EDI Implementation Guidelines

ANSI X12 Version /Release 3020
856 Ship Notice / Manifest

856 Ship Notice/Manifest

Functional Group ID=SH

Introduction:

This standard provides the standardized format and establishes the data contents of a ship notice/manifest transaction set. A ship notice/manifest lists the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, type of packaging, marking, carrier information, and configuration of goods within the transportation equipment. The transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey information. The sender of this transaction is the organization responsible for detailing and communicating the contents of a shipment, or shipments, to one or more receivers of the transaction set. The receiver of this transaction set can be any organization having an interest in the contents of a shipment or information about the contents of a shipment.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BSN	Beginning Segment for Ship Notice	M	1		
Not Used	030	NTE	Note/Special Instruction	F	100		
	040	DTM	Date/Time/Period	O	10		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - HL			200000	
M	010	HL	Hierarchical Level	M	1		c1
Not Used	020	LIN	Item Identification	O	1		
Not Used	030	SN1	Item Detail (Shipment)	O	1		
Not Used	040	SLN	Subline Item Detail	O	100		
Not Used	050	PRF	Purchase Order Reference	O	1		
Not Used	060	PO4	Item Physical Details	O	1		

Not Used	070	PID	Product/Item Description	O	200		
M	080	MEA	Measurements	M	40		
Not Used	090	PWK	Paperwork	O	25		
Not Used	100	PKG	Marking, Packaging, Loading	O	25		
M	110	TD1	Carrier Details (Quantity and Weight)	M	20		
M	120	TD5	Carrier Details (Routing Sequence /Transit	M	12		
M	130	TD3	Carrier Details (Equipment)	M	12		
	140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5		
M	150	REF	Reference Numbers	M	200		
M	150	REF	Reference Numbers	M	200		
Not Used	160	PER	Administrative Communications Contact	O	3		
			LOOP ID - CLD			200	
Not Used	170	CLD	Load Detail	O	1		
Not Used	180	REF	Reference Numbers	O	200		
Not Used	190	MAN	Marks and Numbers	O	10		
Not Used	200	DTM	Date/Time/Period	O	10		
Not Used	210	FOB	F.O.B. Related Instructions	O	1		
			LOOP ID - N1			200	
M	220	N1	Name	M	1		
	230	N2	Additional Name Information	O	2		
Not Used	240	N3	Address Information	O	2		
Not Used	250	N4	Geographic Location	O	1		
Not Used	260	REF	Reference Numbers	O	12		
Not Used	270	PER	Administrative Communications Contact	O	3		
Not Used	280	FOB	F.O.B. Related Instructions	O	1		
Not Used	290	SDQ	Destination Quantity	O	50		
Not Used	300	ETD	Excess Transportation Detail	O	1		
Not Used	310	CUR	Currency	O	1		
Not Used	320	ITA	Allowance, Charge or Service	O	10		
			LOOP ID - HL			200000	
	010	HL	Hierarchical Level	O	1		c2
M	020	LIN	Item Identification	M	1		
M	030	SN1	Item Detail (Shipment)	M	1		
Not Used	040	SLN	Subline Item Detail	O	100		
M	050	PRF	Purchase Order Reference	M	1		
Not Used	060	PO4	Item Physical Details	O	1		
Not Used	070	PID	Product/Item Description	O	200		
Not Used	080	MEA	Measurements	O	40		
Not Used	090	PWK	Paperwork	O	25		
Not Used	100	PKG	Marking, Packaging, Loading	O	25		

Not Used	110	TD1	Carrier Details (Quantity and Weight)	O	20		
Not Used	120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
Not Used	130	TD3	Carrier Details (Equipment)	O	12		
Not Used	140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5		
Not Used	150	REF	Reference Numbers	O	200		
Not Used	160	PER	Administrative Communications Contact	O	3		
			LOOP ID - CLD			200	
	170	CLD	Load Detail	O	1		
Not Used	180	REF	Reference Numbers	O	200		
Not Used	190	MAN	Marks and Numbers	O	10		
Not Used	200	DTM	Date/Time/Period	O	10		
Not Used	210	FOB	F.O.B. Related Instructions	O	1		
			LOOP ID - N1			200	
Not Used	220	N1	Name	O	1		
Not Used	230	N2	Additional Name Information	O	2		
Not Used	240	N3	Address Information	O	2		
Not Used	250	N4	Geographic Location	O	1		
Not Used	260	REF	Reference Numbers	O	12		
Not Used	270	PER	Administrative Communications Contact	O	3		
Not Used	280	FOB	F.O.B. Related Instructions	O	1		
Not Used	290	SDQ	Destination Quantity	O	50		
Not Used	300	ETD	Excess Transportation Detail	O	1		
Not Used	310	CUR	Currency	O	1		
Not Used	320	ITA	Allowance, Charge or Service	O	10		
			LOOP ID - HL			200000	
M	010	HL	Hierarchical Level	M	1		c3
M	020	LIN	Item Identification	M	1		
M	030	SN1	Item Detail (Shipment)	M	1		
Not Used	040	SLN	Subline Item Detail	O	100		
M	050	PRF	Purchase Order Reference	M	1		
Not Used	060	PO4	Item Physical Details	O	1		
Not Used	070	PID	Product/Item Description	O	200		
	080	MEA	Measurements	O	40		
Not Used	090	PWK	Paperwork	O	25		
Not Used	100	PKG	Marking, Packaging, Loading	O	25		
Not Used	110	TD1	Carrier Details (Quantity and Weight)	O	20		
Not Used	120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
Not Used	130	TD3	Carrier Details (Equipment)	O	12		

Not Used	140	TD4	Carrier Details (Special Handling, or Hazardous Materials, or Both)	O	5	
	150	REF	Reference Numbers	O	200	
	150	REF	Reference Numbers	O	200	
Not Used	160	PER	Administrative Communications Contact	O	3	
			LOOP ID - CLD			200
	170	CLD	Load Detail	O	1	
	180	REF	Reference Numbers	O	200	
Not Used	190	MAN	Marks and Numbers	O	10	
Not Used	200	DTM	Date/Time/Period	O	10	
Not Used	210	FOB	F.O.B. Related Instructions	O	1	
			LOOP ID - N1			200
Not Used	220	N1	Name	O	1	
Not Used	230	N2	Additional Name Information	O	2	
Not Used	240	N3	Address Information	O	2	
Not Used	250	N4	Geographic Location	O	1	
Not Used	260	REF	Reference Numbers	O	12	
Not Used	270	PER	Administrative Communications Contact	O	3	
Not Used	280	FOB	F.O.B. Related Instructions	O	1	
Not Used	290	SDQ	Destination Quantity	O	50	
Not Used	300	ETD	Excess Transportation Detail	O	1	
Not Used	310	CUR	Currency	O	1	
Not Used	320	ITA	Allowance, Charge or Service	O	10	

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	10	CTT	Transaction Totals	M	1		n1
M	20	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of HL segments. If used, hash total (CTT02) is the sum of the value of units shipped (SN102) for each SN1 segment.

Transaction Set Comments

1. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

2. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

3. The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.

ST

Segment: **Transaction Set Header**
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes:
Comments: **1** The transaction set identifier (ST01) is intended for use by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	ST01	143	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set 856 X12.10 Ship Notice/Manifest	M ID 3/3
M	ST02	329	**Transaction Set Control Number** Identifying control number assigned by the originator for a transaction set.	M AN 4/9

BSN

Segment: **Beginning Segment for Ship Notice**
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To transmit identifying numbers, dates, and other basic data relating to the transaction set
Syntax Notes:
Semantic Notes:
Comments:
1 BSN03 is the date the shipment transaction set is created.
2 BSN04 is the time the shipment transaction set is created.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	BSN01	353	**Transaction Set Purpose Code** Code identifying purpose of transaction set 00 Original	M ID 2/2
M	BSN02	396	**Shipment Identification** A unique control number assigned by the original shipper to identify a specific shipment ASN number. Unique supplier assigned number that is not repeated within one year. Adient recomends using the packing slip number. ASN Number shouldnt start with characters like "C", "I" or "S".	M AN 2/30
M	BSN03	373	**Date** Date (YYMMDD) Date ASN was created. YYMMDD	M DT 6/6
M	BSN04	337	**Time** Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959) Time ASN was created. HHMM	M TM 4/6
X	BSN05	1005	**Hierarchical Structure Code** Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set Refer to 003020 Data Element Dictionary for acceptable code values	O ID 4/4

DTM

Segment: **Date/Time/Period**
Position: 040
Loop:
Level: Heading
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes: **1** At least one of DTM02 or DTM03 is required.
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 011 Shipped 017 Estimated Delivery	**M ID 3/3**
	DTM02	**373**	**Date** Date (YYMMDD) YYMMDD	**X DT 6/6**
	DTM03	**337**	**Time** Time expressed in 24-hour clock time (HHMMSS) (Time range: 000000 through 235959) HHMM	**X TM 4/6**
X	**DTM04**	**623**	**Time Code** Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow Refer to 003020 Data Element Dictionary for acceptable code values.	**O ID 2/2**
X	**DTM05**	**624**	**Century** The first two characters in the designation of the year (CCYY)	**O N0 2/2**

HL

Segment: **Hierarchical Level**
Position: 010
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:
Semantic Notes:
Comments:

1 The HL segment defines a top-down/left-right ordered structure.
2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL 03 is used to indicate the subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Shipment Level

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	HL01	628	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M AN 1/12
	HL02	734	**Hierarchical Parent ID Number** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O AN 1/12
M	HL03	735	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure S Shipment	M ID 1/2

HL04	**736**	**Hierarchical Child Code** Code indicating whether if there are hierarchical child data segments subordinate to the level being described. Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 1/1**

MEA

Segment: **Measurements**
Position: 080
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 40
Purpose: To specify physical measurements, including dimension tolerances, weights and counts.

Syntax Notes:

1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
2 If MEA03 is present, then MEA04 is required
3 If MEA05 is present, then MEA04 is required.
4 If MEA06 is present, then MEA04 is required.
5 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
6 Only one of MEA08 or MEA03 may be present.

Semantic Notes:

Comments:

1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
MEA01	**737**	**Measurement Reference ID Code** Code specifying the application of physical measurement cited. PD Physical Dimensions	**O ID 2/2**
MEA02	**738**	**Measurement Qualifier** Code identifying the type of measurement. G Gross Weight N Actual Net Weight	**O ID 1/3**
MEA03	**739**	**Measurement Value** The value of the measurement	**X R 1/10**
MEA04	**355**	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. LB Pound, KG Kilogram,	**X ID 2/2**
MEA05	**740**	**Range Minimum** The value specifying the minimum of the measurement range	**X R 1/10**

MEA06	**741**	**Range Maximum** The value specifying the maximum of the measurement range	**X**	**R 1/10**
MEA07	**935**	**Measurement Significance Code** Code used to benchmark, qualify or further define a measurement value Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
MEA08	**936**	**Measurement Attribute Code** Code used to express an attribute response when a numeric measurement value cannot be determined Refer to 003020 Data Element Dictionary for acceptable code values	**X**	**ID 2/2**
MEA09	**752**	**Surface/Layer/Position Code** Code indicating the product surface, layer or position that is being described Refer to 003020 Data Element Dictionary for acceptable code values	**O**	**ID 2/2**

TD1

Segment: **Carrier Details (Quantity and Weight)**
Position: 110
Loop: Mandatory
Level: Detail
Usage: Mandatory
Max Use: 20
Purpose: To specify the transportation details relative to commodity, weight, and quantity
Syntax Notes:
1 If TD101 is present, then TD102 is required
2 If TD103 is present, then TD104 is required.
3 If TD106 is present, then TD107 is required.
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
	TD101	**103**	**Packaging Code** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material Refer to 003020 Data Element Dictionary for acceptable code values.	**O AN 5/5**
	TD102	**80**	**Lading Quantity** Number of units (pieces) of the lading commodity	**X N0 1/7**
X	**TD103**	**23**	**Commodity Code Qualifier** Code identifying the commodity coding system used for Commodity Code Refer to 003020 Data Element Dictionary for acceptable code values.	**O ID 1/1**
X	**TD104**	**22**	**Commodity Code** Code describing a commodity or group of commodities	**X AN 1/16**
X	**TD105**	**79**	**Lading Description** Description of an item as required for rating and billing purposes	**O AN 1/50**
X	**TD106**	**187**	**Weight Qualifier** Code defining the type of weight Refer to 003020 Data Element Dictionary for acceptable code values.	**O ID 1/2**
X	**TD107**	**81**	**Weight** Numeric value of weight	**X R 1/8**

X	**TD108**	**355**	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. Refer to 003020 Data Element Dictionary for acceptable code values	**O**	**ID 2/2**

TD5

Segment: **Carrier Details (Routing Sequence/Transit Time)**
Position: 120
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 12
Purpose: To specify the carrier and sequence of routing and provide transit time information
Syntax Notes:
1 At least one of TD502 TD504 or TD505 is required.
2 If TD502 is present, then TD503 is required
3 If TD507 is present, then TD508 is required.
4 If TD510 is present, then TD511 is required.

Semantic Notes:
Comments:
1 When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TD501	**133**	**Routing Sequence Code** Code describing the relationship of a carrier to a specific shipment movement B Origin/Delivery Carrier (Any Mode)	**O ID 1/2**
TD502	**66**	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67) 2 Standard Carrier Alpha Code (SCAC)	**X ID 1/2**
TD503	**67**	**Identification Code** Code identifying a party.	**X AN 2/17**
TD504	**91**	**Transportation Method/Type Code** Code specifying the method or type of transportation for the shipment A Air C Consolidation M Motor (Common Carrier) R Rail	**X ID 1/2**

	TD505	**387**	**Routing** Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	**X**	**AN 1/35**
	TD506	**368**	**Shipment/Order Status Code** Code indicating the status of an order or shipment or the disposition of any difference between the quantity ordered and the quantity shipped for a line item or transaction Refer to 003020 Data Element Dictionary for acceptable code values	**O**	**ID 2/2**
X	**TD507**	**309**	**Location Qualifier** Code identifying type of location Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 1/2**
X	**TD508**	**310**	**Location Identifier** Code which identifies a specific location	**X**	**AN 1/25**
	TD509	**731**	**Transit Direction Code** The point of origin and point of direction Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	TD510	**732**	**Transit Time Direction Qualifier** Code specifying the value of time used to measure the transit time Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	TD511	**733**	**Transit Time** The numeric amount of transit time	**X**	**R 1/4**

TD3

Segment: **Carrier Details (Equipment)**
Position: 130
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 12
Purpose: To specify transportation details relating to the equipment used by the carrier
Syntax Notes: **1** If TD302 is present, then TD303 is required.
2 If TD304 is present, then both TD305 and TD306 are required
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	TD301	40	**Equipment Description Code** Code identifying type of equipment used for shipment TL Trailer (not otherwise specified)	M ID 2/2
X	TD302	206	**Equipment Initial** Prefix or alphabetic part of an equipment unit's identifying number	O AN 1/4
	TD303	207	**Equipment Number** Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)	X AN 1/10
	TD304	187	**Weight Qualifier** Code defining the type of weight Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 1/2
	TD305	81	**Weight** Numeric value of weight	X R 1/8
	TD306	355	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. Refer to 003020 Data Element Dictionary for acceptable code values	X ID 2/2
	TD307	102	**Ownership Code** Code indicating the relationship of equipment to carrier. Refer to 003020 Data Element Dictionary for acceptable code values	O ID 1/1

TD4

Segment: **Carrier Details (Special Handling, or Hazardous Materials, or Both)**
Position: 140
Loop: HL Mandatory
Level: Detail
Usage: Optional
Max Use: 5
Purpose: To specify transportation special handling requirements, or hazardous materials information, or both

Syntax Notes:
1 At least one of TD401 TD402 or TD404 is required.
2 If TD402 is present, then TD403 is required

Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TD401	**152**	**Special Handling Code** Code specifying special transportation handling instructions Refer to 003020 Data Element Dictionary for acceptable code values.	**X ID 2/3**
TD402	**208**	**Hazardous Material Code Qualifier** Code which qualifies the Hazardous Material Class Code (209) Refer to 003020 Data Element Dictionary for acceptable code values.	**X ID 1/1**
TD403	**209**	**Hazardous Material Class Code** Code specifying the kind of hazard for a material	**X AN 2/4**
TD404	**352**	**Description** A free-form description to clarify the related data elements and their content	**X AN 1/80**

REF

Segment: **Reference Numbers**
Position: 150
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 200
Purpose: To specify identifying numbers.
Syntax Notes: **1** At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**REF01**	**128**	**Reference Number Qualifier** Code qualifying the Reference Number. BM Bill of Lading Number PK Packing List Number	**M ID 2/2**
	REF02	**127**	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	**X AN 1/30**
	REF03	**352**	**Description** A free-form description to clarify the related data elements and their content	**X AN 1/80**

N1

Segment: **Name**
Position: 220
Loop: N1 Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes:
1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required
Semantic Notes:
Comments:
1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**N101**	**98**	**Entity Identifier Code** Code identifying an organizational entity or a physical location. SF Ship From ST Ship To	**M ID 2/2**
X	**N102**	**93**	**Name** Free-form name	**X AN 1/35**
	N103	**66**	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67) 1 Dun and Bradstreet (Credit Reporting) (DUNS)	**X ID 1/2**
	N104	**67**	**Identification Code** Code identifying a party. DUNS Number	**X AN 2/17**

N2

Segment: **Additional Name Information**
Position: 230
Loop: N1
Level: Detail
Usage: Optional
Max Use: 2
Purpose:
To specify additional names or those longer than 35 characters in length
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	N201	93	**Name** Free-form name	M AN 1/35
	N202	93	**Name** Free-form name	O AN 1/35

HL

Segment: **Hierarchical Level**
Position: 010
Loop: HL Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:
Semantic Notes:
Comments:

1. The HL segment defines a top-down/left-right ordered structure.
2. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction
3. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
4. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
5. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes: Order Level - Primary Metals ONLY

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	HL01	628	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M AN 1/12
	HL02	734	**Hierarchical Parent ID Number** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O AN 1/12
M	HL03	735	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure O Order	M ID 1/2

HL04	**736**	**Hierarchical Child Code** Code indicating whether if there are hierarchical child data segments subordinate to the level being described. Refer to 003020 Data Element Dictionary for acceptable code values	**O**	**ID 1/1**

LIN

Segment: **Item Identification**
Position: 020
Loop: HL Optional
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes:
1 If LIN04 is present, then LIN05 is required.
2 If LIN06 is present, then LIN07 is required.
3 If LIN08 is present, then LIN09 is required.
4 If LIN10 is present, then LIN11 is required.
5 If LIN12 is present, then LIN13 is required.
6 If LIN14 is present, then LIN15 is required.
7 If LIN16 is present, then LIN17 is required.
8 If LIN18 is present, then LIN19 is required.
9 If LIN20 is present, then LIN21 is required.
10 If LIN22 is present, then LIN23 is required.
11 If LIN24 is present, then LIN25 is required.
12 If LIN26 is present, then LIN27 is required.
13 If LIN28 is present, then LIN29 is required.
14 If LIN30 is present, then LIN31 is required.

Semantic Notes:
Comments:
1 See the Data Dictionary for a complete list of ID's.
2 LIN01 is the line item identification
3 LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
X	LIN01	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/11
M	LIN02	235	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buyer's Part Number	M ID 2/2

M	**LIN03**	**234**	**Product/Service ID** Identifying number for a product or service	**M**	**AN 1/20**
	LIN04	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN05	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN06	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN07	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN08	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN09	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN10	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN11	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN12	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN13	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN14	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN15	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**

LIN16	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN17	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN18	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN19	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN20	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN21	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN22	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN23	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN24	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN25	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN26	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN27	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN28	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**

LIN29	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN30	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN31	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**

SN1

Segment: **Item Detail (Shipment)**
Position: 030
Loop: HL Optional
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes: **1** If SN105 is present, then SN106 is required.
Semantic Notes:
Comments: **1** SN101 is the ship notice line item identification.
2 SN103 defines the unit of measurement for both SN102 and SN104

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
X	SN101	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/11
M	SN102	382	**Number of Units Shipped** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M R 1/10
M	SN103	355	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. 24 Theoretical Pounds	M ID 2/2
	SN104	646	**Quantity Shipped to Date** Number of units shipped to date	O R 1/9
X	SN105	330	**Quantity Ordered** Quantity ordered	O R 1/9
X	SN106	355	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. Refer to 003020 Data Element Dictionary for acceptable code values.	X ID 2/2
	SN107	728	**Returnable Container Load Make-Up Code** Code identifying the load make-up of the returnable containers in the shipment Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 1/2
	SN108	668	**Line Item Status Code** Code specifying the action taken by the seller on a line item requested by the buyer Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2

PRF

Segment: **Purchase Order Reference**
Position: 050
Loop: HL Optional
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**PRF01**	**324**	**Purchase Order Number** Identifying number for Purchase Order assigned by the orderer/purchaser	**M AN 1/22**
X	**PRF02**	**328**	**Release Number** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	**O AN 1/30**
X	**PRF03**	**327**	**Change Order Sequence Number** Number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set	**O AN 1/8**
X	**PRF04**	**323**	**Purchase Order Date** Date assigned by the purchaser to Purchase Order	**O DT 6/6**
X	**PRF05**	**350**	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set	**O AN 1/11**
X	**PRF06**	**367**	**Contract Number** Contract number	**O AN 1/30**

CLD

Segment: **Load Detail**
Position: 170
Loop: CLD Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the number of material loads shipped
Syntax Notes:
Semantic Notes:
Comments:
1 The CLD data segment may be used to provide information to aid in the preparation of move tags and/or bar coded labels.
2 CLD05, "Unit of Measure Code," is used to dimension the value given in CLD04, "Size."

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	CLD01	622	**Number of Loads** Number of customer-defined loads shipped by the supplier	M N0 1/5
M	CLD02	382	**Number of Units Shipped** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M R 1/10
	CLD03	103	**Packaging Code** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material Refer to 003020 Data Element Dictionary for acceptable code values.	O AN 5/5
	CLD04	357	**Size** Size of supplier units in pack	O R 1/8
	CLD05	355	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2

HL

Segment: **Hierarchical Level**
Position: 010
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments
Syntax Notes:
Semantic Notes:
Comments:

1. The HL segment defines a top-down/left-right ordered structure.
2. HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction
3. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate
4. HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information
5. HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment

Notes: Item Level

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	HL01	628	**Hierarchical ID Number** A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	M AN 1/12
	HL02	734	**Hierarchical Parent ID Number** Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	O AN 1/12

M	**HL03**	**735**	**Hierarchical Level Code** Code defining the characteristic of a level in a hierarchical structure I Item	**M**	**ID 1/2**
	HL04	**736**	**Hierarchical Child Code** Code indicating whether if there are hierarchical child data segments subordinate to the level being described. Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 1/1**

LIN

Segment: **Item Identification**
Position: 020
Loop: HL Optional
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes:
1 If LIN04 is present, then LIN05 is required.
2 If LIN06 is present, then LIN07 is required.
3 If LIN08 is present, then LIN09 is required.
4 If LIN10 is present, then LIN11 is required.
5 If LIN12 is present, then LIN13 is required.
6 If LIN14 is present, then LIN15 is required.
7 If LIN16 is present, then LIN17 is required.
8 If LIN18 is present, then LIN19 is required.
9 If LIN20 is present, then LIN21 is required.
10 If LIN22 is present, then LIN23 is required.
11 If LIN24 is present, then LIN25 is required.
12 If LIN26 is present, then LIN27 is required.
13 If LIN28 is present, then LIN29 is required.
14 If LIN30 is present, then LIN31 is required.

Semantic Notes:
Comments:
1 See the Data Dictionary for a complete list of ID's.
2 LIN01 is the line item identification
3 LIN02 through LIN31 provide for fifteen (15) different product/service ID's for each item. For Example: Case, Color, Drawing No., UPC No., ISBN No., Model No., SKU.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
X	**LIN01**	**350**	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set	**O AN 1/11**
M	**LIN02**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buyer's Part Number	**M ID 2/2**

M	**LIN03**	**234**	**Product/Service ID** Identifying number for a product or service	**M**	**AN 1/20**
	LIN04	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN05	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN06	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN07	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN08	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN09	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN10	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN11	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN12	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN13	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
	LIN14	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
	LIN15	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**

LIN16	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN17	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN18	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN19	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN20	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN21	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN22	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN23	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN24	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN25	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN26	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN27	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN28	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**

LIN29	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**
LIN30	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234) Refer to 003020 Data Element Dictionary for acceptable code values.	**O**	**ID 2/2**
LIN31	**234**	**Product/Service ID** Identifying number for a product or service	**X**	**AN 1/30**

SN1

Segment: **Item Detail (Shipment)**
Position: 030
Loop: HL Optional
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To specify line-item detail relative to shipment
Syntax Notes: **1** If SN105 is present, then SN106 is required.
Semantic Notes:
Comments: **1** SN101 is the ship notice line item identification.
2 SN103 defines the unit of measurement for both SN102 and SN104

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
X	SN101	350	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/11
M	SN102	382	**Number of Units Shipped** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M R 1/10
M	SN103	355	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. CO for primary metals	M ID 2/2
	SN104	646	**Quantity Shipped to Date** Number of units shipped to date CUM quantity shipped for this model year, including this ASN	O R 1/9
	SN105	330	**Quantity Ordered** Quantity ordered	O R 1/9
	SN106	355	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. Refer to 003020 Data Element Dictionary for acceptable code values.	X ID 2/2
	SN107	728	**Returnable Container Load Make-Up Code** Code identifying the load make-up of the returnable containers in the shipment Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 1/2
	SN108	668	**Line Item Status Code** Code specifying the action taken by the seller on a line item requested by the buyer Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2

PRF

Segment: **Purchase Order Reference**
Position: 050
Loop: HL Optional
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**PRF01**	**324**	**Purchase Order Number** Identifying number for Purchase Order assigned by the orderer/purchaser	**M AN 1/22**
X	**PRF02**	**328**	**Release Number** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	**O AN 1/30**
X	**PRF03**	**327**	**Change Order Sequence Number** Number assigned by the orderer identifying a specific change or revision to a previously transmitted transaction set	**O AN 1/8**
X	**PRF04**	**323**	**Purchase Order Date** Date assigned by the purchaser to Purchase Order	**O DT 6/6**
X	**PRF05**	**350**	**Assigned Identification** Alphanumeric characters assigned for differentiation within a transaction set	**O AN 1/11**
X	**PRF06**	**367**	**Contract Number** Contract number	**O AN 1/30**

MEA

Segment: **Measurements**
Position: 80
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 40
Purpose: To specify physical measurements, including dimension tolerances, weights and counts.

Syntax Notes:
1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
2 If MEA03 is present, then MEA04 is required
3 If MEA05 is present, then MEA04 is required.
4 If MEA06 is present, then MEA04 is required.
5 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
6 Only one of MEA08 or MEA03 may be present.

Semantic Notes:
Comments:
1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value

Notes: Primary Metals ONLY
MEA*PD*WT*1231*01

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
	MEA01	**737**	**Measurement Reference ID Code** Code specifying the application of physical measurement cited. PD Physical Dimensions	**O ID 2/2**
	MEA02	**738**	**Measurement Qualifier** Code identifying the type of measurement. G Gross Weight N Actual Net Weight	**O ID 1/3**
	MEA03	**739**	**Measurement Value** The value of the measurement	**X R 1/10**
	MEA04	**355**	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. LB Pound, KG Kilogram	**X ID 2/2**
X	**MEA05**	**740**	**Range Minimum** The value specifying the minimum of the measurement range	**X R 1/10**

X	MEA06	741	**Range Maximum** The value specifying the maximum of the measurement range	X	R 1/10
X	MEA07	935	**Measurement Significance Code** Code used to benchmark, qualify or further define a measurement value Refer to 003020 Data Element Dictionary for acceptable code values.	O	ID 2/2
X	MEA08	936	**Measurement Attribute Code** Code used to express an attribute response when a numeric measurement value cannot be determined Refer to 003020 Data Element Dictionary for acceptable code values	X	ID 2/2
X	MEA09	752	**Surface/Layer/Position Code** Code indicating the product surface, layer or position that is being described Refer to 003020 Data Element Dictionary for acceptable code values	O	ID 2/2

REF

Segment: **Reference Numbers**
Position: 150
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 200
Purpose: To specify identifying numbers.
Syntax Notes: **1** At least one of REF02 or REF03 is required.
Semantic Notes:
Comments: Primary Metals ONLY

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	**REF01**	**128**	**Reference Number Qualifier** Code qualifying the Reference Number. HC Heat Code LS Bar-Coded Serial Number	**M ID 2/2**
	REF02	**127**	**Reference Number** Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.	**X AN 1/30**
X	**REF03**	**352**	**Description** A free-form description to clarify the related data elements and their content	**X AN 1/80**

CLD

Segment: **Load Detail**
Position: 170
Loop: CLD Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the number of material loads shipped
Syntax Notes:
Semantic Notes:
Comments:
1 The CLD data segment may be used to provide information to aid in the preparation of move tags and/or bar coded labels.
2 CLD05, "Unit of Measure Code," is used to dimension the value given in CLD04, "Size."

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	CLD01	622	**Number of Loads** Number of customer-defined loads shipped by the supplier	M N0 1/5
M	CLD02	382	**Number of Units Shipped** Numeric value of units shipped in manufacturer's shipping units for a line item or transaction set	M R 1/10
	CLD03	103	**Packaging Code** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material Refer to 003020 Data Element Dictionary for acceptable code values.	O AN 5/5
X	CLD04	357	**Size** Size of supplier units in pack	O R 1/8
X	CLD05	355	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. Refer to 003020 Data Element Dictionary for acceptable code values.	O ID 2/2

REF

Segment: **Reference Numbers**
Position: 150
Loop: HL Mandatory
Level: Detail
Usage: Mandatory
Max Use: 200
Purpose: To specify identifying numbers.
Syntax Notes: **1** At least one of REF02 or REF03 is required.
Semantic Notes:
Comments: Primary Metals ONLY

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
M	**REF01**	**128**	**Reference Number Qualifier**		**M ID 2/2**
			Code qualifying the Reference Number.		
			LS	Bar-Coded Serial Number	
	REF02	**127**	**Reference Number**		**X AN 1/30**
			Reference number or identification number as defined for a particular Transaction Set, or as specified by the Reference Number Qualifier.		
	REF03	**352**	**Description**		**X AN 1/80**
			A free-form description to clarify the related data elements and their content		

CTT

Segment: **Transaction Totals**
Position: 010
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes:
1 If CTT03 is present, then CTT04 is required.
2 If CTT05 is present, then CTT06 is required
Semantic Notes:
Comments:
1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	CTT01	354	**Number of Line Items** Total number of line items in the transaction set	M N0 1/6
	CTT02	347	**Hash Total** Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ------- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.	O R 1/10
	CTT03	81	**Weight** Numeric value of weight	O R 1/8
	CTT04	355	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. Refer to 003020 Data Element Dictionary for acceptable code values.	X ID 2/2
	CTT05	183	**Volume** Value of volumetric measure	O R 1/8

CTT06	**355**	**Unit or Basis for Measurement Code** Code identifying the basic unit of measurement. Refer to 003020 Data Element Dictionary for acceptable code values.	**X**	**ID 2/2**
CTT07	**352**	**Description** A free-form description to clarify the related data elements and their content	**O**	**AN 1/80**

SE

Segment: **Transaction Set Trailer**
Position: 020
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).
Syntax Notes:
Semantic Notes:
Comments: **1** SE is the last segment of each transaction set.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	SE01	96	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments	M N0 1/6
M	SE02	329	**Transaction Set Control Number** Identifying control number assigned by the originator for a transaction set.	M AN 4/9

Example:

```
ISA*00*          *00*          *01*03350          *01*000290
*090226*0914*U*00200*000000160*0*P*\
GS*SH*03350*000290*090226*0914*160*X*003020
ST*856*30288802
BSN*00*30288802*090226*0914
DTM*011*090226*1630
HL*1**S
MEA*PD*N*409*LB
MEA*PD*G*409*LB
TD1*PCS90*0
TD5*B*02*UNPC*LT
TD3*TL**CH1J0H1755
REF*BM*30288802
REF*PK*30288802
N1*SF**01*03350
N1*ST**92*000290
HL*2*1*I
LIN**BP*616108-167A
SN1**600*EA*600
PRF*55025112
HL*3*1*I
LIN**BP*3451R167ABAS
SN1**30*EA*30
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Document Revision

Version	Date	Description	Author
1.0	2009-02-10	Creation	Hans-Ulrich Berger
1.5	2009-09-18	Enhancement	Hans-Ulrich Berger
2.0	2016-Aug-10	Modified JCI or Johnson Controls references to be Adient. Removed JCI logo and added Adient logo.	Hemant Bhardwaj
2.1	2022-Mar-22	Modified Shipper number pattern	Gomichan Paul George