

# 850 Purchase Order

Functional Group ID=**PO**

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Purchase Order Transaction Set (850) 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 and industry practice relative to the placement of purchase orders for goods and services. This transaction set should not be used to convey purchase order changes or purchase order acknowledgment information.

## Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BEG	Beginning Segment for Purchase Order	M	1		
	040	CUR	Currency	O	1		
	050	REF	Reference Identification	O	>1		
	060	PER	Administrative Communications Contact	O	3		
	080	FOB	F.O.B. Related Instructions	O	>1		
	130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1		
	150	DTM	Date/Time Reference	O	10		
	190	PID	Product/Item Description	O	200		
	200	MEA	Measurements	O	40		
	240	TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		
						LOOP ID - N1	200
	310	N1	Name	O	1		
	330	N3	Address Information	O	2		
	340	N4	Geographic Location	O	>1		

## Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
						LOOP ID - PO1	100000
M	010	PO1	Baseline Item Data	M	1		n1
	020	CUR	Currency	O	1		
						LOOP ID - PID	1000
	050	PID	Product/Item Description	O	1		
	060	MEA	Measurements	O	10		
	100	REF	Reference Identification	O	>1		
	210	DTM	Date/Time Reference	O	10		
						LOOP ID - SCH	200
	295	SCH	Line Item Schedule	O	1		n2
						LOOP ID - N1	200
	350	N1	Name	O	1		
	370	N3	Address Information	O	2		
	380	N4	Geographic Location	O	1		

## Summary:

<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
		LOOP ID - CTT			1	
010	CTT	Transaction Totals	O	1		n3
M	030	SE	Transaction Set Trailer	M	1	

## Transaction Set Notes

1. PO102 is required.
2. The SCH segment is used to specify various quantities of items ordered that are to be scheduled. When this segment is used the unit of measurement code (SCH02) should always be identical to the unit of measurement code in the associated PO1 segment (PO103) and the sum of values of quantity (SCH01) should always equal the quantity ordered (PO102) in the PO1 segment.
3. The number of line items (CTT01) is the accumulation of the number of PO1 segments. If used, hash total (CTT02) is the sum of the value of quantities ordered (PO102) for each PO1 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:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 850 Purchase Order	M ID 3/3
M	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

**Segment:** **BEG** Beginning Segment for Purchase Order  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of the Purchase Order Transaction Set and transmit identifying numbers and dates

**Syntax Notes:**  
**Semantic Notes:** 1 BEG05 is the date assigned by the purchaser to purchase order.  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	BEG01	353	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set 00 Original 01 Cancellation 02 Add 04 Change 05 Replace	M ID 2/2
M	BEG02	92	<b>Purchase Order Type Code</b> Code specifying the type of Purchase Order NE New Order RL Release or Delivery Order An order for goods and services placed against a pre-existing contract or blanket order SA Stand-alone Order	M ID 2/2
M	BEG03	324	<b>Purchase Order Number</b> Identifying number for Purchase Order assigned by the orderer/purchaser	M AN 1/22
	BEG04	328	<b>Release Number</b> Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction Or Previous Order Number	O AN 1/30
M	BEG05	373	<b>Date</b> Date expressed as CCYYMMDD	M DT 8/8

**Segment:** **CUR** Currency  
**Position:** 040  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the currency (dollars, pounds, francs, etc.) used in a transaction  
**Syntax Notes:**

- 1 If CUR08 is present, then CUR07 is required.
- 2 If CUR09 is present, then CUR07 is required.
- 3 If CUR10 is present, then at least one of CUR11 or CUR12 is required.
- 4 If CUR11 is present, then CUR10 is required.
- 5 If CUR12 is present, then CUR10 is required.
- 6 If CUR13 is present, then at least one of CUR14 or CUR15 is required.
- 7 If CUR14 is present, then CUR13 is required.
- 8 If CUR15 is present, then CUR13 is required.
- 9 If CUR16 is present, then at least one of CUR17 or CUR18 is required.
- 10 If CUR17 is present, then CUR16 is required.
- 11 If CUR18 is present, then CUR16 is required.
- 12 If CUR19 is present, then at least one of CUR20 or CUR21 is required.
- 13 If CUR20 is present, then CUR19 is required.
- 14 If CUR21 is present, then CUR19 is required.

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

- 1 See Figures Appendix for examples detailing the use of the CUR segment.

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	CUR01	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual BY Buying Party (Purchaser)	M ID 2/3
M	CUR02	100	<b>Currency Code</b> Code (Standard ISO) for country in whose currency the charges are specified	M ID 3/3
	CUR03	280	<b>Exchange Rate</b> Value to be used as a multiplier conversion factor to convert monetary value from one currency to another	O R 4/10
	CUR04	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 2/3
	CUR05	100	<b>Currency Code</b> Code (Standard ISO) for country in whose currency the charges are specified	O ID 3/3
	CUR06	669	<b>Currency Market/Exchange Code</b> Code identifying the market upon which the currency exchange rate is based Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 3/3
	CUR07	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 3/3
	CUR08	373	<b>Date</b> Date expressed as CCYYMMDD	O DT 8/8
	CUR09	337	<b>Time</b> 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)	O TM 4/8

<b>CUR10</b>	<b>374</b>	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time Refer to 004010 Data Element Dictionary for acceptable code values.	<b>X</b>	<b>ID 3/3</b>
<b>CUR11</b>	<b>373</b>	<b>Date</b> Date expressed as CCYYMMDD	<b>X</b>	<b>DT 8/8</b>
<b>CUR12</b>	<b>337</b>	<b>Time</b> 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)	<b>X</b>	<b>TM 4/8</b>
<b>CUR13</b>	<b>374</b>	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time Refer to 004010 Data Element Dictionary for acceptable code values.	<b>X</b>	<b>ID 3/3</b>
<b>CUR14</b>	<b>373</b>	<b>Date</b> Date expressed as CCYYMMDD	<b>X</b>	<b>DT 8/8</b>
<b>CUR15</b>	<b>337</b>	<b>Time</b> 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)	<b>X</b>	<b>TM 4/8</b>
<b>CUR16</b>	<b>374</b>	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time Refer to 004010 Data Element Dictionary for acceptable code values.	<b>X</b>	<b>ID 3/3</b>
<b>CUR17</b>	<b>373</b>	<b>Date</b> Date expressed as CCYYMMDD	<b>X</b>	<b>DT 8/8</b>
<b>CUR18</b>	<b>337</b>	<b>Time</b> 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)	<b>X</b>	<b>TM 4/8</b>
<b>CUR19</b>	<b>374</b>	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time Refer to 004010 Data Element Dictionary for acceptable code values.	<b>X</b>	<b>ID 3/3</b>
<b>CUR20</b>	<b>373</b>	<b>Date</b> Date expressed as CCYYMMDD	<b>X</b>	<b>DT 8/8</b>
<b>CUR21</b>	<b>337</b>	<b>Time</b> 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)	<b>X</b>	<b>TM 4/8</b>

**Segment:** **REF** Reference Identification  
**Position:** 050  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** >1  
**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:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
	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:** **PER** Administrative Communications Contact  
**Position:** 060  
**Loop:**  
**Level:** Heading  
**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 If either PER07 or PER08 is present, then the other is required.

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

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>	<b>Code</b>	<b>Code</b>
M	PER01	366 <b>Contact Function Code</b> Code identifying the major duty or responsibility of the person or group named BD Buyer Name or Department	M ID 2/2
	PER02	93 <b>Name</b> Free-form name	O AN 1/60
	PER03	365 <b>Communication Number Qualifier</b> Code identifying the type of communication number EM Electronic Mail TE Telephone	X ID 2/2
	PER04	364 <b>Communication Number</b> Complete communications number including country or area code when applicable	X AN 1/80



**Segment:** **FOB** F.O.B. Related Instructions  
**Position:** 080  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To specify transportation instructions relating to shipment  
**Syntax Notes:**

- 1 If FOB03 is present, then FOB02 is required.
- 2 If FOB04 is present, then FOB05 is required.
- 3 If FOB07 is present, then FOB06 is required.
- 4 If FOB08 is present, then FOB09 is required.

**Semantic Notes:**

- 1 FOB01 indicates which party will pay the carrier.
- 2 FOB02 is the code specifying transportation responsibility location.
- 3 FOB06 is the code specifying the title passage location.
- 4 FOB08 is the code specifying the point at which the risk of loss transfers. This may be different than the location specified in FOB02/FOB03 and FOB06/FOB07.

**Comments:**

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	FOB01	146	<b>Shipment Method of Payment</b> Code identifying payment terms for transportation charges	M ID 2/2
	FOB02	309	<b>Location Qualifier</b> Code identifying type of location	X ID 1/2
	FOB04	334	<b>Transportation Terms Qualifier Code</b> Code identifying the source of the transportation terms	O ID 2/2
	FOB05	335	<b>Transportation Terms Code</b> Code identifying the trade terms which apply to the shipment transportation responsibility	X ID 3/3

<b>Segment:</b>	<b>ITD</b> Terms of Sale/Deferred Terms of Sale
<b>Position:</b>	130
<b>Loop:</b>	
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify terms of sale
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.</li> <li>2 If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.</li> <li>3 If ITD09 is present, then at least one of ITD10 or ITD11 is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 ITD15 is the percentage applied to a base amount used to determine a late payment charge.</li> </ol>
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.</li> </ol>

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
ITD01	336	<b>Terms Type Code</b> Code identifying type of payment terms	O ID 2/2
ITD02	333	<b>Terms Basis Date Code</b> Code identifying the beginning of the terms period	O ID 1/2
ITD03	338	<b>Terms Discount Percent</b> Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date	O R 1/6
ITD04	370	<b>Terms Discount Due Date</b> Date payment is due if discount is to be earned expressed in format CCYYMMDD	X DT 8/8
ITD05	351	<b>Terms Discount Days Due</b> Number of days in the terms discount period by which payment is due if terms discount is earned	X N0 1/3
ITD06	446	<b>Terms Net Due Date</b> Date when total invoice amount becomes due expressed in format CCYYMMDD	O DT 8/8
ITD07	386	<b>Terms Net Days</b> Number of days until total invoice amount is due (discount not applicable)	O N0 1/3
ITD08	362	<b>Terms Discount Amount</b> Total amount of terms discount	O N2 1/10
ITD09	388	<b>Terms Deferred Due Date</b> Date deferred payment or percent of invoice payable is due expressed in format CCYYMMDD	O DT 8/8
ITD10	389	<b>Deferred Amount Due</b> Deferred amount due for payment	X N2 1/10
ITD11	342	<b>Percent of Invoice Payable</b> Amount of invoice payable expressed in percent	X R 1/5
ITD12	352	<b>Description</b> A free-form description to clarify the related data elements and their content	O AN 1/80
ITD13	765	<b>Day of Month</b> The numeric value of the day of the month between 1 and the maximum day of the month being referenced	X N0 1/2
ITD14	107	<b>Payment Method Code</b> Code identifying type of payment procedures	O ID 1/2
ITD15	954	<b>Percent</b> Percentage expressed as a decimal	O R 1/10

**Segment:** **DTM** Date/Time Reference  
**Position:** 150  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**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.
- 3 If either DTM05 or DTM06 is present, then the other is required.

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

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	<b>M ID 3/3</b>
	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	<b>X DT 8/8</b>
	DTM03	337	<b>Time</b> 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)	<b>X TM 4/8</b>
	DTM04	623	<b>Time Code</b> Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow	<b>O ID 2/2</b>

**Segment:** **PID** Product/Item Description  
**Position:** 190  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 200  
**Purpose:** To describe a product or process in coded or free-form format  
**Syntax Notes:**

- 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:**

- 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:**

- 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.

#### Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</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	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
	PID02	750 Product/Process Characteristic Code	O ID 2/3
		Code identifying the general class of a product or process characteristic	
		02 General Product Form	
		08 Product	
		09 Sub-product	
		11 Society, Government, Customer Specifications	
		13 Quality (Quality Level)	
		14 Finish or Surface Roughness	
		15 Heat Treat/Anneal	
		16 Temper	
		17 Coating	
		18 Surface Treatment, Chemical	
		19 Surface Treatment, Mechanical	
		20 Ends: Slitting, Splitting, Cutting	
		21 Forming	
		22 Edge Treatment	
		23 Welds/Splices	
		25 End Treatment	
		28 Test Sample Frequency	
		29 Test Sample Location	
		30 Test Sample Direction	
		32 Type of Test/Inspection	
		35 Color	
		55 Alloy	

	58	Winding Instructions	
	9B	Product Application	
	PR	Manufacturing Process	
		Production operations performed on the product being reported	
	TWF	Theoretical Weight Formula	
		Used to calculate a material weight	
<b>PID03</b>	<b>559</b>	<b>Agency Qualifier Code</b>	<b>X ID 2/2</b>
		Code identifying the agency assigning the code values	
	AA	Aluminum Association	
	CB	Copper and Brass Fabricators Council, Inc.	
	ST	American Iron & Steel Institute	
<b>PID04</b>	<b>751</b>	<b>Product Description Code</b>	<b>X AN 1/12</b>
		A code from an industry code list which provides specific data about a product characteristic	
<b>PID05</b>	<b>352</b>	<b>Description</b>	<b>X AN 1/80</b>
		A free-form description to clarify the related data elements and their content	
<b>PID06</b>	<b>752</b>	<b>Surface/Layer/Position Code</b>	<b>O ID 2/2</b>
		Code indicating the product surface, layer or position that is being described	

**Segment:** **MEA** Measurements

**Position:** 200

**Loop:**

**Level:** Heading

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

**Semantic Notes:** 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
MEA01	737	<b>Measurement Reference ID Code</b> Code identifying the broad category to which a measurement applies	O ID 2/2
MEA02	738	<b>Measurement Qualifier</b> Code identifying a specific product or process characteristic to which a measurement applies	O ID 1/3
MEA03	739	<b>Measurement Value</b> The value of the measurement	X R 1/20
MEA04	C001	<b>Composite Unit of Measure</b> To identify a composite unit of measure (See Figures Appendix for examples of use)	X
M	C00101	<b>355 Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M ID 2/2
MEA05	740	<b>Range Minimum</b> The value specifying the minimum of the measurement range	X R 1/20
MEA06	741	<b>Range Maximum</b> The value specifying the maximum of the measurement range	X R 1/20
MEA09	752	<b>Surface/Layer/Position Code</b> Code indicating the product surface, layer or position that is being described	O ID 2/2

**Segment:** **TD5** Carrier Details (Routing Sequence/Transit Time)  
**Position:** 240  
**Loop:**  
**Level:** Heading  
**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.
- 4 If TD510 is present, then TD511 is required.
- 5 If TD513 is present, then TD512 is required.
- 6 If TD514 is present, then TD513 is required.
- 7 If TD515 is present, then TD512 is required.

**Semantic Notes:**

- 1 TD515 is the country where the service is to be performed.

**Comments:**

- 1 When specifying a routing sequence to be used for the shipment movement in lieu of specifying each carrier within the movement, use TD502 to identify the party responsible for defining the routing sequence, and use TD503 to identify the actual routing sequence, specified by the party identified in TD502.

#### Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
TD501	133	<b>Routing Sequence Code</b>	O ID 1/2
		Code describing the relationship of a carrier to a specific shipment movement	
TD502	66	<b>Identification Code Qualifier</b>	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
TD503	67	<b>Identification Code</b>	X AN 2/80
		Code identifying a party or other code	
TD504	91	<b>Transportation Method/Type Code</b>	X ID 1/2
		Code specifying the method or type of transportation for the shipment	
TD505	387	<b>Routing</b>	X AN 1/35
		Free-form description of the routing or requested routing for shipment, or the originating carrier's identity	

**Segment:** **N1** Name  
**Position:** 310  
**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 N105 and N106 further define the type of entity in N101.

**Data Element Summary**

M	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
	N101	98	<b>Entity Identifier Code</b>	Code identifying an organizational entity, a physical location, property or an individual BT Bill-to-Party MF Manufacturer of Goods ST Ship To SU Supplier/Manufacturer VN Vendor
N102	93	<b>Name</b>	Free-form name	X AN 1/60
N103	66	<b>Identification Code Qualifier</b>	Code designating the system/method of code structure used for Identification Code (67)	X ID 1/2
N104	67	<b>Identification Code</b>	Code identifying a party or other code	X AN 2/80



**Segment:** N3 Address Information  
**Position:** 330  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
M	N301	166	<b>Address Information</b> Address information	M AN 1/55
	N302	166	<b>Address Information</b> Address information	O AN 1/55

**Segment:** **N4 Geographic Location**  
**Position:** 340  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To specify the geographic place of the named party  
**Syntax Notes:** 1 If N406 is present, then N405 is required.  
**Semantic Notes:**  
**Comments:** 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.  
2 N402 is required only if city name (N401) is in the U.S. or Canada.

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>		
N401	19	<b>City Name</b> Free-form text for city name	<b>O AN 2/30</b>
N402	156	<b>State or Province Code</b> Code (Standard State/Province) as defined by appropriate government agency	<b>O ID 2/2</b>
N403	116	<b>Postal Code</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	<b>O ID 3/15</b>
N404	26	<b>Country Code</b> Code identifying the country	<b>O ID 2/3</b>

- Segment:** **PO1** **Baseline Item Data**
- Position:** 010
- Loop:** PO1 Mandatory
- Level:** Detail
- Usage:** Mandatory
- Max Use:** 1
- Purpose:** To specify basic and most frequently used line item data
- Syntax Notes:**
- 1 If PO103 is present, then PO102 is required.
  - 2 If PO105 is present, then PO104 is required.
  - 3 If either PO106 or PO107 is present, then the other is required.
  - 4 If either PO108 or PO109 is present, then the other is required.
  - 5 If either PO110 or PO111 is present, then the other is required.
  - 6 If either PO112 or PO113 is present, then the other is required.
  - 7 If either PO114 or PO115 is present, then the other is required.
  - 8 If either PO116 or PO117 is present, then the other is required.
  - 9 If either PO118 or PO119 is present, then the other is required.
  - 10 If either PO120 or PO121 is present, then the other is required.
  - 11 If either PO122 or PO123 is present, then the other is required.
  - 12 If either PO124 or PO125 is present, then the other is required.
- Semantic Notes:**
- Comments:**
- 1 See the Data Element Dictionary for a complete list of IDs.
  - 2 PO101 is the line item identification.
  - 3 PO106 through PO125 provide for ten different product/service IDs per each item.  
For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
PO101	350		<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/20
PO102	330		<b>Quantity Ordered</b> Quantity ordered	X R 1/15
PO103	355		<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken BB Base Box KG Kilogram LB Pound PC Piece	O ID 2/2
PO104	212		<b>Unit Price</b> Price per unit of product, service, commodity, etc.	X R 1/17
PO106	235		<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) BP Buyer's Part Number EC Engineering Change Level GC Grade Code IN Buyer's Item Number MG Manufacturer's Part Number ON Customer Order Number PL Purchaser's Order Line Number PN Company Part Number PO Purchase Order Number RN Release Number Or Previous Order Number	X ID 2/2

VN Vendor's (Seller's) Item Number

VO Vendor's Order Number

VX Vendor's Specification Number

**PO107**

**234**

**Product/Service ID**

**X AN 1/48**

Identifying number for a product or service

**Segment:** **CUR** Currency  
**Position:** 020  
**Loop:** PO1 Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the currency (dollars, pounds, francs, etc.) used in a transaction  
**Syntax Notes:**

- 1 If CUR08 is present, then CUR07 is required.
- 2 If CUR09 is present, then CUR07 is required.
- 3 If CUR10 is present, then at least one of CUR11 or CUR12 is required.
- 4 If CUR11 is present, then CUR10 is required.
- 5 If CUR12 is present, then CUR10 is required.
- 6 If CUR13 is present, then at least one of CUR14 or CUR15 is required.
- 7 If CUR14 is present, then CUR13 is required.
- 8 If CUR15 is present, then CUR13 is required.
- 9 If CUR16 is present, then at least one of CUR17 or CUR18 is required.
- 10 If CUR17 is present, then CUR16 is required.
- 11 If CUR18 is present, then CUR16 is required.
- 12 If CUR19 is present, then at least one of CUR20 or CUR21 is required.
- 13 If CUR20 is present, then CUR19 is required.
- 14 If CUR21 is present, then CUR19 is required.

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

- 1 See Figures Appendix for examples detailing the use of the CUR segment.

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	CUR01	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual BY Buying Party (Purchaser)	<b>M ID 2/3</b>
M	CUR02	100	<b>Currency Code</b> Code (Standard ISO) for country in whose currency the charges are specified	<b>M ID 3/3</b>

**Segment:** **PID** Product/Item Description

**Position:** 050

**Loop:** PID Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 1

**Purpose:** To describe a product or process in coded or free-form format

**Syntax Notes:**

- 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:**

- 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:**

- 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.

#### Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</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	
		S Structured (From Industry Code List)	
		X Semi-structured (Code and Text)	
	PID02	750 Product/Process Characteristic Code	O ID 2/3
		Code identifying the general class of a product or process characteristic	
		02 General Product Form	
		08 Product	
		09 Sub-product	
		11 Society, Government, Customer Specifications	
		13 Quality (Quality Level)	
		14 Finish or Surface Roughness	
		15 Heat Treat/Anneal	
		16 Temper	
		17 Coating	
		18 Surface Treatment, Chemical	
		19 Surface Treatment, Mechanical	
		20 Ends: Slitting, Splitting, Cutting	
		21 Forming	
		22 Edge Treatment	
		23 Welds/Splices	
		25 End Treatment	
		28 Test Sample Frequency	
		29 Test Sample Location	
		30 Test Sample Direction	
		32 Type of Test/Inspection	

		35	Color		
		55	Alloy		
		58	Winding Instructions		
		9B	Product Application		
		PR	Manufacturing Process		
			Production operations performed on the product being reported		
		TWF	Theoretical Weight Formula		
			Used to calculate a material weight		
		ZZ	Mutually Defined		
<b>PID03</b>	<b>559</b>	<b>Agency Qualifier Code</b>		<b>X</b>	<b>ID 2/2</b>
		Code identifying the agency assigning the code values			
		AA	Aluminum Association		
		CB	Copper and Brass Fabricators Council, Inc.		
		ST	American Iron & Steel Institute		
<b>PID04</b>	<b>751</b>	<b>Product Description Code</b>		<b>X</b>	<b>AN 1/12</b>
		A code from an industry code list which provides specific data about a product characteristic			
<b>PID05</b>	<b>352</b>	<b>Description</b>		<b>X</b>	<b>AN 1/80</b>
		A free-form description to clarify the related data elements and their content			
<b>PID06</b>	<b>752</b>	<b>Surface/Layer/Position Code</b>		<b>O</b>	<b>ID 2/2</b>
		Code indicating the product surface, layer or position that is being described			

**Segment:** **MEA** Measurements

**Position:** 060

**Loop:** PID Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 10

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

**Semantic Notes:** 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
MEA01	737	<b>Measurement Reference ID Code</b> Code identifying the broad category to which a measurement applies	O ID 2/2
MEA02	738	<b>Measurement Qualifier</b> Code identifying a specific product or process characteristic to which a measurement applies	O ID 1/3
MEA03	739	<b>Measurement Value</b> The value of the measurement	X R 1/20
MEA04	C001	<b>Composite Unit of Measure</b> To identify a composite unit of measure (See Figures Appendix for examples of use)	X
M	C00101	<b>355 Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M ID 2/2
MEA05	740	<b>Range Minimum</b> The value specifying the minimum of the measurement range	X R 1/20
MEA06	741	<b>Range Maximum</b> The value specifying the maximum of the measurement range	X R 1/20
MEA09	752	<b>Surface/Layer/Position Code</b> Code indicating the product surface, layer or position that is being described	O ID 2/2



**Segment:** **REF** Reference Identification  
**Position:** 100  
**Loop:** PO1 Mandatory  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** >1  
**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:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification	M ID 2/3
	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30
	REF03	352	<b>Description</b> A free-form description to clarify the related data elements and their content	X AN 1/80

**Segment:** **DTM** **Date/Time Reference**  
**Position:** 210  
**Loop:** PO1 Mandatory  
**Level:** Detail  
**Usage:** Optional  
**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.
- 3 If either DTM05 or DTM06 is present, then the other is required.

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

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	<b>M ID 3/3</b>
	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	<b>X DT 8/8</b>
	DTM03	337	<b>Time</b> 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)	<b>X TM 4/8</b>
	DTM04	623	<b>Time Code</b> Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow	<b>O ID 2/2</b>

**Segment:** SCH Line Item Schedule  
**Position:** 295  
**Loop:** SCH Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the data for scheduling a specific line-item  
**Syntax Notes:**

- 1 If SCH03 is present, then SCH04 is required.
- 2 If SCH08 is present, then at least one of SCH09 or SCH10 is required.
- 3 If SCH09 is present, then SCH08 is required.
- 4 If SCH10 is present, then SCH08 is required.

**Semantic Notes:**

- 1 SCH12 is the schedule identification.

**Comments:**

- 1 SCH05 specifies the interpretation to be used for SCH06 and SCH07.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	SCH01	380	<b>Quantity</b> Numeric value of quantity	M R 1/15
M	SCH02	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken BB Base Box KG Kilogram LB Pound PC Piece	M ID 2/2
	SCH03	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3
	SCH04	93	<b>Name</b> Free-form name	X AN 1/60
M	SCH05	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	M ID 3/3
M	SCH06	373	<b>Date</b> Date expressed as CCYYMMDD	M DT 8/8
	SCH07	337	<b>Time</b> 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)	O TM 4/8
	SCH08	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	X ID 3/3

**Segment:** **N1** Name  
**Position:** 350  
**Loop:** 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 N105 and N106 further define the type of entity in N101.

**Data Element Summary**

M	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Entity Identifier Code</u>	<u>M ID 2/3</u>
	<b>N101</b>	<b>98</b>	Code identifying an organizational entity, a physical location, property or an individual BT Bill-to-Party MF Manufacturer of Goods ST Ship To SU Supplier/Manufacturer VN Vendor	
	<b>N102</b>	<b>93</b>	<b>Name</b> Free-form name	<b>X AN 1/60</b>
	<b>N103</b>	<b>66</b>	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67)	<b>X ID 1/2</b>
	<b>N104</b>	<b>67</b>	<b>Identification Code</b> Code identifying a party or other code	<b>X AN 2/80</b>

**Segment:** N3 Address Information  
**Position:** 370  
**Loop:** N1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
M	N301	166	<b>Address Information</b> Address information	M AN 1/55
	N302	166	<b>Address Information</b> Address information	O AN 1/55

**Segment:** **N4 Geographic Location**  
**Position:** 380  
**Loop:** N1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the geographic place of the named party  
**Syntax Notes:** 1 If N406 is present, then N405 is required.  
**Semantic Notes:**  
**Comments:** 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.  
2 N402 is required only if city name (N401) is in the U.S. or Canada.

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>		
N401	19	<b>City Name</b> Free-form text for city name	<b>O AN 2/30</b>
N402	156	<b>State or Province Code</b> Code (Standard State/Province) as defined by appropriate government agency	<b>O ID 2/2</b>
N403	116	<b>Postal Code</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	<b>O ID 3/15</b>
N404	26	<b>Country Code</b> Code identifying the country	<b>O ID 2/3</b>

**Segment:** **CTT** Transaction Totals  
**Position:** 010  
**Loop:** CTT Optional  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To transmit a hash total for a specific element in the transaction set  
**Syntax Notes:** 1 If either CTT03 or CTT04 is present, then the other is required.  
 2 If either CTT05 or CTT06 is present, then the other is required.  
**Semantic Notes:**  
**Comments:** 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	CTT01	354	Number of Line Items Total number of line items in the transaction set	M N0 1/6

**Segment:** **SE** Transaction Set Trailer  
**Position:** 030  
**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

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