

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 <u>any</u> 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) 09/14/2022

- **a.** Updated the <u>BSN02</u> and overall length
- **b.** Updated the <u>REF PK</u> notes

2) 07/09/2019

- **a.** Added the fact that we prefer the ASN and invoice be the same ID.
- **b.** Updated the <u>BSN02</u> notes
- c. Mandated the DTM 017<u>#DTM</u> Expected Date. (will be monitored by some of our facilities going forward)
- d. TD1 <u>**#TD1</u>**This should equal the number of containers that hold parts serials not including the masters(i.e. Containers not pallets)</u>
- e. Added the mandatory REF CN <u>#REF CN</u> after the TD3 for the Carrier pro tracking number.
- f. Added Tare level <u>#TARE LIN</u> (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 <u>#SN104</u>- Quantity Shipped to Date
- h. Added 3 samples (Master/standalone/mixed) <u>#SAMPLES</u>
- i. Added EDI packaging Codes <u># EDI PACKAGING CODES</u>
- 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 <u>Usage</u> Always	Pos. <u>No.</u> 010	Seg. <u>ID</u> ST	<u>Name</u> Transaction Set Header	AIAG <u>Usage</u> M	<u>Max.Use</u> 1	Loop <u>Repeat</u>	Notes and <u>Comments</u>
Always	020	BSN	Beginning Segment for Ship Notice	М	1		
Always	040	DTM	Date/Time Reference	М	10		

Shipment Level:

FNG <u>Usage</u>	Pos. <u>No.</u>	Seg. <u>ID</u>	<u>Name</u> LOOP ID – HL	AIAG <u>Usage</u>	<u>Max.Use</u>	Loop <u>Repeat</u> 200000	Notes and <u>Comments</u>
A 1	010	HL	Hierarchical Level	М	1	200000	-1
Always	010 080	HL MEA	Measurements	M O	40		c1
Always		MEA TD1					
Always	110 120	TD1 TD5	Carrier Details (Quantity and Weight)	0 0	20 12		
Always	120	105	Carrier Details (Routing Sequence/Transit Time)	0	12		
Always	130	TD3	Carrier Details (Equipment)	0	12		
			LOOP ID - N1			200	
Always	220	N1	Name	0	1		
<u>Tare L</u>	evel:						
FNG	Pos.	Seg.		AIAG		Loop	Notes and
<u>Usage</u>	<u>No.</u>	<u>ID</u>	Name	<u>Usage</u>	<u>Max.Use</u>	<u>Repeat</u>	<u>Comments</u>
			LOOP ID – HL			1	
Always	010	HL	Hierarchical Level	М	1		
Always	020	LIN	Item package Identification	М	1		
Always	150	REF	Reference Identification	М	1		
Order	Level	<u> </u>					
FNG	Pos.	Seg.		AIAG		Loop	Notes and
<u>Usage</u>	<u>No.</u>	<u>ID</u>	Name	<u>Usage</u>	<u>Max.Use</u>	<u>Repeat</u>	Comments
			LOOP ID – HL			200000	
Always	010	HL	Hierarchical Level	М	1		c1
Always	020	LIN	Item Identification	М	1		
Always	030	SN1	Item Detail (Shipment)	М	1		
Always	050	PRF	Purchase Order Reference	М	1		
See comm	ents 150	REF	Reference Identification	М	>1		

See comments 180 Summary:

Always

A 1	Pos. <u>No.</u> 010	Seg. <u>ID</u>	<u>Name</u> Transaction Totals	Req. <u>Des.</u> M	Max.Use	Loop <u>Repeat</u>	Notes and <u>Comments</u>
Always Always	020	CTT SE	Transaction Set Trailer	M M	1		nl

Μ

М

Transaction Set Notes

170

CLD

REF

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.

LOOP ID – CLD

Reference Identification

Load Detail

200

1

500



	Segment:	ST т	ransaction Set Header		
	Loop: Level:	Heading			
	Usage:	Mandato	PT7		
	Max Use:	1	ſÿ		
		-	ate the start of a transaction set and to assign a control number		
S	Purpose:	10 maica	ate the start of a transaction set and to assign a control number		
•	ntax Notes:	1 The	transaction act identifier (ST01) is used by the translation rout	inca of the	
Semantic Notes: Comments:		inter selec The trans	he transaction set identifier (ST01) is used by the translation routines of the terchange partners to select the appropriate transaction set definition (e.g., 810 lects the Invoice Transaction Set). Insaction Set Control Number (ST02) in this header must match the Transaction et Control Number (SE02) in the Transaction Set Trailer (SE).		
Data Element Summary					
FNG	Ref.	Data	·		
<u>Usage</u>	Des.	<u>Element</u>	Name	<u>Attributes</u>	
Always	ST01	143	Transaction Set Identifier Code	M ID 3/3	
			Code uniquely identifying a Transaction Set		
			856 Ship Notice/Manifest		
Always	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the tra functional group assigned by the originator for a transaction		



Segment:	${f BSN}$ 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.

FNG	Ref.	Data		
<u>Usage</u>	Des.	<u>Element</u>	Name	<u>Attributes</u>
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	5N02 396	Shipment Identification A unique control number assigned by the original shipp shipment	M AN 2/15 per to identify a specific
			Any character after the 15 th will be truncated a duplicate ASN Unique supplier-assigned number that cannot repeat wi This will be treated as Packing Slip Number in Flex-N-	ithin a one-year period.
Always	BSN03	373	ASN Date	M DT 8/8
			Date expressed as CCYYMMDD	
Always	BSN04	337	ASN Time Time expressed in 24-hour clock time as follows: HHM HHMMSSD, or HHMMSSDD, where H = hours (00-2 S = integer seconds (00-59) and DD = decimal seconds expressed as follows: D = tenths (0-9) and DD = hundr	3), M = minutes (00-59), s; decimal seconds are

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

FNG	Ref.	Data	Data Elem	nent Summary		
Usage	Des.	Data <u>Element</u>	Name		Att	<u>ributes</u>
Always	DTM01	374	Date/Time Qualifi	ier	Μ	ID 3/3
			Code specifying ty	pe of date or time, or both date and time		
			011	Shipped date		
			<mark>017</mark>	Expected date		
Always	DTM02	373	Ship Date		Х	DT 8/8
			Date expressed as (CCYYMMDD		
Always	DTM03	337	Ship Time		Х	TM 4/8
				Time expressed in 24-hour clock time a	s foll	ows:
				HHMM, or HHMMSS, or HHMMSSD	, or	
				HHMMSSDD, where $H = hours (00-23)$), M	= minutes
				(00-59), S = integer seconds $(00-59)$ and	d DD	= decimal
				seconds; decimal seconds are expressed	as fo	ollows: D =
				tenths $(0-9)$ and DD = hundredths $(00-9)$	9)	
Always	DTM04	623	Shipper's Time Z	one Code	0	ID 2/2



Segmen	t: HL	Hierarchical Level	
Loo		Mandatory	
Leve		Shipment	
Usag			
Max Us			
Purpos	segment	fy dependencies among and the content of hierarchically rela	ted groups of data
Syntax Note			
Semantic Note Comment	s: 1 The struction item The 2 HLC segr num be " subs 3 HLC HL 4 HLC segr HLC	The HL segment is used to identify levels of detail information using a hierarchical tructure, such as relating line-item data to shipment data, and packaging data to line-tem data. The HL segment defines a top-down/left-right ordered structure. 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. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate. 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 Ref.	Data		
Usage Des.	<u>Element</u>	Name	<u>Attributes</u>
Always HL0		Hierarchical ID Number	M AN 1/12
		A unique number assigned by the sender to identify a particular in a hierarchical structure	C
		Use "1" for this occurrence of the HL at the shipment level, each subsequent HL segment within the transaction.	increment by 1 for

 Always
 HL03
 735
 Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure S
 M
 ID 1/2



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:

ENC	Df	D (Data Element Summary		
FNG <u>Usage</u> Always	Ref. <u>Des.</u> MEA01	Data <u>Element</u> 737	<u>Name</u> Measurement Reference ID Code Code identifying the broad category to which a measuremen	0	ributes ID 2/2 ies
			PD Physical Dimensions		
Always	MEA02	738	Measurement QualifierCode identifying a specific product or process characteristicmeasurement appliesGGross Weight	O to wh	ID 1/3 nich a
			N Actual Net Weight		
Always	MEA03	739	Measurement Value The value of the measurement	X	R 1/20
Always	MEA04	355	Unit or Basis for Measurement Code To identify a composite unit of measure.	Μ	ID 2/2
			Code specifying the units in which a value is being expresse which a measurement has been taken Use any valid X12 measurement code	1, or 1	manner in



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:

This should equal the number of containers that hold parts serials not including the masters (i.e. Containers not pallets)

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



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.

FNG <u>Usage</u>	Ref. <u>Des.</u>	Data Element	Name	A ##	<u>ributes</u>
Always	<u>Des.</u> TD501	133	Routing Sequence Code Code describing the relationship of a carrier to a specific shi	0	ID 1/2
			B Origin/Delivery Carrier (Any Mode)		
Always	TD502	66	Identification Code QualifierCode designating the system/method of code structure usedCode (67)22Standard Carrier Alpha Code (SCAC)	X for Id	ID 1/2 entification
Always	TD503	67	Identification Code Code identifying a party or other code	X	AN 2/80
			Use SCAC code of trucking company		
Always	TD504	91	Transportation Method/Type Code Code specifying the method or type of transportation for the	X shipr	ID 1/2 nent
			Any valid X12 code except mutually defined "ZZ".		
Always	TD507	309	Location Qualifier Code identifying type of location	0	ID 1/2
			If TD504 = 'A', use code value "OR", meaning Origin (Ship)	ping F	oint).
			OR Origin (Shipping Point)		
			PP Pool Point		
Always	TD508	310	Location Identifier Code which identifies a specific location	X	AN 1/30
			Give pool code if TD507 is "PP"; give airport code identifies for an air shipment (i.e. DTW = Detroit Metro Airport).	r if TI	0507 is "OR"



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.					

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

t: REF	Reference Identification
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	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. The "PK" is an Optional ref segment for the packing slip if you do not map this then the ASN number <u>BSN02</u> will be used.

			Data	Element Summary		
FNG	Ref.	Data				
<u>Usage</u>	Des.	<u>Element</u>	<u>Name</u>		Att	ributes
See comments	REF01	128		entification Qualifier	Μ	ID 2/3
			Code qualifyi	ng the Reference Identification		
			AW	Air Waybill Number		
			FR	Freight Bill		
			РК	Packing List Number		
			CN	Carrier pro tracking number		
See comments	REF02	127	Reference Id	entification	Х	AN 1/30
				ormation as defined for a particular Transactio he Reference Identification Qualifier	n Set o	or as



Sema	Segment: Loop: Level: Usage: Max Use: Purpose: ntax Notes: ntic Notes: omments:	Detail Optional 1 To identi 1 At le 2 If ei This segu organiza provide a This mea N1 SU is	Repeat: 200 Shipment ify a party by type of east one of N102 or N ther N103 or N104 is ment, used alone, pro- tional identification. a key to the table main ans that what we send	f organization, name, and code N103 is required. s present, then the other is required. ovides the most efficient method of provi To obtain this efficiency the "ID Code" (intained by the transaction processing par d you on the 830 needs to be returned er/ID this should match your GS segmen	N104 ty.	
			Data Elen	nent Summary		
FNG <u>Usage</u> Always	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	Name Entity Identifier (Code identifying an individual ST SU		Μ	ributes ID 2/3 perty or an
			SF	Ship From		
Always	N102	93	Name Free-form name		X	AN 1/60
Always	N103	66	Identification Cod Code designating the Code (67)	le Qualifier he system/method of code structure used D-U-N-S Number, Dun & Bradstreet	X for Id	ID 1/2 entification
Always	N104	67	This should match		X ed/rec	AN 2/80 <mark>juired.</mark> This is

	Segment:	HL	Hierarchical Level				
	Loop:		Repeat: 1				
	Level:	Detail					
	Usage:	Mandato					
	Max Use:	1					
	Purpose:	To identi	fy dependencies among and the content of hierarchically relate	ed groups of data			
	1	segments		0 1			
Sy	ntax Notes:	U					
	antic Notes:						
	Comments:	struct item The HL0 segn num be "1 subs 3 HL0 HL s 4 HL0 segn HL0	The HL segment is used to identify levels of detail information using a hierarchical tructure, such as relating line-item data to shipment data, and packaging data to line tem data. The HL segment defines a top-down/left-right ordered structure. 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. HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate. 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				
		Brow	ping of data referring to shipment, order, or item-level information				
FNG	Ref.	Data	Data Element Summary				
<u>Usage</u>	Des.	Element	Name	Attributes			
Always	<u>Des.</u> HL01	<u>628</u>	Hierarchical ID Number	M AN 1/12			
111.04.95	11201	020	A unique number assigned by the sender to identify a particu				
			in a hierarchical structure	8			
			Use "1" for this occurrence of the HL at the shipment level, i	ncrement by 1 for			
			each subsequent HL segment within the transaction.	, i i i i i i i i i i i i i i i i i i i			
Always	HL02	734	Hierarchical Parent ID Number	O AN 1/12			
			Identification number of the next higher hierarchical data seg	ment 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 st	ructure			
			T Tare				

Tare



Segment:	LIN Item Identification
Loop:	HL
Level:	Detail – Tare
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:

FNG	Ref.	Data	Dutu Element Summury		
<u>Usage</u>	Des.	<u>Element</u>	Name	Att	<u>ributes</u>
Always	LIN02	235	Product/Service ID Qualifier	Μ	ID 2/2
			Code identifying the type/source of the descriptive number	used ir	ı
			Product/Service ID (234)		
			PG Packaging Code		
Always	LIN03	234	Product/Service ID Identifying number for a product or service	Μ	AN 1/48



Segment:	REF Reference Identification			
Loop:	HL			
Level:	Detail Tare			
Usage:	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	Ref.	Data			
<u>Usage</u>	Des.	<u>Element</u>	Name	Att	<u>ributes</u>
See comments	REF01	128	Reference Identification Qualifier	Μ	ID 2/3
			Code qualifying the Reference Identification		
			LS Bar-Coded Serial Number for External	packa	ıge
			Provide the Serial bar code label information at the Tare Lev	el.	
See comments	REF02	127	Reference Identification	Х	AN 1/30
			Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier	1 Set (or as



	Segment:		Hierarchical Level		
	Loop: HL Repeat: 200000				
	Level: Detail Order				
	Usage:	Mandato	ry		
	Max Use:	1			
	Purpose:	To identi segments	fy dependencies among and the content of hierarchically relate	ed groups of data	
Sy	ntax Notes:	0			
	antic Notes:				
Semantic Notes: Comments:		structitem The HL0 segn num be " subs 3 HL0 HL s 4 HL0 segn HL0	HL segment is used to identify levels of detail information usi eture, such as relating line-item data to shipment data, and pack data. HL segment defines a top-down/left-right ordered structure. I shall contain a unique alphanumeric number for each occurr nent in the transaction set. For example, HL01 could be used to ber of occurrences of the HL segment, in which case the value 1" for the initial HL segment and would be incremented by one equent HL segment within the transaction. 2 identifies the hierarchical ID number of the HL segment to v segment is subordinate. 3 indicates the context of the series of segments following the nent up to the next occurrence of an HL segment in the transact 3 is used to indicate that subsequent segments in the HL loop ping of data referring to shipment, order, or item-level informa-	kaging data to line- rence of the HL o indicate the of HL01 would e in each which the current current HL ction. For example, form a logical	
			Data Element Summary		
FNG	Ref.	Data	·		
Usage	Des.	<u>Element</u>	Name	<u>Attributes</u>	
Always	HL01	628	Hierarchical ID Number	M AN 1/12	
			A unique number assigned by the sender to identify a particu	lar data segment	
			in a hierarchical structure	.1 10	
			Use "1" for this occurrence of the HL at the shipment level, i	ncrement by 1 for	
Almone	HL02	724	each subsequent HL segment within the transaction. Hierarchical Parent ID Number	O AN 1/12	
Always	HL02	734	Identification number of the next higher hierarchical data seg		
			segment being described is subordinate to	ment that the data	
Always	HL03	735	Hierarchical Level Code	M ID 1/2	
			Code defining the characteristic of a level in a hierarchical st		
			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.

Vendor part number

Engineering change

LIN06 through LN31 provide for 13 additional pairs of data elements 235 and

Purchase Order (also must be in the PRF segment)

FNG	Ref.	Data	Duta Element Summary		
<u>Usage</u>	Des.	Element	Name	Att	ributes
Always	LIN02	235	Product/Service ID Qualifier	Μ	ID 2/2
			Code identifying the type/source of the descriptive number	used ir	ı
			Product/Service ID (234)		
			BP Buyer's Part Number		
			RC Returnable container code		
Always	LIN03	234	Product/Service ID Identifying number for a product or service	Μ	AN 1/48
See comment	s LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number	X used in	ID 2/2

Identifying number for a product or service

Product/Service ID (234)

Product/Service ID

VP

PO EC

234.

234

See comments LIN05

Data Element Summary

X AN 1/48



Segment:	${f SN1}$ 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.				

FNG	Ref.	Data			
<u>Usage</u>	<u>Des.</u>	<u>Element</u>	Name		<u>ibutes</u>
Always	SN102	382	Number of Units Shipped		R 1/10
			Numeric value of units shipped in manufacturer's shipping un or transaction set	its fo	r a line item
Always	SN103	355	Unit or Basis for Measurement Code	Μ	ID 2/2
			Code specifying the units in which a value is being expressed which a measurement has been taken	, or m	anner in
			This must be the same Unit of Measure sent in the correspond UIT01.	ling 8	30, in the
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 which a measurement has been taken Use any valid X12 code except mutually defined, "ZZ".		ID 2/2 anner in



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:	

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



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.

FNG	Ref.	Data			
<u>Usage</u>	Des.	<u>Element</u>	Name	Att	<u>ributes</u>
Always	CLD01	622	Number of Loads Number of containers shipped by the supplier	Μ	N0 1/5
Always	CLD02	382	Number of Units Shipped Numeric value of units shipped in manufacturer's container for transaction set Total quantity per container.	M or a li	R 1/10 ine item or
Always	CLD03	103	Packaging Code Code identifying the type of packaging; Part 1: Packaging Fo Packaging Material; if the Data Element is used, then Part 1 i Any valid X12 code except mutually defined, "ZZ".		



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	Ref.	Data	
Usage	Des.	<u>Element</u>	<u>Name</u> <u>Attributes</u>
Always	REF01	128	Reference Identification M ID 2/3
			Qualifier 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	<mark>127</mark>	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
			of the actual Lot humber
			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.

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.

FNG	Ref.	Data	·	
<u>Usage</u>	Des.	<u>Element</u>	Name	<u>Attributes</u>
Always	CTT01	354	Number of Line Items	M N0 1/6
			Total number of line items in the transaction set	
			Total number of HL segments.	
Always	CTT02	347	Hash Total Sum of values of the specified data element. All values in the be summed without regard to decimal points (explicit or imp Truncation will occur on the left most digits if the sum is gree maximum size of the hash total of the data element. Example occurrence of value being hashed18 Second occurrence of hashed. 1.8 Third occurrence of value being hashed. 18.01 F of value being hashed 1855 Hash total prior to trunce total after truncation to three-digit field. Hash total of quantity shipped (SN102).	blicit) or signs. cater than the e:0018 First value being ourth occurrence



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

ata Element Sun nary

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

<u>SAMPLES</u> 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*<mark>X0820480</mark>. 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

*01*VENDDUNS# *ZZ*OURDUNS# *190607*1634*U*00401*000000154*0*P*.. ISA*00* *00* 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*MST2081477. 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*<mark>X0820480</mark> 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.



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 Chest Dail
CLD	Car Load, Rail
CNA	Household Goods Container, Wood
CNB	Container, MAC-ISO, LT. WGT. 8x8x20 Foot Air
CNC CND	Container, Navy Cargo Transporter
CND	Container, Commercial Highway Lift Container, Engine
-	
CNF CNT	Container, Multi-walled, Secured to Warehouse Pallet 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	Кед
KIT	Kit
KRK	Knockdown Rack
KTB	Knockdown Tote Bin
LBK	Liquid Bulk
LID	Lip/Top
LIF	Lifts
LNR	Liners
LOG	Log
LSE	Loose

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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

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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

