FLEX N GATE

# EDI IMPLEMENTATION GUIDE

## 830 ANSI X12 V4010
### Planning Schedule
### with Release Capability

# 830 Planning Schedule with Release Capability

<div align="right">**Functional Group ID=PS**</div>

## 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 **daily**, 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. ANSI standards and AIAG guidelines list many optional segments and elements in the v4010 830. Segments and elements not listed below will not be used by Flex-N-Gate. The supplier's software <u>must</u> be able to process all segments and elements listed. The left-hand column provides information on FNG's normal usage. "Always" means that the segment or element will always be sent by Flex-N-Gate.

"Optional +" indicates that this segment is usually sent. "Optional –" means that this segment is rarely used.

Within one day of receiving an 830, a 997 should be returned. See end of this documentation for a sample of the 997.

## Heading:

| FNG Usage | Pos No. | Seg. ID | Name | AIAG Usage | Max Use | Loop Repeat | Notes and Comments |
|---|---|---|---|---|---|---|---|
| Always | 10 | ST | Transaction Set Header | M | 1 | | |
| Always | 20 | BFR | Beginning Segment for Planning Schedule | M | 1 | | |
| | | | LOOP ID - N1 | | | 200 | |
| Always + | 240 | N1 | Name | O | 1 | | |
| Optional + | 290 | PER | Administrative contact | O | 3 | | |

## Detail:

| FNG Usage | Pos No. | Seg. ID | Name | AIAG Usage | Max Use | Loop Repeat | Notes and Comments |
|---|---|---|---|---|---|---|---|
| | | | LOOP ID – LIN | | | >1 | |
| Always | 350 | LIN | Item Identification | M | 1 | | |
| Always | 360 | UIT | Unit Detail | O | 1 | | |
| Optional - | 460 | PRS | Part Release Status | O | 1 | | |
| Optional - | 470 | REF | Reference  Identification | O | 12 | | |
| Optional + | 550 | ATH | Resource Authorization | O | 20 | | |
| | | | LOOP ID – LIN/N1 | | | 200 | |
| Optional + | 690 | N1 | Name | O | 1 | | |
| Optional + | 710 | N3 | Address Information | O | 1 | | |
| Optional + | 720 | N4 | Geographic Location | O | 1 | | |
| | | | LOOP ID – LIN/FST | | | 260 | |
| Optional + | 800 | FST | Forecast Schedule | O | 1 | | |
| | | | LOOP ID – LIN/SHP | | | 25 | |
| Optional + | 900 | SHP | Shipped/Received Information | O | 1 | | |
| Optional + | 910 | REF | Reference Identification | O | 1 | | |

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## Summary:

| FNG Usage | Pos No. | Seg. ID | Name | AIAG Usage | Max Use | Loop Repeat | Notes and Comments |
|---|---|---|---|---|---|---|---|
| Always | 950 | CTT | Transaction Totals | O | 1 | | n1 |
| Always | 960 | SE | Transaction Set Trailer | M | 1 | | |

### Transaction Set Notes

**1.**    Number of line items (CTT01) is the accumulation of the number of LIN segments.

| | 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: | |

| 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 |
| | | | 830 | Planning Schedule with Release Capability | |
| 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 |

**Data Element Summary**

| | | | |
|---|---|---|---|
| **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** BFR02 is the identifying number for a forecast assigned by the orderer/purchaser. | | |
| | **2** BFR06 is the forecast horizon start date: The date when the forecast horizon (envelope) begins. | | |
| | **3** BFR07 is the forecast horizon end date: The date when the forecast horizon (envelope) ends. | | |
| | **4** BFR08 is the date forecast generated: The date the forecast data was generated. | | |
| | **5** Use LIN05 for Purchase Order rather than BFR11 since there may be more than one PO on the 830. | | |

**Data Element Summary**

| FNG Usage | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| Always | **BFR01** | 353 | **Transaction Set Purpose Code** Code identifying purpose of transaction set | M | ID 2/2 |
| | | | 04 Change | | |
| | | | 05 Replace | | |
| Always | **BFR02** | 127 | **Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier | X | AN 1/30 |
| Always | **BFR03** | 328 | **Release Number** Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction | X | AN 1/30 |
| Always | **BFR04** | 675 | **Schedule Type Qualifier** Code identifying the type of dates used when defining a shipping or delivery time in a schedule or forecast | M | ID 2/2 |
| | | | DL Delivery Based | | |
| | | | SH Shipment Based | | |
| Always | **BFR05** | 676 | **Schedule Quantity Qualifier** Code identifying the type of quantities used when defining a schedule or forecast | M | ID 1/1 |
| | | | A Actual Discrete Quantities | | |
| Always | **BFR06** | 373 | **Forecast Horizon Start Date** Date expressed as CCYYMMDD | M | DT 8/8 |
| Always | **BFR07** | 373 | **Forecast Horizon End Date** Date expressed as CCYYMMDD | O | DT 8/8 |
| Always | **BFR08** | 373 | **Generation Date** Date expressed as CCYYMMDD | M | DT 8/8 |
| Always | **BFR11** | 324 | **Purchase Order Number** Identifying number for Purchase Order Number assigned by Purchaser | M | DT 8/8 |

**Segment:** # N1 Name

| | |
|---|---|
| **Position:** | 240 |
| **Loop:** | N1      Optional |
| **Level:** | Heading |
| **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:** | 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     The N1*ST will be used at either the header level or at the detail level, but never at both levels. If all parts in a transaction set have the same ship to destination, the header level N1*ST will be used. If parts have different destinations, the detail level segment will be used within every LIN loop. |
| | 3     N103 for N1*SU only may be 92. |

## 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 | | |
| Always | | | MI | Material Release Issuer | |
| See comment 2 | | | ST | Ship To | |
| Always | | | SU | Supplier/Manufacturer | |
| 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 | |
| | | | 92 | Assigned by Buyer or Buyer's Agent | |
| Always | **N104** | 67 | **Identification Code** | | X   AN 2/80 |
| | | | Code identifying a party or other code | | |
| | | | Suppress internal dashes and spaces. | | |

**Segment:** **PER** Administrative Communications Contact
**Position:** **290**
**Loop:** N1
**Level:** Header
**Usage:** Optional
**Max Use:** 3
**Purpose:** To identify a person or office to whom administrative communications should be directed
**Syntax Notes:** 1 If either PER03 or PER04 is present, then the other is required.
2 If either PER05 or PER06 is present, then the other is required.
3 This segment is used only for the Ship-to.

**Semantic Notes:**
**Comments:**

### Data Element Summary

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| Always | **PER01** | **366** | **Contact Function Code** | **M** | **ID 2/2** |
| | | | Code identifying the major duty or responsibility of the person or group named | | |
| | | | EX        Expeditor | | |
| Always | **PER02** | **93** | **Name** | **O** | **AN 1/60** |
| | | | Free-form name | | |
| Optional + | **PER03** | **365** | **Communications Number Qualifier** | **X** | **ID 2/2** |
| | | | Code identifying the type of communications number | | |
| | | | TE        Telephone | | |
| Optional + | **PER04** | **364** | **Communications Number** | **X** | **A/N 1/80** |
| | | | Complete communications number including country or area code | | |
| Optional + | **PER05** | **365** | **Communications Number Qualifier** | **X** | **ID 2/2** |
| | | | Code identifying the type of communications number | | |
| | | | FX        Facsimile | | |
| Optional + | **PER06** | **364** | **Communications Number** | **X** | **A/N 1/80** |
| | | | Complete communications number including country or area code | | |

**Segment:**     **LIN** **Item Identification**

**Position:** 350
**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 LIN08 or LIN09 is present, then the other is required.
**3** If either LIN12 or LIN13 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 LIN13 provide for six different product/service IDs for each item.

**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) | | |
| | | | BP          Buyer's Part Number | | |
| Always | **LIN03** | **234** | **Product/Service ID** | **M** | **AN 1/48** |
| | | | Identifying number for a product or service | | |
| Always | **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 | | |
| Always | **LIN05** | **234** | **Product/Service ID** | **X** | **AN 1/48** |
| | | | Identifying number for a product or service | | |
| Optional - | **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) | | |
| | | | EC          Engineering Change Level | | |
| Optional - | **LIN07** | **234** | **Product/Service ID** | **X** | **AN 1/48** |
| | | | Identifying number for a product or service | | |
| Optional - | **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) | | |
| | | | VP          Vendor Part | | |
| Optional - | **LIN09** | **234** | **Product/Service ID** | **X** | **AN 1/48** |
| | | | Identifying number for a product or service | | |
| Optional - | **LIN10** | **235** | **Product/Service ID Qualifier** | **X** | **ID 2/2** |
| | | | Code identifying the type/source of the descriptive number used in Product/Service ID (234) | | |
| | | | RY          Model Year | | |
| Optional - | **LIN11** | **234** | **Product/Service ID** | **X** | **AN 1/48** |
| Optional - | **LIN12** | **235** | **Product/Service ID Qualifier** | **X** | **ID 2/2** |
| | | | Code identifying the type/source of the descriptive number used in Product/Service ID (234) | | |
| | | | PD          Part Description | | |
| Optional - | **LIN13** | **234** | **Product/Service ID** | **X** | **AN 1/48** |

| **Segment:** | # UIT Unit Detail |
| --- | --- |
| **Position:** | 360 |
| **Loop:** | LIN    Mandatory |
| **Level:** | Detail |
| **Usage:** | Optional |
| **Max Use:** | 1 |
| **Purpose:** | To specify item unit data |
| **Syntax Notes:** | 1    if UIT03 is present, then UIT02 is required. |
| **Semantic Notes:** | UIT01 is a composite data element, C001, which contains 15 simple data elements. AIAG only utilizes the first component of the composite, data element 355. This implementation guideline reflects that decision by substituting 355 for C001, which is syntactically correct. |
| **Comments:** | 1    The unit of measure in the SN103 element on the 856 for a given part  should match the unit of measure in UIT01 for that part. |

**Data Element Summary**

| FNG Usage | Ref. Des. | Data Element | Name | Attributes |
| --- | --- | --- | --- | --- |
| Always | UIT01 | 355 | **Unit or Basis for Measurement Code** | M   AN 2/2 |
| | | | Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | |
| | | | Any valid X12 code value except mutually defined:  'ZZ' | |

**Segment:** **PRS** Part Release Status

      **Position:** 460
         **Loop:** LIN      Mandatory
        **Level:** Detail
       **Usage:** Optional
   **Max Use:** 1
    **Purpose:** To indicate the status of the part being ordered or forecast with respect to this material release or planning document

  **Syntax Notes:**
**Semantic Notes:**
   **Comments:**

### Data Element Summary

| FNG Usage | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| Optional - | PRS01 | 682 | **Part Release Status Code** | M  ID 1/2 |
| | | | Code identifying the status of the specific part number being released or forecast or being used in an engineering change | |
| | | | Any valid X12 code value. | |

| | **Segment:** | **REF** Reference Identification | | |
|---|---|---|---|---|
| | **Position:** | **470** | | |
| | **Loop:** | LIN Mandatory | | |
| | **Level:** | Detail | | |
| | **Usage:** | Optional | | |
| | **Max Use:** | 12 | | |
| | **Purpose:** | To specify identifying information | | |
| | **Syntax Notes:** | **1** At least one REF02 is required. | | |
| | | . | | |
| | **Comments:** | | | |

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| Optional - | **REF01** | **128** | **Reference Identification Qualifier** | **M ID 2/3** |

Code qualifying the Reference Identification

| | | |
|---|---|---|
| DK | Dock code |
| LF | Line Feed |
| RL | Reserve Line Feed |

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| Optional - | **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: | **ATH** Resource Authorization |
|---|---|
| **Position:** | 550 |
| **Loop:** | LIN    Mandatory |
| **Level:** | Detail |
| **Usage:** | Optional |
| **Max Use:** | 20 |
| **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. |
| **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. |

### Data Element Summary

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| Always | ATH01 | 672 | **Resource Authorization Code** | M | ID 2/2 |
| | | | 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 | | |
| Always | ATH02 | 373 | **Date** | X | DT 8/8 |
| | | | Date expressed as CCYYMMDD | | |
| See syntax | ATH03 | 380 | **Authorization Cum Required Quantity** | X | R 1/15 |
| | | | Numeric value of quantity | | |
| See syntax | ATH05 | 373 | **Required Ship Date** | X | DT 8/8 |
| | | | Date expressed as CCYYMMDD | | |

| | | |
|---|---|---|
| **Segment:** | **N1** Name | |
| **Position:** | 690 | |
| **Loop:** | LIN/N1 | Optional |
| **Level:** | Detail | |
| **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:** | 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 | The N1*ST will be used at either the header level or at the detail level, but never at both levels. If all parts in a transaction set have the same ship to destination, the header level N1*ST will be used. If parts have different destinations, the detail level segment will be used. |

### Data Element Summary

| FNG Usage | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| Always | **N101** | **98** | **Entity Identifier Code**<br>Code identifying an organizational entity, a physical location, property or an individual<br>ST          Ship To | **M  ID 2/3** |
| Always | **N102** | **93** | **Name**<br>Free-form name | **X  AN 1/60** |
| Always | **N103** | **66** | **Identification Code Qualifier**<br>Code designating the system/method of code structure used for Identification Code (67)<br>1          D-U-N-S Number, Dun & Bradstreet | **X  ID 1/2** |
| Always | **N104** | **67** | **Identification Code**<br>Suppress internal dashes and spaces.<br><br>Code identifying a party or other code | **X  AN 2/80** |

**Segment:** **N3** **Address Information**

      **Position:**   **710**
          **Loop:**   LIN/N1     Optional
          **Level:**   Detail
          **Usage:**   Optional
      **Max Use:**   1
       **Purpose:**   To specify the location of the named party
  **Syntax Notes:**
**Semantic Notes:**
    **Comments:**

### Data Element Summary

| FNG Usage | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| Optional - | **N301** | 166 | **Address Information** | **M ID 1/55** |
| Optional - | **N302** | 166 | **Address Information** | **O AN 1/55** |

**Segment:** **N4** Geographic Location

| | | |
|---|---|---|
| **Position:** | **720** | |
| **Loop:** | LIN/N1 | Optional |
| **Level:** | Detail | |
| **Usage:** | Optional | |
| **Max Use:** | 1 | |
| **Purpose:** | To specify the geographic location, e.g., city, state, of the named party | |
| **Syntax Notes:** | | |
| **Semantic Notes:** | | |
| **Comments:** | **1** | |

## Data Element Summary

| FNG Usage | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| Optional - | **N401** | 19 | **City Name** | M | AN 2/30 |
| Optional - | **N402** | 156 | State/Province | O | ID 1/2 |
| Optional - | **N403** | 116 | Postal code | O | ID 3/15 |
| Optional - | **N404** | 26 | **Country Code** | O | ID 2/3 |

| | | | | |
|---|---|---|---|---|
| **Segment:** | **FST** Forecast Schedule | | | |
| **Position:** | 800 | | | |
| **Loop:** | LIN/FST | Optional | | |
| **Level:** | Detail | | | |
| **Usage:** | Optional | | | |
| **Max Use:** | 260 | | | |
| **Purpose:** | To specify the forecasted dates and quantities | | | |

**Syntax Notes:** 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:** 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. Flex-N-Gate may send daily requirements.

**Data Element Summary**

| FNG Usage | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| Always | FST01 | 380 | **Quantity** | | M R 1/15 |
| | | | Numeric value of quantity | | |
| Always | FST02 | 680 | **Forecast Qualifier** | | M ID 1/1 |
| | | | Code specifying the sender's confidence level of the forecast data or an action associated with a forecast | | |
| | | | C | Firm | |
| | | | D | Planning | |
| Always | FST03 | 681 | **Forecast Timing Qualifier** | | M ID 1/1 |
| | | | Code specifying interval grouping of the forecast | | |
| | | | D | Discrete | |
| | | | F | Flexible Interval (from Date X through Date Y) | |
| | | | M | Monthly Bucket (Calendar Months) | |
| | | | W | Weekly Bucket | |
| Always | FST04 | 373 | **Forecast Begin Date** | | M DT 8/8 |
| | | | Date expressed as CCYYMMDD | | |
| See syntax &comments | FST05 | 373 | **Forecast End Date** | | O DT 8/8 |
| | | | Date expressed as CCYYMMDD | | |

| Segment: | **SHP** Shipped/Received Information |
|---|---|
| **Position:** | 900 |
| **Loop:** | LIN/SHP     Optional |
| **Level:** | Detail |
| **Usage:** | Optional |
| **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. |
| **Semantic Notes:** | **1** | SHP04 is the date shipped, delivered, received, or the cumulative quantity start date (as qualified by SHP03). |
| **Comments:** | **1** | The SHP segment is used to communicate shipment, delivery, or receipt information and may include discrete or cumulative quantities, dates, and times. |

### Data Element Summary

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| Always | **SHP01** | **673** | **Quantity Qualifier** | | **O**   **ID 2/2** |
| | | | Code specifying the type of quantity | | |
| | | | 01 | Discrete Quantity | |
| | | | 02 | Cumulative Quantity | |
| Always | **SHP02** | **380** | **Quantity** | | **X**   **R 1/15** |
| | | | Numeric value of quantity | | |
| Always | **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 | |
| Always | **SHP04** | **373** | **Date** | | **X**   **DT 8/8** |
| | | | Date expressed as CCYYMMDD | | |

| | | | |
|---|---|---|---|
| **Segment:** | **REF** Reference Identification | | |
| **Position:** | 910 | | |
| **Loop:** | SHP Optional | | |
| **Level:** | Detail | | |
| **Usage:** | Optional | | |
| **Max Use:** | 5 | | |
| **Purpose:** | To specify identifying information | | |
| **Syntax Notes:** | 1 At least one REF02 is required. | | |
| | . | | |
| | **Comments:** | | |

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| Always | REF01 | 128 | **Reference Identification Qualifier** | **M ID 2/3** |
| | | | 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 | |
| Always | 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:** **CTT** Transaction Totals
**Position:** 950
**Loop:**
**Level:** Summary
**Usage:** Optional
**Max Use:** 1
**Purpose:** To transmit a hash total for a specific element in the transaction set
**Syntax Notes:**
**Semantic Notes:**
**Comments:** 1. this segment is intended to provide hash totals to validate transaction completeness and correctness.

### Data Element Summary

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| Always | CTT01 | 354 | **Number of Line Items** | M   N0 1/6 |
| | | | Total number of line items in the transaction set | |
| | | | Total number of LIN segments | |

**Segment:**  **SE** Transaction Set Trailer
**Position:** 960
**Loop:**
**Level:** Summary
**Usage:** Mandatory
**Max Use:** 1
**Purpose:** To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)
**Syntax Notes:**
**Semantic Notes:**
**Comments:** 1  SE is the last segment of each transaction set.

### Data Element Summary

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| Always | SE01 | 96 | **Number of Included Segments** | M  N0 1/10 |
| | | | Total number of segments included in a transaction set including ST and SE segments | |
| > Always | 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 830

```
ISA~00~          ~00~          ~ZZ~5197273931      ~ZZ~VENDDUNS#~020801~1046
~U~00401~000000006~0~T~@*
GS~PS~5197273931~VENDDUNS#~20020801~1046~6~X~004010*
ST~830~0006*
BFR~05~2002213B~2002213B~DL~A~20020801~20021103~20020801*
N1~MI~FLEX-N-GATE~1~5197273931*
N1~SU~TEST VENDOR~1~VENDDUNS#*
N1~ST~FLEX-N-GATE~1~5197273931*
PER~EX~CHARLES SNYDER~TE~519-727-3931~FX~519-727-6436*
LIN~~BP~TEST MATERIAL 1~PO~001628*
UIT~EA*
ATH~PQ~20020801~24800~~20020101*
ATH~FI~20020801~0~~20020101*
ATH~MT~20020801~0~~20020101*
FST~100~C~D~20020801*
FST~100~C~D~20020802*
FST~0~C~D~20020803*
FST~0~C~D~20020804*
FST~150~C~D~20020805*
FST~0~C~D~20020806*
FST~50~C~D~20020807*
FST~100~C~D~20020808*
FST~100~C~D~20020809*
FST~0~C~D~20020810*
FST~0~C~D~20020811*
FST~2000~D~F~20020812~20020908*
FST~1900~D~F~20020909~20021006*
FST~2200~D~F~20021007~20021103*
SHP~01~1010~050~20020628*
REF~SI~5FF427*
SHP~02~24800~051~20020101*
LIN~~BP~TEST MATERIAL 2~PO~001629*
UIT~EA*
ATH~PQ~20020801~2370~~20020101*
ATH~FI~20020801~0~~20020101*
ATH~MT~20020801~0~~20020101*
FST~10~C~D~20020801*
FST~20~C~D~20020802*
FST~0~C~D~20020803*
FST~0~C~D~20020804*
FST~0~C~D~20020805*
FST~20~C~D~20020806*
FST~20~C~D~20020807*
FST~0~C~D~20020808*
FST~0~C~D~20020809*
FST~0~C~D~20020810*
FST~0~C~D~20020811*
FST~150~D~F~20020812~20020908*
FST~200~D~F~20020909~20021006*
FST~300~D~F~20021007~20021103*
SHP~01~210~050~20020702*
REF~SI~XYZ123*
SHP~02~2370~051~20020101*
CTT~2*
SE~52~0006*
GE~1~6*
IEA~1~000000006*
```

## Sample 997

ISA~00~    ~00~    ~ZZ~VENDDUNS#   ~ZZ~5197273931   ~
020801~1807~U~00401~000000129~0~T*:
GS~FA~VENDDUNS#~5197273931~20020801~1807~129~X~004010*
ST~997~0004*
AK1~PS~6*
AK2~830~0006*
AK5~A*
AK9~A~1~1~1*
SE~6~0004*
GE~1~129*
IEA~1*000000129*