FLEX N GATE

EDI IMPLEMENTATION GUIDE

856 ADVANCED SHIP NOTICE
REGULAR (NON-RAW METAL)

ANSI X12 V4010

856 Ship Notice/Manifest

Functional Group ID=**SH**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Ship Notice/Manifest Transaction Set (856) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to list the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, and 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.

Suppliers must have the capability of transmitting almost all of the segments and elements described below. There are many other loops, segments and elements that can be used in an AIAG v4010 856 but those are not described in this document. In general, Flex-N-Gate can successfully receive any AIAG-compliant data, but the Flex-N-Gate software will only process and use the below entries described.

The far left column below describes Flex-N-Gate's requirements. Again, almost every segment and element in this 856 will be marked "Always", indicating that it must be sent in every 856, and that it must be sent in the specified loops. The few exceptions to these rules will be noted in the comments.

Please note that Flex-N-Gate will use the BSN02 (Shipment ID) as a packing slip number. REF*BM and REF*PK can be transmitted in the 856, but the Flex-N-Gate software will ignore these segments. Ideally, suppliers will use the same value for SID, BOL, Packing Slip, and invoice.

REVISIONS:

1) 02/15/2024
    a. Updated the HLTare Level repeat loop 200000
2) 09/14/2022
    a. Updated the BSN02 and overall length
    b. Updated the REF PK notes
3) 07/09/2019
    a. Added the fact that we prefer the ASN and invoice be the same ID.
    b. Updated the BSN02 notes
    c. Mandated the DTM 017#DTM - Expected Date. (will be monitored by some of our facilities going forward)
    d. **TD1 #TD1This should equal the number of containers that hold parts serials not including the masters(i.e. Containers not pallets)**
    e. Added the mandatory REF CN #REF CN after the TD3 for the Carrier pro tracking number. If you have one
    f. Added Tare level #TARE_LIN (LIN package and REF LS) after the shipment level and before the Order level. These segments become Mandatory for Flex-N-Gate facilities **currently this is the serial from the External package label (Master/standalone/mixed).**
    g. Mandated the SN104 #SN104- **Quantity Shipped to Date**
    h. Added 3 samples **(Master/standalone/mixed)** #SAMPLES
    i. **Added EDI packaging Codes # EDI PACKAGING CODES**
    j. Added Note about ASN number
        any character after the 15th will be truncated and could cause a duplicate ASN. An ASN number is a unique supplier-assigned number that cannot repeat within a one-year period. This will be treated as Packing Slip Number in Flex-N-Gate software

Heading:

FNG Usage	Pos. No.	Seg. ID	Name	AIAG Usage	Max.Use	Loop Repeat	Notes and Comments
Always	010	ST	Transaction Set Header	M	1		
Always	020	BSN	Beginning Segment for Ship Notice	M	1		
Always	040	DTM	Date/Time Reference	M	10		

Shipment Level:

FNG Usage	Pos. No.	Seg. ID	Name	AIAG Usage	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID – HL			200000	
Always	010	HL	Hierarchical Level	M	1		c1
Always	080	MEA	Measurements	O	40		
Always	110	TD1	Carrier Details (Quantity and Weight)	O	20		
Always	120	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
Always	130	TD3	Carrier Details (Equipment)	O	12		
			LOOP ID - N1			200	
Always	220	N1	Name	O	1		

Tare Level:

FNG Usage	Pos. No.	Seg. ID	Name	AIAG Usage	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID – HL			1	
Always	010	HL	Hierarchical Level	M	1		
Always	020	LIN	Item package Identification	M	1		
Always	150	REF	Reference Identification	M	1		

Order Level:

FNG Usage	Pos. No.	Seg. ID	Name	AIAG Usage	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID – HL			200000	
Always	010	HL	Hierarchical Level	M	1		c1
Always	020	LIN	Item Identification	M	1		
Always	030	SN1	Item Detail (Shipment)	M	1		
Always	050	PRF	Purchase Order Reference	M	1		
See comments	150	REF	Reference Identification	M	>1		
			LOOP ID – CLD			200	
Always	170	CLD	Load Detail	M	1		
See comments	180	REF	Reference Identification	M	500		

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Always	010	CTT	Transaction Totals	M	1		n1
Always	020	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.

FLEX N GATE

Segment:	**ST** **Transaction Set Header**	
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:	1	The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:		The transaction Set Control Number (ST02) in this header must match the Transaction Set Control Number (SE02) in the Transaction Set Trailer (SE).

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**ST01**	**143**	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set	**M ID 3/3**
			856 Ship Notice/Manifest	
Always	**ST02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**M AN 4/9**

FLEX|N|GATE

Segment:	**BSN** Beginning Segment for Ship Notice	
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:	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

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	BSN01	353	**Transaction Set Purpose Code**	**M ID 2/2**
			Code identifying purpose of transaction set	
			00 Original	
			01 Cancellation	
			05 Replace	
Always	BSN02	396	**Shipment Identification**	**M AN 2/15**
			A unique control number assigned by the original shipper to identify a specific shipment	
			Any character after the 15th will be truncated and could cause a duplicate ASN	
			Unique supplier-assigned number that cannot repeat within a one-year period. This will be treated as Packing Slip Number in Flex-N-Gate software	
Always	BSN03	373	**ASN Date**	**M DT 8/8**
			Date expressed as CCYYMMDD	
Always	BSN04	337	**ASN Time**	**M TM 4/8**
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	

FLEX N GATE

Segment:	**DTM** Date/Time Reference
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM05 is required.
	2 If DTM04 is present, then DTM03 is required.
Semantic Notes:	1 For DTM04, use valid X12 codes such as ED, ET, CD, CT, etc.
Comments:	**Some of the facilities will monitor the DTM 017 expected date in future.** If you are unsure of this date please verify with the receiving plant if it is required by them

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	DTM01	374	**Date/Time Qualifier**	M ID 3/3
			Code specifying type of date or time, or both date and time	
			011 Shipped date	
			017 Expected date	
Always	DTM02	373	**Ship Date**	X DT 8/8
			Date expressed as CCYYMMDD	
Always	DTM03	337	**Ship Time**	X TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	
Always	DTM04	623	**Shipper's Time Zone Code**	O ID 2/2

Segment: **HL** Hierarchical Level
Loop: HL   Mandatory
Level: Detail -- Shipment
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 is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
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.

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**HL01**	**628**	**Hierarchical ID Number**	**M AN 1/12**
			A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
			Use "1" for this occurrence of the HL at the shipment level, increment by 1 for each subsequent HL segment within the transaction.	
Always	**HL03**	**735**	**Hierarchical Level Code**	**M ID 1/2**
			Code defining the characteristic of a level in a hierarchical structure	
			S Shipment	

Segment: **MEA** Measurements

Loop:	HL Mandatory
Level:	Detail -- Shipment
Usage:	Optional
Max Use:	40
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights

Syntax Notes:

Semantic Notes: 1   MEA04 defines the unit of measure for MEA03

Comments:

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes	
Always	MEA01	737	**Measurement Reference ID Code**	O	ID 2/2
			Code identifying the broad category to which a measurement applies		
			PD Physical Dimensions		
Always	MEA02	738	**Measurement Qualifier**	O	ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies		
			G Gross Weight		
			N Actual Net Weight		
Always	MEA03	739	**Measurement Value**	X	R 1/20
			The value of the measurement		
Always	MEA04	355	**Unit or Basis for Measurement Code**	M	ID 2/2
			To identify a composite unit of measure.		
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			Use any valid X12 measurement code		

FLEX | N | GATE

Segment:	**TD1** Carrier Details (Quantity and Weight)	
Loop:	HL Mandatory	
Level:	Detail -- Shipment	
Usage:	Optional	
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.	
Semantic Notes:		
Comments:	<mark>This should equal the number of containers that hold parts serials not including the masters (i.e. Containers not pallets)</mark>	

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**TD101**	**103**	**Packaging Code** Code identifying the type of packaging	O AN 3/5
			Use any valid X12 packaging code.	
Always	**TD102**	**80**	**Lading Quantity** Number of units (pieces) of the lading commodity	X N0 1/7

FLEX N GATE

Segment:	**TD5** Carrier Details (Routing Sequence/Transit Time)	
Loop:	HL Mandatory	
Level:	Detail -- Shipment	
Usage:	Optional	
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 TD505 TD506 or TD512 is required.	
	2 If TD502 is present, then TD503 is required.	
	3 If TD507 is present, then TD508 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

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**TD501**	133	**Routing Sequence Code** O ID 1/2	
			Code describing the relationship of a carrier to a specific shipment movement	
			B Origin/Delivery Carrier (Any Mode)	
Always	**TD502**	66	**Identification Code Qualifier** X ID 1/2	
			Code designating the system/method of code structure used for Identification Code (67)	
			2 Standard Carrier Alpha Code (SCAC)	
Always	**TD503**	67	**Identification Code** X AN 2/80	
			Code identifying a party or other code	
			Use SCAC code of trucking company	
Always	**TD504**	91	**Transportation Method/Type Code** X ID 1/2	
			Code specifying the method or type of transportation for the shipment	
			Any valid X12 code except mutually defined "ZZ".	
Always	**TD507**	309	**Location Qualifier** O ID 1/2	
			Code identifying type of location	
			If TD504 = 'A', use code value "OR", meaning Origin (Shipping Point).	
			OR Origin (Shipping Point)	
			PP Pool Point	
Always	**TD508**	310	**Location Identifier** X AN 1/30	
			Code which identifies a specific location	
			Give pool code if TD507 is "PP"; give airport code identifier if TD507 is "OR" for an air shipment (i.e. DTW = Detroit Metro Airport).	

FLEX N GATE

Segment:	**TD3** Carrier Details (Equipment)		
Loop:	HL Mandatory		
Level:	Detail -- Shipment		
Usage:	Optional		
Max Use:	12		
Purpose:	To specify transportation details relating to the equipment used by the carrier		
Syntax Notes:	1 Only one of TD301 or TD310 may be present.		
	2 If TD302 is present, then TD303 is required.		
Semantic Notes:			
Comments:	**The Carrier Pro tracking number is put in the REF CN segment.**		

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**TD301**	**40**	**Equipment Description Code**	**X ID 2/2**
			Code identifying type of equipment used for shipment	
			Any valid X12 code except mutually defined.	
Always	**TD302**	**206**	**Equipment Initial**	**O AN 1/4**
			Prefix or alphabetic part of an equipment unit's identifying number	
Always	**TD303**	**207**	**Equipment Number**	**X AN 1/10**
			Sequencing or serial part of an equipment unit's identifying number (pure numeric form for equipment number is preferred)	

Segment: **REF** Reference Identification

Loop:	HL Mandatory
Level:	Detail -- Shipment
Usage:	Optional
Max Use:	>1
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
Semantic Notes:	
Comments:	1 while it is very common for a Bill of Lading and Packing List to be sent in the REF02 at this level, the Flex-N-Gate software will not process this segment. Please see the 830 introductory comments.

The "CN" is a mandatory ref segment for the carrier pro tracking number. If you have one

The "PK" is an Optional ref segment for the packing slip if you do not map this then the ASN number BSN02 will be used.

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
See comments	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification	**M ID 2/3**
			AW Air Waybill Number	
			FR Freight Bill	
			PK Packing List Number	
			CN Carrier pro tracking number	
See comments	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**

Segment:	**N1** Name	
Loop:	HL/N1 **Repeat:** 200	
Level:	Detail -- Shipment	
Usage:	Optional	
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:	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.	
	This means that what we send you on the 830 needs to be returned…	
	N1 SU is a mandatory qualifier/ID this should match your GS segment as well as your Label Supplier ID	

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**N101**	**98**	**Entity Identifier Code**	**M ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual	
			ST Ship To	
			SU Supplier/Manufacturer	
			SF Ship From	
Always	**N102**	**93**	**Name**	**X AN 1/60**
			Free-form name	
Always	**N103**	**66**	**Identification Code Qualifier**	**X ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)	
			1 D-U-N-S Number, Dun & Bradstreet	
Always	**N104**	**67**	**Identification Code**	**X AN 2/80**
			Code identifying a party or other code	
			This should match your GS segment unless otherwise directed/required. This is the same Supplier ID that is on the Label	

FLEX N GATE

Segment:	<mark>**HL** Hierarchical Level</mark>
<mark>**Loop:**</mark>	<mark>HL **Repeat:** 200000</mark>
<mark>**Level:**</mark>	<mark>Detail -- Tare</mark>
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 is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
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.

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**HL01**	628	**Hierarchical ID Number**	**M AN 1/12**
			A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
			Use "1" for this occurrence of the HL at the shipment level, increment by 1 for each subsequent HL segment within the transaction.	
Always	**HL02**	734	**Hierarchical Parent ID Number**	**O AN 1/12**
			Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	
Always	**HL03**	735	**Hierarchical Level Code**	**M ID 1/2**
			Code defining the characteristic of a level in a hierarchical structure	
			T Tare	

Segment:	<mark>**LIN** Item Identification</mark>
Loop:	<mark>HL</mark>
Level:	<mark>Detail – Tare</mark>
Usage:	Mandatory
Max Use:	1
Purpose:	To specify basic item identification data
Comments:	1 See the Data Dictionary for a complete list of IDs.
	2 LIN02 through LIN3 provide the Master Packaging Code
Example of LIN:	

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	LIN02	235	**Product/Service ID Qualifier**	**M ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			PG Packaging Code	
Always	LIN03	234	**Product/Service ID**	**M AN 1/48**
			Identifying number for a product or service	

Segment:	==**REF** Reference Identification==
Loop:	==HL- repeat:1==
Level:	==Detail -- Tare==
Usage:	Mandatory
Max Use:	12
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 is required.

Semantic Notes:

Comments: 1==**This segment becomes Mandatory for Flex-N-Gate facilities. This is the serial from the External package label (Master/standalone/mixed).**==

==REF LS ensure that the "S" is not included as part of the ASN.==
==Should be imbedded in the Serial Barcode of the LABEL only.==

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes	
See comments	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			LS Bar-Coded Serial Number for External package		
			Provide the Serial bar code label information at the Tare Level.		
See comments	REF02	127	**Reference Identification**	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

Segment: **HL** **Hierarchical Level**
Loop: HL   **Repeat:** 200000
Level: Detail -- Order
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 is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
    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.

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**HL01**	**628**	**Hierarchical ID Number**	**M AN 1/12**
			A unique number assigned by the sender to identify a particular data segment in a hierarchical structure	
			Use "1" for this occurrence of the HL at the shipment level, increment by 1 for each subsequent HL segment within the transaction.	
Always	**HL02**	**734**	**Hierarchical Parent ID Number**	**O AN 1/12**
			Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to	
Always	**HL03**	**735**	**Hierarchical Level Code**	**M ID 1/2**
			Code defining the characteristic of a level in a hierarchical structure	
			O Order	

Segment:		**LIN** Item Identification		
Loop:	HL			
Level:	Detail – Order			
Usage:	Mandatory			
Max Use:	1			
Purpose:	To specify basic item identification data			
Comments:	**1**	See the Data Dictionary for a complete list of IDs.		
	2	LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU		
	3	While it is very common for a Purchase Order Number to be sent in the LIN05, the Flex-N-Gate software will not use this element. Only the PO# in PRF01 is used.		

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**LIN02**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	**M ID 2/2**
			BP Buyer's Part Number	
			RC Returnable container code	
Always	**LIN03**	**234**	**Product/Service ID** Identifying number for a product or service	**M AN 1/48**
See comments	**LIN04**	**235**	**Product/Service ID Qualifier** Code identifying the type/source of the descriptive number used in Product/Service ID (234)	**X ID 2/2**
			VP Vendor part number	
			PO Purchase Order (also must be in the PRF segment)	
			EC Engineering change	
See comments	**LIN05**	**234**	**Product/Service ID** Identifying number for a product or service	**X AN 1/48**
			LIN06 through LN31 provide for 13 additional pairs of data elements 235 and 234.	

Segment: **SN1** Item Detail (Shipment)

Loop:	HL
Level:	Detail -- Order
Usage:	Optional
Max Use:	1
Purpose:	To specify line-item detail relative to shipment
Syntax Notes:	1 If either SN105 or SN106 is present, then the other is required.
Semantic Notes:	1 SN101 is the ship notice line-item identification.
Comments:	1 SN103 defines the unit of measurement for both SN102 and SN104.

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	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**
Always	SN103	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken This must be the same Unit of Measure sent in the corresponding 830, in the UIT01.	**M ID 2/2**
Always	SN104	646	**Quantity Shipped to Date** Number of units shipped to date, including this shipment	**M R 1/15**
Conditional	SN106	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Use any valid X12 code except mutually defined, "ZZ".	**X ID 2/2**

Segment: **PRF** Purchase Order Reference
Loop: HL
Level: Detail -- Order
Usage: Optional
Max Use: 1
Purpose: To provide reference to a specific purchase order
Syntax Notes:
Semantic Notes: **1**   PRF04 is the date assigned by the purchaser to purchase order.
Comments:

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**PRF01**	**324**	**Purchase Order Number**	**M AN 1/22**
			Identifying number for Purchase Order assigned by the orderer/purchaser	
			Use PO number from releasing document.	

FLEX N GATE

Segment:	**CLD** Load Detail
Loop:	HL/CLD
Level:	Detail -- Order
Usage:	Optional
Max Use:	500
Purpose:	To specify the number of material loads shipped
Syntax Notes:	
Semantic Notes:	
Comments:	This segment will transmit the total number of material loads shipped for the preceding Order Level LIN. There may be multiple depending on the shipment.

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	CLD01	622	**Number of Loads** Number of containers shipped by the supplier	**M N0 1/5**
Always	CLD02	382	**Number of Units Shipped** Numeric value of units shipped in manufacturer's container for a line item or transaction set Total quantity per container.	**M R 1/10**
Always	CLD03	103	**Packaging Code** Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required Any valid X12 code except mutually defined, "ZZ".	**O AN 3/5**

Revision Date: 02/15/2024 Rev#13.01   Page | 22   ANSI X12 version 4010

1Segment:	**REF** Reference Identification
Loop:	CLD Optional
Level:	Detail -- Order
Usage:	Mandaory
Max Use:	500
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
Semantic Notes:	
Comments:	**This segment becomes Mandatory for some Flex-N-Gate facilities**
	None of our facilities currently use Master Labels the ref LS should
	Be the container labels for the parts.
	REF 03 is Mandatory for some of the plants that require the LT.the actual lot
	number is a SUB element of the REF 03 and must be accompanied by a LS
	serial

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name		Attributes
Always	REF01	128	Reference Identification Qualifier	M ID 2/3	
			Code qualifying the Reference Identification		
			Provide the Serial bar code label information at the Order Level.		
			LS Bar-Coded Serial Number		
Always	REF02	127	Reference Identification	X AN 1/22	
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Indicate the Barcode Serial Number.		
NOTES:			For the REF LS, ensure that the qualifiers are not included as part of the ASN. They should be imbedded in the Serial Barcode of the LABEL only.		
condition	REF03	127	Reference Identification	X AN 1/22	
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier. This will have a sub element of the actual Lot number		
			LT Lot Number then add sub element		
condition	REF04	127	Reference Identification	X AN 1/22	
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Indicate the Barcode Serial lot Number.		
NOTES:			REF LT if the plant you are sending to mandates a Lot number it must be after the Serial. If no serials then no lot number can be sent.		

FLEX N GATE

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

Data Element Summary

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	CTT01	354	**Number of Line Items** Total number of line items in the transaction set	M N0 1/6
			Total number of HL segments.	
Always	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
			Hash total of quantity shipped (SN102).	

FLEX N GATE

Segment:	**SE** Transaction Set Trailer
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

FNG Usage	Ref. Des.	Data Element	Name	Attributes
Always	**SE01**	**96**	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments	**M N0 1/10**
Always	**SE02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**M AN 4/9**

SAMPLES
Sample MIXED 856:
4 Containers on 1 master PALLET with 2 part numbers
ISA*00*   *00*   *01*VENDDUNS#   *ZZ*OURDUNS#   *190607*1634*U*00401*000000154*0*P*:
GS*SH*VENDDUNS#*OURDUNS#*20190607*1634*154*X*004010.
ST*856*0001.
BSN*00*mixed 2*20190607*1634.
DTM*011*20190607*1534*CD.
        HL*1**S.
        MEA*PD*G*1494*LB.
        MEA*PD*N*1436*LB.
        TD1*CTN90*4.
        TD5*B*2*ODFL*M***PP*32053.
        TD3*TL*ODFL*1.
        REF*BM*A74580.
        REF*PK*A74580.
        REF*CN*CARRPROREF.
        N1*ST*FLEX-N-GATE N GATE ADV*1*OURDUNS#.
        N1*SU*Vendor Name*1*VENDDUNS#.
                HL*2*1*T.
                LIN**PG*PLT090.
                REF*LS*MST2081477.
                        HL*3*1*O.
                        LIN**BP*X0820483.
                        SN1**4000*EA*226000.
                        PRF*18400.
                                CLD*2*2000*CTN90.
                                REF*LS*ZC22081475.
                                REF*LS*ZC22081474.
                        HL*4*1*O.
                        LIN**BP*X0820480.
                        SN1**2400*EA*433200.
                        PRF*18400.
                                CLD*2*1200*CTN90.
                                REF*LS*ZC22081399.
                                REF*LS*ZC22081398.
CTT*4*6400.
SE*32*0001.
GE*1*154.
IEA*1*000000154.

Sample MASTER 856:

4 Containers on 2 master PALLET with each having 1 part number

```
ISA*00*      *00*      *01*VENDDUNS#    *ZZ*OURDUNS#     *190607*1634*U*00401*000000154*0*P*:.
GS*SH*VENDDUNS#*OURDUNS#*20190607*1634*154*X*004010.
ST*856*0001.
BSN*00*master2*20190607*1634.
DTM*011*20190607*1534*CD.
        HL*1**S.
        MEA*PD*G*1494*LB.
        MEA*PD*N*1436*LB.
        TD1*CTN90*4.
        TD5*B*2*ODFL*M***PP*32053.
        TD3*TL*ODFL*1.
        REF*BM*A74580.
        REF*PK*A74580.
        REF*CN*CARRPROREF.
        N1*ST*FLEX-N-GATE N GATE ADV*1*OURDUNS#.
        N1*SU* Vendor Name*1*VENDDUNS#.
                HL*2*1*T.
                LIN**PG*PLT090.
                REF*LS*MST2081478.
                        HL*3*1*O.
                        LIN**BP*X0820483.
                        SN1**4000*EA*226000.
                        PRF*4000.
                                CLD*2*2000*CTN90.
                                REF*LS*ZC22081477.
                                REF*LS*ZC22081476.
                HL*4*1*T.
                LIN**PG*PLT090.
                REF*LS*MST0820480.
                        HL*5*1*O.
                        LIN**BP*X0820480.
                        SN1**2400*EA*433200.
                        PRF*18400.
                                CLD*2*1200*CTN90.
                                REF*LS*ZC22081401.
                                REF*LS*ZC22081400.
CTT*5*6400.
SE*35*0001.
GE*1*154.
IEA*1*000000154.
```

Sample STANDALONE 856:

2 Containers on 2 master PALLET with each having 1 part number the TARE REF LS and the CLD REF LS should be equal as well as lot number "999999999**".**

```
ISA*00*      *00*      *01*VENDDUNS#    *ZZ*OURDUNS#     *190607*1634*U*00401*000000154*0*P*:.
GS*SH*VENDDUNS#*OURDUNS#*20190607*1634*154*X*004010.
ST*856*0001.
BSN*00*stand2*20190607*1634.
DTM*011*20190607*1534*CD.
          HL*1**S.
          MEA*PD*G*1494*LB.
          MEA*PD*N*1436*LB.
          TD1*CTN90*3.
          TD5*B*2*ODFL*M***PP*32053.
          TD3*TL*ODFL*1.
          REF*BM*A74580.
          REF*PK*A74580.
          REF*CN*CARRPROREF.
          N1*ST*FLEX-N-GATE N GATE ADV*1*OURDUNS#.
          N1*SU*Vendor Name*1*VENDDUNS#.
                    HL*2*1*T.
                    LIN**PG*PLT090.
                    REF*LS*ZC22081523.
                              HL*3*1*O.
                              LIN**BP*X0820483.
                              SN1**32000*EA*226000.
                              PRF*18400.
                                        CLD*16*2000*CTN90.
                                        REF*LS*ZC22081523*LT:999999999.
                    HL*4*1*T.
                    LIN**PG*PLT090.
                    REF*LS*ZC22081525.
                              HL*5*1*O.
                              LIN**BP*X0820480.
                              SN1**86400*EA*433200.
                              PRF*18400.
                                        CLD*72*1200*CTN90.
                                        REF*LS*ZC22081525*LT:999999999.
CTT*5*118400.
SE*33*0001.
GE*1*154.
IEA*1*000000154.
```

FLEX|N|GATE

EDI Packaging codes

Table 103 Container Types (Packaging Codes X.12 element 103)	
Code	Definition
BIN52	Bin - Iron or Steel
BIN79	Bin - Plastic
BOX25	Box - Corrugated or Solid
BOX79	Box - Plastic
CRT71	Crate
CTN25	Carton - Corrugated or Solid
MIX90	Mixed Container Types
PLT71	Pallet
PLT79	Pallets - Plastic
RCK58	Rack - Metal
SKD71	Skid

ASC X12 004010

103 Packaging Code

TYPE=AN MIN=3 MAX=5

Code identifying the type of packaging; Part 1: Packaging Form, Part 2: Packaging Material; if the Data Element is used, then Part 1 is always required

AMM	Ammo Pack
AMP	Ampoule
ATH	Attachment
BAG	Bag
BAL	Bale
BBL	Barrel
BDG	Banding
BDL	Bundle
BEM	Beam
BIC	Bing Chest
BIN	Bin
BLK	Bulk
BLT	Belting
BOB	Bobbin
BOT	Bottle
BOX	Box
BRC	Bracing
BRG	Barge
BSK	Basket or hamper
BXI	Box, with inner container
BXT	Bucket
CAB	Cabinet
CAG	Cage
CAN	Can
CAR	Carrier
CAS	Case
CBC	Containers of Bulk Cargo
CBY	Carboy
CCS	Can Case
CHE	Cheeses
CHS	Chest
CLD	Car Load, Rail
CNA	Household Goods Container, Wood
CNB	Container, MAC-ISO, LT. WGT. 8x8x20 Foot Air
CNC	Container, Navy Cargo Transporter
CND	Container, Commercial Highway Lift
CNE	Container, Engine
CNF	Container, Multi-walled, Secured to Warehouse Pallet
CNT	Container
COL	Coil
CON	Cones

COR	Core
CRD	Cradle
CRF	Corner Reinforcement
CRT	Crate
CSK	Cask
CTN	Carton
CX2	CONEX
CYL	Cylinder
DBK	Dry Bulk
DRK	Double-length Rack
DRM	Drum
DSK	Double-length Skid
DTB	Double-length Tote Bin
DUF	Duffelbag
EGG	Egg Crating
ENV	Envelope
EPR	Edge Protection
FIR	Firkin
FLO	Flo-bin
FRM	Frame
FSK	Flask
FWR	Forward Reel
HED	Heads of Beef
HGH	Hogshead
HPR	Hamper
HPT	Hopper Truck
HRB	On Hanger or Rack in Boxes
HRK	Half-Standard Rack
HTB	Half-Standard Tote Bin
INT	Intermediate Container
JAR	Jar
KEG	Keg
KIT	Kit
KRK	Knockdown Rack
KTB	Knockdown Tote Bin
LBK	Liquid Bulk
LID	Lip/Top
LIF	Lifts
LNR	Liners
LOG	Log
LSE	Loose

LUG	Lug
LVN	Lift Van
MIX	Mixed Container Types
ML2	MILVAN
MRP	Multi-Roll Pack
MS2	MSCVAN
MXD	Mixed
NOL	Noil
PAF	Pallet - 4 Way
PAL	Pail
PAT	Pallet - 2 Way
PCK	Packed - not otherwise specified
PCS	Pieces
PIR	Pirns
PKG	Package
PLC	Primary Lift Container
PLF	Platform
PLN	Pipeline
PLT	Pallet
POV	Private Vehicle
PRK	Pipe Rack
PRT	Partitioning
PWT	Plastic-Wrapped Tray
QTR	Quarter of Beef
RAL	Rail (Semiconductor)
RCK	Rack
REL	Reel
RFT	Reinforcement
ROL	Roll
RVR	Reverse Reel
SAK	Sack
SCS	Suitcase
SHK	Shook
SHT	Sheet
SID	Side of Beef
SKD	Skid
SKE	Skid, elevating or lift truck
SLP	Slip Sheet
SLV	Sleeve
SPI	Spin Cylinders
SPL	Spool

SPR	Separator/Divider
SRW	Shrink Wrap
STW	Stretch Wrap
SV2	SEAVAN
TBE	Tube
TBN	Tote Bin
TKR	Tank Car
TKT	Tank Truck
TLD	Intermodal Trailer/Container Load (Rail)
TNK	Tank
TRC	Tierce
TRK	Trunk and Chest
TRU	Truck
TRY	Tray
TSS	Trunk, Salesmen Sample
TUB	Tub
UNP	Unpacked
UNT	Unit
VEH	Vehicles
VIL	Vial
VOC	Vehicle in Operating Condition
VPK	Van Pack
WHE	On Own Wheel
WLC	Wheeled Carrier
WRP	Wrapped
01	Aluminum
04	As Specified by the DOT
07	Burlap
10	Chemically Hardened Fibre
13	Cloth
16	Cloth Top
19	Cloth or Fabric
22	Compressed
25	Corrugated or Solid
28	Double-wall Paper
31	Fibre
34	Fibre (Paperboard)
37	Fiberboard
40	Fiberboard Metal
43	Glass
46	In Inner Containers

48	Wire/Cord
49	Insulated
50	Steel - Vinyl Coated
51	Wire Mesh
52	Iron or Steel
53	Jumbo
54	Special Jumbo
55	Lead
58	Metal
59	Metal Cans
61	Moisture Resistant
64	Molded Plastic
67	Multiple-wall Paper (2 or more walls)
70	Multiple-wall Paper (3 or more walls)
71	Not Otherwise Specified
72	Paper - VCI
73	Other than Glass
74	Other than Metal or Plastic Tubes, or Glass
75	Plastic - Vacuum Formed
76	Paper
77	Plastic - Structural Foam
78	Plastic - Injection Molded
79	Plastic
80	Polyethylene Lined
81	Plastic - Virgin
82	Pulpboard
83	Plastic - Regrind
84	Polystyrene
85	Rubber
86	Foam
88	Rubber and Fabric
89	Special
90	Standard
91	Stainless Steel
92	Tubes, Metal or Plastic
94	Wood
95	Single Wall Corrugated Board
96	Double Wall Corrugated Board
97	Triple Wall Corrugated Board