

Scenario	Hardcover book specification, trade
Spreadsheet	None
XML File	BookSpecification_ScenarioI.xml

Scenario J

Scenario	Jacket Specification
Spreadsheet	None
XML File	BookSpecification_ScenarioJ.xml