



THE MANUFACTURING CLOUD

Plex Systems

IMPLEMENTATION GUIDELINES FOR
ANSI X12 EDI CONVENTIONS

862 TRANSACTION SET
MATERIAL RELEASE
Version 004010
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862 Ship Schedule

Functional Group ID=DL

This Standard contains the format and establishes the data contents of the Shipping Schedule Transaction Set (862) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used by a customer to convey precise shipping schedule requirements to a supplier, and is intended to supplement the planning schedule transaction set (830). The shipping schedule transaction set will supersede certain shipping and delivery information transmitted in a previous planning schedule transaction, but it does not replace the 830 transaction set. The shipping schedule transaction set shall not be used to authorize labor, materials or other resources. The use of this transaction set will facilitate the practice of Just-In-Time (JIT) manufacturing by providing the customer with a mechanism to issue precise shipping schedule requirements on a more frequent basis than with the issuance of a planning schedule transaction, e.g., daily shipping schedules versus weekly planning schedules. The shipping schedule transaction also provides the ability for a customer location to issue shipping requirements independent of other customer locations when planning schedule transactions are issued by a consolidated scheduling organization.

Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			
020	BSS	Beginning Segment for Shipping Schedule/Production Sequence	M	1			Must use
030	DTM	Date/Time Reference	O	10			
LOOP ID - N1					200		
050	N1	Name	O	1			Used
100	PER	Administrative Contact	O	3			

Detail:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
LOOP ID - LIN					10000		
010	LIN	Item Identification	M	1			Must use
020	UIT	Unit Detail	M	1			Must use
LOOP ID - FST					100		
080	FST	Forecast Schedule	O	1			Must use
LOOP ID - SHP					10		
140	SHP	Shipped/Received Information	O	1			Used
150	REF	Reference Identification	O	12			Used

Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	CTT	Transaction Totals	M	1		N3/010	Used
020	SE	Transaction Set Trailer	M	1			Used

Notes:

3/010 The number of lines items (CTT01) is the accumulation of number of LIN segments.

BSS**Beginning Segment for Shipping Schedule/Production Sequence**

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 6

User Option (Usage): Must use

To transmit identifying numbers, dates, and other basic data relating to the transaction set

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
BSS01	353	Transaction Set Purpose Code Description: Code identifying purpose of transaction set	M	ID	2/2	Must use
		Code Name 05 Replacement				
BSS02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M	AN	1/30	Must use
BSS03	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
		Generated Date				
BSS04	675	Schedule Type Qualifier Description: Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast	M	ID	2/2	Must use
		Code Name DL Delivery Based SH Shipment Based				
BSS05	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
		Start Date				
BSS06	373	Date Description: Date expressed as CCYYMMDD	M	DT	8/8	Must use
		End Date				
BSS07	328	Release Number	X	AN	1/30	
BSS11	676	Schedule Quantity Qualifier Code A – Actual Discrete Quantities D – Net Change Quantities R – Replacement Quantities	O	ID	1/1	

Semantics:

1. Use BSS02 to indicate a document number.
2. Use BSS03 to indicate the date of this document.
3. Use BSS05 to indicate the schedule horizon start date (the date when the schedule begins).
4. Use BSS06 to indicate the schedule horizon end date (the date when the schedule ends).

DTM**Date/Time Reference**

Pos: 030	Max: 10
Heading - Optional	
Loop: N/A	Elements: 3

User Option (Usage): Used

To specify pertinent dates and times.

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier Description: Code identifying an organizational entity, a physical location, property or an individual	M	ID	3/3	Used
		Code Name 102 Issue Date				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM02	373	Date Description: CCYYMMDD	C	DT	8/8	Used
DTM03	337	Time	C	TM	4/8	Used

N1**Name**

Pos: 050	Max: 1
Heading - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

To identify a party by type of organization, name, and code

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	Must use
		Code Name				
		SU Supplier/Manufacturer				
		ST SHIP TO				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N102	93	Name Description: Free-form name	C	AN	1/60	Used
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	C	ID	1/2	Used
		Code Name				
		01 D-U-N-S Number, Dun & Bradstreet				
		92 Assigned by Buyer or Buyer's Agent				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N104	67	Identification Code Description: Code identifying a party or other code	C	AN	2/80	Used

Syntax:

1. R0203 - At least one of N102,N103 is required
2. P0304 - If either N103,N104 is present, then all are required

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.
2. N105 and N106 further define the type of entity in N101.

PER**Administrative Contact**

Pos: 100	Max: 3
Heading - Optional	
Loop: N1	Elements: 4

User Option (Usage): Used

To identify a person or office to whom communications should be directed.

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PER01	366	Contact Function Code Description: Code identifying the responsibility of the person named.	M	ID	2/2	Used
		Code Name SU Supplier Contact				
PER02	93	Name Description: Free-form name	O	AN	1/35	
PER03	365	Communications Number Qualifier Description: Code identifying the type of communication number	X	ID	2/2	
		Code Name TE Telephone				
PER04	364	Communications Number	X	AN	1/80	

LIN	Item Identification	Pos: 010 Max: 1 Detail - Mandatory Loop: LIN Elements: 9
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User Option (Usage): Must use

To specify basic item identification data

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
LIN01	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set	O	AN	1/20	Used
LIN02	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) <u>Code</u> <u>Name</u> BP Buyer's Part Number	M	ID	2/2	Must use
LIN03	234	Product/Service ID Description: Identifying number for a product or service	M	AN	1/48	Must use
LIN04	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) <u>Code</u> <u>Name</u> EC Engineering Change Level	O	ID	2/2	Used
LIN05	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
LIN06	234	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) <u>Code</u> <u>Name</u> PO Purchase Order Number	M	AN	2/2	Used
LIN07	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
LIN08	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234) <u>Code</u> <u>Name</u> PD Product Description	O	ID	2/2	Used
LIN09	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used

LIN10	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID	2/2	Used
		<u>Code</u> VP		<u>Name</u> Vendor's (Seller's) Part Number		
LIN09	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used
LIN11	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234)	O	ID	2/2	Used
		<u>Code</u> PL		<u>Name</u> Purchase Order Line Number		
LIN12	234	Product/Service ID Description: Identifying number for a product or service	X	AN	1/48	Used

Syntax:

1. P0405 - If either LIN04,LIN05 is present, then all are required
2. P0607 - If either LIN06,LIN07 is present, then all are required
3. P0809 - If either LIN08,LIN09 is present, then all are required
4. P1011 - If either LIN10,LIN11 is present, then all are required
5. P1213 - If either LIN12,LIN13 is present, then all are required
6. P1415 - If either LIN14,LIN15 is present, then all are required
7. P1617 - If either LIN16,LIN17 is present, then all are required
8. P1819 - If either LIN18,LIN19 is present, then all are required
9. P2021 - If either LIN20,LIN21 is present, then all are required
10. P2223 - If either LIN22,LIN23 is present, then all are required
11. P2425 - If either LIN24,LIN25 is present, then all are required
12. P2627 - If either LIN26,LIN27 is present, then all are required
13. P2829 - If either LIN28,LIN29 is present, then all are required
14. P3031 - If either LIN30,LIN31 is present, then all are required

Semantics:

1. LIN01 is the line item identification

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.

UIT

Unit Detail

Pos: 020	Max: 1
Detail - Mandatory	
Loop: LIN	Elements: 1

User Option (Usage): Must use

To specify item unit data

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>								
UIT01	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	M	Comp		Must use								
	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Must use								
		<table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>EA</td> <td>Each</td> </tr> <tr> <td>PC</td> <td>Piece</td> </tr> <tr> <td>ZZ</td> <td>Mutually Defined</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	EA	Each	PC	Piece	ZZ	Mutually Defined				
<u>Code</u>	<u>Name</u>													
EA	Each													
PC	Piece													
ZZ	Mutually Defined													

Syntax:

1. C0302 - If UIT03 is present, then all of UIT02 are required

FST Forecast Schedule

Pos: 080	Max: 1
Detail - Mandatory	
Loop: FST	Elements: 4

User Option (Usage): Used

To specify the forecasted dates and quantities.

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
FST01	380	Quantity Description: Numeric value of quantity	M	R	1/15	Used				
FST02	680	Forecast Qualifier Description: Code specifying the sender's confidence level of the forecast data. <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>C</td> <td>Firm</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	C	Firm	C	R	1/15	Used
<u>Code</u>	<u>Name</u>									
C	Firm									
FST03	681	Forecast Timing Qualifier Description: Code specifying interval grouping of data <table border="1"> <thead> <tr> <th><u>Code</u></th> <th><u>Name</u></th> </tr> </thead> <tbody> <tr> <td>C</td> <td>Daily</td> </tr> </tbody> </table>	<u>Code</u>	<u>Name</u>	C	Daily	C	ID	3/3	Used
<u>Code</u>	<u>Name</u>									
C	Daily									
FST04	373	Date Description: Delivery Date expressed as CCYYMMDD	C	DT	8/8	Used				

JIT

Just-In-Time Schedule

Pos: 110	Max: 24
Detail - Optional	
Loop: JIT	Elements: 2

User Option (Usage): Optional

To identify the specific shipping/delivery time in terms of a 24-hour clock and identify the associated quantity

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
JIT01	380	Quantity Description: Numeric value of quantity	O	N	1/15	Optional

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
JIT02	337	Time Description: HHMMSS EX: 000001	C	R	4/8	Optional

Syntax:

- The sum of the quantities in the JIT segments must add up to the quantity transmitted in the previous FST segment
- Time sent in the JIT02 is sent in the format HHMMSS. EX: 000001

REF Reference Identification

Pos: 090	Max: 12
Detail - Optional	
Loop: FST	Elements: 2

User Option (Usage): Used

To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Must use
		Code Name RE Release Number				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02,REF03 is required

SHP**Shipped/Received Information**

Pos: 140	Max: 1
Detail - Optional	
Loop: SHP	Elements: 5

User Option (Usage): Used

To specify shipment and/or receipt information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SHP01	673	Quantity Qualifier Description: Code specifying the type of quantity	O	ID	2/2	Used
		Code Name				
		01 Discrete Quantity				
		02 Cumulative Quantity				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SHP02	380	Quantity Description: Numeric value of quantity last received.	C	R	1/15	Used
SHP03	374	Date/Time Qualifier Description: Code specifying type of date or time, or both date and time	C	ID	3/3	Used
		Code Name				
		050 Received				
		051 Cumulative Quantity Start				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SHP04	373	Date Description: Start Date expressed as CCYYMMDD	C	DT	8/8	Used
SHP05	373	Date Description: End Date expressed as CCYYMMDD	C	TM	4/8	Used

Syntax:

1. C0102 - If SHP01 is present, then all of SHP02 are required
2. L030405 - If SHP03 is present, then at least one of SHP04, SHP05 is required
3. C0403 - If SHP04 is present, then all of SHP03 are required
4. C0503 - If SHP05 is present, then all of SHP03 are required

Semantics:

1. SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03).
2. SHP06 is the cumulative quantity end date.

Comments:

1. The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times.
2. If SHP01 equals "02", "07", "08", "09", or "10" (indicating cumulative quantities), then SHP04 and SHP06 are required to identify the start and end dates of the quantity count.

REF Reference Identification

Pos: 150	Max: 12
Detail - Optional	
Loop: SHP	Elements: 3

User Option (Usage): Used

To specify identifying information

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Must use
		Code Name SI Shipper (Last Received)				
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF02	127	Reference Identification Description: Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Used

Syntax:

1. R0203 - At least one of REF02,REF03 is required

CTT Transaction Totals

Pos: 010	Max: 1
Summary - Optional	
Loop: N/A	Elements: 1

User Option (Usage): Used

To transmit a hash total for a specific element in the transaction set

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
CTT01	354	Number of Line Items Description: Total number of line items in the transaction set	M	N0	1/6	Must use
CTT02	347	Hash Total	O	R	1/10	Used

Syntax:

1. P0304 - If either CTT03,CTT04 is present, then all are required
2. P0506 - If either CTT05,CTT06 is present, then all are required

Comments:

1. This segment is intended to provide hash totals to validate transaction completeness and correctness.