

830 Planning Schedule with Release Capability

Functional Group ID=**PS**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Planning Schedule with Release Capability Transaction Set (830) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business practice relative to the transfer of forecasting/material release information between organizations. The planning schedule transaction may be used in various ways or in a combination of ways, such as: (1) a simple forecast; (2) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material; (3) a forecast that is also used as an order release mechanism, containing such elements as resource authorizations, period-to-date cumulative quantities, and specific ship/delivery patterns for requirements that have been represented in "buckets," such as weekly, monthly, or quarterly. The order release forecast may also contain all data related to purchase orders, as required, because the order release capability eliminates the need for discrete generation of purchase orders.

Heading:

| <u>Attributes</u> | <u>Pos. No.</u> | <u>Seg. ID</u> | <u>Name</u> | <u>Base Attributes</u> | <u>Max.Use</u> | <u>Loop Repeat</u> | <u>Notes and Comments</u> |
|-------------------|-----------------|----------------|---|------------------------|----------------|--------------------|---------------------------|
| M | 010 | ST | Transaction Set Header | M | 1 | | |
| M | 020 | BFR | Beginning Segment for Planning Schedule | M | 1 | | |
| Must Use | 130 | DTM | Date/Time Reference | O | 1 | | |
| LOOP ID - N1 | | | | | | 4 | |
| M | 230 | N1 | Name | M | 1 | | |

Detail:

| <u>Attributes</u> | <u>Pos. No.</u> | <u>Seg. ID</u> | <u>Name</u> | <u>Base Attributes</u> | <u>Max.Use</u> | <u>Loop Repeat</u> | <u>Notes and Comments</u> |
|-------------------|-----------------|----------------|---------------------------------------|------------------------|----------------|--------------------|---------------------------|
| LOOP ID - LIN | | | | | | >1 | |
| M | 010 | LIN | Item Identification | M | 1 | | |
| Must Use | 020 | UIT | Unit Detail | O | 1 | | |
| Must Use | 080 | PID | Product/Item Description | O | 1 | | |
| | 140 | REF | Reference Identification | O | 1 | | |
| | 150 | PER | Administrative Communications Contact | O | 1 | | |
| | 230 | ATH | Resource Authorization | O | 3 | | |
| LOOP ID - SDP | | | | | | 260 | |
| Must Use | 450 | SDP | Ship/Delivery Pattern | O | 1 | | |
| Must Use | 460 | FST | Forecast Schedule | O | 260 | | |
| LOOP ID - SHP | | | | | | 2 | |
| Must Use | 470 | SHP | Shipped/Received Information | O | 1 | | |
| | 480 | REF | Reference Identification | O | 5 | | |

Summary:

| <u>Attributes</u> | <u>Pos. No.</u> | <u>Seg. ID</u> | <u>Name</u> | <u>Base Attributes</u> | <u>Max.Use</u> | <u>Loop Repeat</u> | <u>Notes and Comments</u> |
|-------------------|-----------------|----------------|-------------------------|------------------------|----------------|--------------------|---------------------------|
| Must Use | 010 | CTT | Transaction Totals | O | 1 | | n1 |
| M | 020 | SE | Transaction Set Trailer | M | 1 | | |

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (FST01) for each FST segment.

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 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:
Business Rules: Variable Name: STST
Notes: **Data Examples**

ST*830*350001~

Data Element Summary

| User | Ref. | Data | | |
|------------------|-------------|----------------|---|-------------------|
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| M | ST01 | 143 | Transaction Set Identifier Code | M ID 3/3 |
| | | | Code uniquely identifying a Transaction Set | |
| | | | 830 Planning Schedule with Release Capability | |
| M | ST02 | 329 | Transaction Set Control Number | M AN 4/9 |
| | | | Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set | |

Segment: **BFR** Beginning Segment for Planning Schedule

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a planning schedule transaction set; whether a ship or delivery based forecast; and related forecast envelope dates

Syntax Notes: 1 At least one of BFR02 or BFR03 is required.

Semantic Notes: 1 If BFR01 contains the value "04" (Net Change), BFR09 is required.

2 BFR02 is the identifying number for a forecast assigned by the orderer/purchaser.

3 BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins.

4 BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends.

5 BFR08 is the date forecast generated: The date the forecast data was generated.

6 BFR09 is the date forecast updated: The date the forecast was updated with "net change" data. (Used only when data element 353 in BFR01 contains the value "04", meaning net change.)

Comments:

Notes: **Data Examples**

BFR*05*2018017**DL*A*20180122*20180702*20180117~

| Data Element Summary | | | | |
|----------------------|-------------|----------------|--|-------------------|
| User | Ref. | Data | | |
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| M | BFR01 | 353 | Transaction Set Purpose Code | M ID 2/2 |
| | | | Code identifying purpose of transaction set | |
| | | 05 | Replace | |
| M | BFR02 | 127 | Reference Identification | M AN 1/30 |
| | | | Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier | |
| | | | Notes to Trading Partner: | |
| | | | This field will contain the HSI release number. The format of the release number will be CCYYDDD. If multiple releases are generated on the same day, each release will have a unique release suffix letter. | |
| M | BFR04 | 675 | Schedule Type Qualifier | M ID 2/2 |
| | | | Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast | |
| | | DL | Delivery Based | |
| | | SH | Shipment Based | |
| M | BFR05 | 676 | Schedule Quantity Qualifier | M ID 1/1 |
| | | | Code identifying the type of quantities used when defining a schedule or forecast | |
| | | A | Actual Discrete Quantities | |
| M | BFR06 | 373 | Date | M DT 8/8 |
| | | | Date expressed as CCYYMMDD | |
| | | | Notes to Trading Partner: | |
| | | | Horizon Start Date | |
| Must Use | BFR07 | 373 | Date | O DT 8/8 |
| | | | Date expressed as CCYYMMDD | |
| | | | Notes to Trading Partner: | |
| | | | Horizon End Date | |

M

BFR08

373

Date

M DT 8/8

Date expressed as CCYYMMDD

Notes to Trading Partner:

Release Creation Date

Segment: **DTM** **Date/Time Reference**
Position: 130
Loop:
Level: Heading
Usage: Optional (Must Use)
Max Use: 1
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.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:
Comments:
Notes:

Data Examples

DTM*097*20180117*1030~

Data Element Summary

| <u>User</u> | <u>Ref.</u> | <u>Data</u> | <u>Attributes</u> |
|------------------|--------------|---|-------------------------------|
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> <u>Name</u> | <u>M</u> <u>ID</u> <u>3/3</u> |
| M | DTM01 | 374 Date/Time Qualifier | |
| | | Code specifying type of date or time, or both date and time | |
| | | 097 Transaction Creation | |
| Must Use | DTM02 | 373 Date | X DT 8/8 |
| | | Date expressed as CCYYMMDD | |
| Must Use | DTM03 | 337 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) | |

Segment: **N1** Name
Position: 230
Loop: N1 Mandatory
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.
Notes: **HSI Notes**

Henderson Stamping sends 3 N1 segments with the following information:

N1(SF)04 element = Supplier code assigned to supplier by HSI

N1(MI)04 element = DUNS number of Henderson Stamping

N1(SU)04 element = Supplier code assigned to supplier by HSI

Data Examples

N1*MI*Henderson Stamping*1*058412461~

N1*SU*SUPPLIER NAME*92*59999~

N1*SF*SUPPLIER NAME*92*59999~

Data Element Summary

| <u>User</u> | <u>Ref.</u> | <u>Data</u> | <u>Name</u> | <u>Attributes</u> |
|------------------|-------------|----------------|---|-------------------|
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | | |
| M | N101 | 98 | Entity Identifier Code | M ID 2/3 |
| | | | Code identifying an organizational entity, a physical location, property or an individual | |
| | | | MI Planning Schedule/Material Release Issuer | |
| | | | SF Ship From | |
| | | | SU Supplier/Manufacturer | |
| Must Use | N102 | 93 | Name | X AN 1/60 |
| | | | Free-form name | |
| Must Use | 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 | |
| | | | 92 Assigned by Buyer or Buyer's Agent | |
| Must Use | N104 | 67 | Identification Code | X AN 2/80 |
| | | | Code identifying a party or other code | |

| | | |
|------------------------|---|----------------------------|
| Segment: | LIN | Item Identification |
| Position: | 010 | |
| Loop: | LIN | Mandatory |
| Level: | Detail | |
| Usage: | Mandatory | |
| Max Use: | 1 | |
| Purpose: | To specify basic item identification data | |
| Syntax Notes: | 1 If either LIN04 or LIN05 is present, then the other is required. 2 If either LIN06 or LIN07 is present, then the other is required. 3 If either LIN08 or LIN09 is present, then the other is required. 4 If either LIN10 or LIN11 is present, then the other is required. 5 If either LIN12 or LIN13 is present, then the other is required. 6 If either LIN14 or LIN15 is present, then the other is required. 7 If either LIN16 or LIN17 is present, then the other is required. 8 If either LIN18 or LIN19 is present, then the other is required. 9 If either LIN20 or LIN21 is present, then the other is required. 10 If either LIN22 or LIN23 is present, then the other is required. 11 If either LIN24 or LIN25 is present, then the other is required. 12 If either LIN26 or LIN27 is present, then the other is required. 13 If either LIN28 or LIN29 is present, then the other is required. 14 If either LIN30 or LIN31 is present, then the other is required. | |
| Semantic Notes: | 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. | |
| Notes: | HSI Notes | |

The LIN segment will contain our item number following qualifier "BP". Any of the following may also be sent in the LIN segment:

Qualifier "PO" - PO Number

Qualifier "VP" - Vendor's Part Number

Qualifier "EC" - Engineering Change Level

Data Examples

LIN**BP*14321638-B*PO*55123003*VP*187340*EC*B~

| Data Element Summary | | | | |
|----------------------|-------------|----------------|---|-------------------|
| User | Ref. | Data | | |
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| M | 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) | |
| | | | BP Buyer's Part Number | |
| M | LIN03 | 234 | Product/Service ID | M AN 1/48 |
| | | | Identifying number for a product or service | |
| | LIN04 | 235 | Product/Service ID Qualifier | X ID 2/2 |
| | | | Code identifying the type/source of the descriptive number used in Product/Service ID (234) | |
| | | | PO Purchase Order Number | |
| | LIN05 | 234 | Product/Service ID | X AN 1/48 |
| | | | Identifying number for a product or service | |
| | LIN06 | 235 | Product/Service ID Qualifier | X ID 2/2 |
| | | | Code identifying the type/source of the descriptive number used in Product/Service ID (234) | |
| | | | VP Vendor's (Seller's) Part Number | |
| | LIN07 | 234 | Product/Service ID | X AN 1/48 |
| | | | Identifying number for a product or service | |
| | LIN08 | 235 | Product/Service ID Qualifier | X ID 2/2 |

Code identifying the type/source of the descriptive number used in
Product/Service ID (234)

EC Engineering Change Level

LIN09

234

Product/Service ID

X AN 1/48

Identifying number for a product or service

Segment: **UIT** Unit Detail
Position: 020
Loop: LIN Mandatory
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: To specify item unit data
Syntax Notes: 1 If UIT03 is present, then UIT02 is required.
Semantic Notes:
Comments:
Notes:

Data Examples

UIT*EA~

Data Element Summary

| <u>User</u> | <u>Ref.</u> | <u>Data</u> | <u>Name</u> | <u>Attributes</u> |
|------------------|---------------|----------------|--|-------------------|
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | | |
| M | UIT01 | C001 | Composite Unit of Measure | M |
| | | | To identify a composite unit of measure (See Figures Appendix for examples of use) | |
| M | C00101 | 355 | Unit or Basis for Measurement Code | M ID 2/2 |
| | | | Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | |
| | | | Refer to 004010 Data Element Dictionary for acceptable code values. | |

| | |
|------------------------|---|
| Segment: | PID Product/Item Description |
| Position: | 080 |
| Loop: | LIN Mandatory |
| Level: | Detail |
| Usage: | Optional (Must Use) |
| Max Use: | 1 |
| Purpose: | To describe a product or process in coded or free-form format |
| Syntax Notes: | <ol style="list-style-type: none"> 1 If PID04 is present, then PID03 is required. 2 At least one of PID04 or PID05 is required. 3 If PID07 is present, then PID03 is required. 4 If PID08 is present, then PID04 is required. 5 If PID09 is present, then PID05 is required. |
| Semantic Notes: | <ol style="list-style-type: none"> 1 Use PID03 to indicate the organization that publishes the code list being referred to. 2 PID04 should be used for industry-specific product description codes. 3 PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate. 4 PID09 is used to identify the language being used in PID05. |
| Comments: | <ol style="list-style-type: none"> 1 If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used. 2 Use PID06 when necessary to refer to the product surface or layer being described in the segment. 3 PID07 specifies the individual code list of the agency specified in PID03. |
| Notes: | Data Examples PID*F****BRACKET - FLOOR -FRONT~ |

| Data Element Summary | | | | |
|---------------------------------|----------------------------|-------------------------------|--|-------------------|
| <u>User</u> <u>Attribute</u> | <u>Ref.</u> <u>Des.</u> | <u>Data</u> <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| M | PID01 | 349 | Item Description Type | M ID 1/1 |
| | | | Code indicating the format of a description | |
| | | | F Free-form | |
| Must Use | PID05 | 352 | Description | X AN 1/80 |
| | | | A free-form description to clarify the related data elements and their content | |

Segment: **ATH** **Resource Authorization**
Position: 230
Loop: LIN Mandatory
Level: Detail
Usage: Optional
Max Use: 3
Purpose: To specify resource authorizations (i.e., finished labor, material, etc.) in the planning schedule

Syntax Notes: 1 At least one of ATH02 or ATH03 is required.
 2 If ATH03 is present, then ATH05 is required.
 3 If ATH04 is present, then ATH05 is required.

Semantic Notes: 1 ATH02 is the resource authorization through date: The date through which the buyer authorizes the seller to commit the resource defined in element ATH01.
 2 ATH03 is the current cumulative requirements quantity: The cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02).
 3 ATH05 is the cumulative start date: The date where the cumulative quantity count starts. This date might be the start date of a contract period, a calendar or fiscal year, or other.

Comments: 1 It is imperative that negotiations defining financial commitment have previously occurred and are agreed to by both buyer and seller.
 2 ATH04 is the maximum cumulative requirements quantity: The maximum cumulative quantity that has been authorized to date from the cumulative start date (ATH05) through the resource authorization through date (ATH02). This is a high water mark. If the forecast decreases, the current cumulative requirements quantity also decreases, but the maximum cumulative requirements quantity does not decrease.

Notes: **Data Examples**

ATH*PQ**48000**20180112~
 ATH*FI*20180223*36000**20180102~
 ATH*MT*20180223*36000**20180102

Data Element Summary

| User <u>Attribute</u> | Ref. <u>Des.</u> | Data <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
|--------------------------|---------------------|------------------------|---|-------------------|
| M | ATH01 | 672 | Resource Authorization Code Code identifying the resource which the buyer is authorizing the seller to commit to FI Finished (Labor, Material, and Overhead/Burden) MT Material PQ Cumulative Quantity Required Prior to First Schedule Period | M ID 2/2 |
| Must Use | ATH02 | 373 | Date ATH02 represents firm date for Forecast lines. Any forecast line with date less than ATH02 can be considered firm for ATH01 code. Date expressed as CCYYMMDD | X DT 8/8 |
| Must Use | ATH03 | 380 | Quantity Numeric value of quantity | X R 1/15 |
| Must Use | ATH05 | 373 | Date Date expressed as CCYYMMDD | X DT 8/8 |

Segment: **N1** Name
Position: 320
Loop: N1 Mandatory
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.
Notes: **HSI Notes**

Henderson Stamping sends one N1*ST segment within the LIN loop to designation the ship-to location for the current item as multiple ship to locations and multiple purchase orders may be included in a single 830.
N1(ST)04 element = Location code of HSI plant

Data Examples

N1*ST*Henderson Stamping Plant 2*92*HSI2~

| Data Element Summary | | | | |
|----------------------|-------------|----------------|---|------------|
| User | Ref. | Data | Name | Attributes |
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | | |
| M | N101 | 98 | Entity Identifier Code | M ID 2/3 |
| | | | Code identifying an organizational entity, a physical location, property or an individual | |
| | | | ST Ship To | |
| Must Use | N102 | 93 | Name | X AN 1/60 |
| | | | Free-form name | |
| Must Use | 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 | |
| | | | 92 Assigned by Buyer or Buyer's Agent | |
| Must Use | N104 | 67 | Identification Code | X AN 2/80 |
| | | | Code identifying a party or other code | |

| | | |
|------------------------|--|------------------------------|
| Segment: | SDP | Ship/Delivery Pattern |
| Position: | 450 | |
| Loop: | SDP | Optional (Must Use) |
| Level: | Detail | |
| Usage: | Optional (Must Use) | |
| Max Use: | 1 | |
| Purpose: | To identify specific ship/delivery requirements | |
| Syntax Notes: | | |
| Semantic Notes: | | |
| Comments: | <p>1 The intent of this segment is to define the routine ship or delivery patterns, as required, when order quantities are in "buckets", such as weekly, monthly. Ship/delivery patterns eliminate the need to transmit discrete quantities and dates for each required shipment or delivery. It is assumed that a "bucketed" quantity is to be divided equally by the ship/delivery pattern. For example, a weekly quantity of 100 with a delivery pattern of Monday and Wednesday would result in 50 to be delivered on Monday and 50 to be delivered on Wednesday.</p> | |
| Notes: | <p>Data Examples</p> <p>SDP*D*G~</p> | |

| Data Element Summary | | | | |
|----------------------|-------------|----------------|---|-------------------|
| <u>User</u> | <u>Ref.</u> | <u>Data</u> | <u>Name</u> | <u>Attributes</u> |
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | | |
| M | SDP01 | 678 | Ship/Delivery or Calendar Pattern Code | M ID 1/2 |
| | | | Code which specifies the routine shipments, deliveries, or calendar pattern | |
| | | | Refer to 004010 Data Element Dictionary for acceptable code values. | |
| M | SDP02 | 679 | Ship/Delivery Pattern Time Code | M ID 1/1 |
| | | | Code which specifies the time for routine shipments or deliveries | |
| | | | Refer to 004010 Data Element Dictionary for acceptable code values. | |

| | |
|------------------------|---|
| Segment: | FST Forecast Schedule |
| Position: | 460 |
| Loop: | SDP Optional (Must Use) |
| Level: | Detail |
| Usage: | Optional (Must Use) |
| Max Use: | 260 |
| Purpose: | To specify the forecasted dates and quantities |
| Syntax Notes: | <ol style="list-style-type: none"> 1 If either FST06 or FST07 is present, then the other is required. 2 If either FST08 or FST09 is present, then the other is required. |
| Semantic Notes: | <ol style="list-style-type: none"> 1 If FST03 equals "F" (indicating flexible interval), then FST04 and FST05 are required. FST04 would be used for the start date of the flexible interval and FST05 would be used for the end date of the flexible interval. |
| Comments: | <ol style="list-style-type: none"> 1 As qualified by FST02 and FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket (weekly, monthly, quarterly, etc.) or the start date of a flexible interval. 2 FST06 qualifies the time in FST07. The purpose of the FST07 element is to express the specific time of day in a 24-hour clock to satisfy "just-in-time" requirements. As an alternative, the ship/delivery pattern segment (SDP) may be used to define an approximate time, such as a.m. or p.m. |
| Notes: | Data Examples FST*6000*D*W*20180129~ |

| Data Element Summary | | | | |
|----------------------|--------------|-----------------|---|------------|
| User Attribute | Ref. Des. | Data Element | Name | Attributes |
| M | FST01 | 380 | Quantity Numeric value of quantity | M R 1/15 |
| M | FST02 | 680 | Forecast Qualifier Code specifying the sender's confidence level of the forecast data or an action associated with a forecast C Firm D Planning | M ID 1/1 |
| M | FST03 | 681 | Forecast Timing Qualifier Code specifying interval grouping of the forecast D Discrete M Monthly Bucket (Calendar Months) W Weekly Bucket (Monday through Sunday) | M ID 1/1 |
| M | FST04 | 373 | Date Date expressed as CCYYMMDD Delivery or ship date as qualified by the value sent in the BFR04 element. | M DT 8/8 |

| | | |
|------------------------|--|--|
| Segment: | SHP | Shipped/Received Information |
| Position: | 470 | |
| Loop: | SHP | Optional (Must Use) |
| Level: | Detail | |
| Usage: | Optional (Must Use) | |
| Max Use: | 1 | |
| Purpose: | To specify shipment and/or receipt information | |
| Syntax Notes: | 1 | If SHP01 is present, then SHP02 is required. |
| | 2 | If SHP03 is present, then at least one of SHP04 or SHP05 is required. |
| | 3 | If SHP04 is present, then SHP03 is required. |
| | 4 | If SHP05 is present, then SHP03 is required. |
| Semantic Notes: | 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. |
| Notes: | Data Examples | |
| | SHP*01*12000*050*20180115~ | |
| | SHP*02*36000*051*20180102**20180115~ | |

| Data Element Summary | | | | |
|----------------------|-------------|----------------|--|-------------------|
| User | Ref. | Data | | |
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| Must Use | SHP01 | 673 | Quantity Qualifier | O ID 2/2 |
| | | | Code specifying the type of quantity | |
| | | | 01 Discrete Quantity | |
| | | | 02 Cumulative Quantity | |
| Must Use | SHP02 | 380 | Quantity | X R 1/15 |
| | | | Numeric value of quantity | |
| | SHP03 | 374 | Date/Time Qualifier | X ID 3/3 |
| | | | Code specifying type of date or time, or both date and time | |
| | | | 050 Received | |
| | | | 051 Cumulative Quantity Start | |
| | SHP04 | 373 | Date | X DT 8/8 |
| | | | Date expressed as CCYYMMDD | |
| | | | Receipt date or cumulative quantity start date as qualified by SHP03 | |
| | SHP06 | 373 | Date | O DT 8/8 |
| | | | Date expressed as CCYYMMDD | |
| | | | Date cumulative quantity reached | |

Segment: **REF** **Reference Identification**
Position: 480
Loop: SHP Optional (Must Use)
Level: Detail
Usage: Optional
Max Use: 5
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

Data Examples

REF*SI*163991693~

Data Element Summary

| <u>User</u> | <u>Ref.</u> | <u>Data</u> | <u>Attributes</u> |
|------------------|--------------|--|-------------------------------|
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> <u>Name</u> | <u>M</u> <u>ID</u> <u>2/3</u> |
| M | REF01 | 128 Reference Identification Qualifier Code qualifying the Reference Identification SI Shipper's Identifying Number for Shipment (SID) A unique number (to the shipper) assigned by the shipper to identify the shipment | X AN 1/30 |
| Must Use | 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: **CTT Transaction Totals**
Position: 010
Loop:
Level: Summary
Usage: Optional (Must Use)
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.
Notes: **Data Examples**
CTT*5*18000~

| Data Element Summary | | | | |
|----------------------|-------------|----------------|---|-------------------|
| User | Ref. | Data | | |
| <u>Attribute</u> | <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| M | CTT01 | 354 | Number of Line Items | M N0 1/6 |
| | | | Total number of line items in the transaction set | |
| Must Use | CTT02 | 347 | Hash Total | O R 1/10 |
| | | | 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. | |

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

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: **Data Examples**

SE*51*3500001~

Data Element Summary

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

Sample Document

ISA*00* *00* *ZZ*HSPI *ZZ*SUPPISAID
*170828*1559*U*00401*000000001*0*P*>~
GS*PS*058412461*SUPPGSID*20170828*1559*1*X*004010~
ST*830*0001~
BFR*05*20180125001**DL*A*20170904*20171127*20170828~
DTM*097*20170828*160312~
N1*MI*Henderson Stamping Inc*1*058412461~
N1*SU*SUPPLIER NAME*92*59999~
N1*SF*SUPPLIER NAME*92*59999~
LIN**BP*MW11290695*PO*55041*VP*2038938*EC*A~
UIT*LB~
PID*F****.021 + .003 x 14.426"~
ATH*PQ**208000**20170827~
ATH*FI**13000**20170101~
ATH*MT**17000**20170101~
N1*ST*Henderson Stamping Plant 1*92*HSI1~
SDP*N*F~
FST*0*D*D*20170904~
FST*500*D*D*20170905~
FST*500*D*D*20170906~
FST*500*D*D*20170907~
FST*0*D*D*20170908~
FST*1000*D*D*20170911~
FST*500*D*D*20170912~
FST*1500*D*D*20170913~
FST*0*D*D*20170914~
FST*500*D*D*20170915~
FST*4000*D*W*20170918~
FST*4000*D*W*20170925~
FST*4000*D*W*20171002~
FST*0*D*W*20171009~
FST*4000*D*W*20171016~
FST*4000*D*W*20171023~
FST*4000*D*W*20171030~
FST*0*D*W*20171106~
FST*4000*D*W*20171113~
FST*12000*D*M*20171120~
FST*16000*D*M*20171127~
SHP*01*4000*050*20170825~
REF*SI*1234567~
SHP*02*208000*051*20170101**20170825~
LIN**BP*1514410*PO*55041001*VP*2038939*EC*B~
UIT*EA~
PID*F****BRACKET FLOOR BACK~
ATH*PQ**208000**20170827~
ATH*FI**13000**20170101~
ATH*MT**17000**20170101~

N1*ST*Henderson Stamping Plant 2*92*HSI2~
SDP*N*F~
FST*0*D*D*20170904~
FST*500*D*D*20170905~
FST*500*D*D*20170906~
FST*500*D*D*20170907~
FST*0*D*D*20170908~
FST*1000*D*D*20170911~
FST*500*D*D*20170912~
FST*1500*D*D*20170913~
FST*0*D*D*20170914~
FST*500*D*D*20170915~
FST*4000*D*W*20170918~
FST*4000*D*W*20170925~
FST*4000*D*W*20171002~
FST*0*D*W*20171009~
FST*4000*D*W*20171016~
FST*4000*D*W*20171023~
FST*4000*D*W*20171030~
FST*0*D*W*20171106~
FST*4000*D*W*20171113~
FST*12000*D*M*20171120~
FST*16000*D*M*20171127~
SHP*01*4000*050*20170825~
REF*SI*1234567~
SHP*02*208000*051*20170101**20170825~
CTT*2*122000~
SE*72*0001~
GE*1*1~
IEA*1*000000001~

Document Revision

| Version | Date | Comment | Author |
|---------|-------------|---|-------------|
| 1.0 | Nov-18-2025 | Document creation. | Kyle Putnam |
| 1.1 | Dec-18-2025 | Move N1*ST inside LIN Loop, Revised Sample to match | Kyle Putnam |
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