# 810 Invoice

# Functional Group ID=IN

#### Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) 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 billing for goods and services provided.

#### **Heading:**

| М | <b>Pos.</b><br><u>No.</u><br>010 | Seg.<br><u>ID</u><br>ST | <u>Name</u><br>Transaction Set Header | <b>Req.</b><br><u>Des.</u><br>M | <u>Max.Use</u><br>1 | Loop<br><u>Repeat</u> | Notes and<br><u>Comments</u> |
|---|----------------------------------|-------------------------|---------------------------------------|---------------------------------|---------------------|-----------------------|------------------------------|
| М | 020                              | BIG                     | Beginning Segment for Invoice         | М                               | 1                   |                       |                              |
|   | 050                              | REF                     | Reference Identification              | 0                               | 12                  |                       |                              |
|   |                                  |                         | LOOP ID - N1                          |                                 |                     | 200                   |                              |
|   | 070                              | N1                      | Name                                  | 0                               | 1                   |                       |                              |
|   | 080                              | N2                      | Additional Name Information           | 0                               | 2                   |                       |                              |
|   | 090                              | N3                      | Address Information                   | 0                               | 2                   |                       |                              |
|   | 100                              | N4                      | Geographic Location                   | 0                               | 1                   |                       |                              |
|   | 130                              | ITD                     | Terms of Sale/Deferred Terms of Sale  | 0                               | >1                  |                       |                              |
|   | 140                              | DTM                     | Date/Time Reference                   | 0                               | 10                  |                       |                              |
|   | 150                              | FOB                     | F.O.B. Related Instructions           | 0                               | 1                   |                       |                              |

#### **Detail:**

| Pos.<br><u>No.</u> | Seg.<br><u>ID</u> | Name                         | Req.<br><u>Des.</u> | <u>Max.Use</u> | Loop<br><u>Repeat</u> | Notes and<br><u>Comments</u> |
|--------------------|-------------------|------------------------------|---------------------|----------------|-----------------------|------------------------------|
|                    |                   | LOOP ID - IT1                |                     |                | 200000                |                              |
| 010                | IT1               | Baseline Item Data (Invoice) | 0                   | 1              |                       |                              |
| 030                | IT3               | Additional Item Data         | 0                   | 5              |                       |                              |
| 059                | MEA               | Measurements                 | 0                   | 40             |                       |                              |
|                    |                   | LOOP ID - PID                |                     |                | 1000                  |                              |
| 060                | PID               | Product/Item Description     | 0                   | 1              |                       |                              |
| 120                | REF               | Reference Identification     | 0                   | >1             |                       |                              |

#### **Summary:**

| М | <b>Pos.</b><br><u>No.</u><br>010 | Seg.<br><u>ID</u><br>TDS | <u>Name</u><br>Total Monetary Value Summary             | <b>Req.</b><br><u>Des.</u><br>M | <u>Max.Use</u><br>1 | Loop<br><u>Repeat</u> | Notes and<br><u>Comments</u> |
|---|----------------------------------|--------------------------|---|---------------------------------|---------------------|-----------------------|------------------------------|
|   | 030                              | CAD                      | Carrier Detail  | 0                               | 1                   |                       |                              |
|   |                                  |                          | LOOP ID - SAC   |                                 |                     | 25                    |                              |
|   | 040                              | SAC                      | Service, Promotion, Allowance, or Charge<br>Information | 0                               | 1                   |                       |                              |
|   | 070                              | CTT                      | Transaction Totals                                      | 0                               | 1                   |                       | n1                           |
| М | 080                              | SE                       | Transaction Set Trailer                                 | М                               | 1                   |                       |                              |

#### **Transaction Set Notes**

1. Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 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   |     |         |
|---|------|----------------|--|-----|---------|
|   | Ref. | Data           |  |     |         |
|   | Des. | <u>Element</u> | <u>Name</u>  | Att | ributes |
| Μ | ST01 | 143            | Transaction Set Identifier Code  | Μ   | ID 3/3  |
|   |      |                | Code uniquely identifying a Transaction Set  |     |         |
|   |      |                | 810 Invoice  |     |         |
| Μ | ST02 | 329            | Transaction Set Control Number   | Μ   | AN 4/9  |
|   |      |                | Identifying control number that must be unique within the tra<br>functional group assigned by the originator for a transaction |     | ion set |

| Segment:         | <b>BIG</b> Beginning Segment for Invoice  |
|------------------|---|
| Position:        | 020   |
| Loop:            |   |
| Level:           | Heading   |
| Usage:           | Mandatory   |
| Max Use:         | 1   |
| Purpose:         | To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates        |
| Syntax Notes:    |   |
| Semantic Notes:  | <b>1</b> BIG01 is the invoice issue date.   |
|                  | <b>2</b> BIG03 is the date assigned by the purchaser to purchase order.                                   |
|                  | <b>3</b> BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used. |
| <b>Comments:</b> | <b>1</b> BIG07 is used only to further define the type of invoice when needed.                            |

|   |                              |                               | I                   | Data Element Summary                               |       |                          |
|---|------------------------------|-------------------------------|---------------------|--|-------|--------------------------|
| М | Ref.<br><u>Des.</u><br>BIG01 | Data<br><u>Element</u><br>373 | <u>Name</u><br>Date |  |       | <u>ributes</u><br>DT 8/8 |
|   |                              |                               | Date exp            | ressed as CCYYMMDD                                 |       |                          |
| Μ | BIG02                        | 76                            | Invoice I           | Number   | Μ     | AN 1/22                  |
|   |                              |                               | Identifyin          | ng number assigned by issuer                       |       |                          |
|   | BIG03                        | 373                           | Date                |  | 0     | DT 8/8                   |
|   |                              |                               | Date exp            | ressed as CCYYMMDD                                 |       |                          |
|   | BIG04                        | 324                           | Purchas             | e Order Number                                     | 0     | AN 1/22                  |
|   |                              |                               | Identifyi           | ng number for Purchase Order assigned by the order | er/pu | rchaser                  |
|   | BIG07                        | 640                           | Transac             | tion Type Code                                     | 0     | ID 2/2                   |
|   |                              |                               | Code spe            | cifying the type of transaction                    |       |                          |
|   |                              |                               | DR                  | Debit Memo   |       |                          |
|   |                              |                               | PR                  | Product (or Service)                               |       |                          |
|   | BIG08                        | 353                           | Transac             | tion Set Purpose Code                              | 0     | ID 2/2                   |
|   |                              |                               | Code ide            | ntifying purpose of transaction set                |       |                          |
|   |                              |                               | 00                  | Original   |       |                          |
|   |                              |                               | 15                  | Re-Submission                                      |       |                          |
|   |                              |                               |                     |  |       |                          |

## REF Deference Identification

| Segment:         | <b>REF</b> Reference Identification   |
|------------------|---|
| <b>Position:</b> | 050   |
| Loop:            |   |
| Level:           | Heading   |
| Usage:           | Optional  |
| Max Use:         | 12  |
| 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.        |
|                  | <b>3</b> If either C04005 or C04006 is present, then the other is required. |
| Semantic Notes:  | <b>1</b> REF04 contains data relating to the value cited in REF02.          |
| <b>Comments:</b> |   |

#### **Data Element Summary** Ref. Data Element Name **Attributes** Des. М **REF01** 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification BM Bill of Lading Number MA Ship Notice/Manifest Number **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:         | N1 <sub>Name</sub>   |
|------------------|--|
| <b>Position:</b> | 070  |
| 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.N105 and N106 further define the type of entity in N101.

**Data Element Summary** 

| М | Ref.<br><u>Des.</u><br>N101 | Data<br><u>Element</u><br>98 | <u>Name</u><br>Entity Identifier ( | Code   |        | <u>ributes</u><br>ID 2/3 |
|---|-----------------------------|------------------------------|------------------------------------|--|--------|--------------------------|
|   |                             |                              |                                    | n organizational entity, a physical location | , proj | perty or an              |
|   |                             |                              | individual                         |  |        |                          |
|   |                             |                              | BT                                 | Bill-to-Party                                |        |                          |
|   |                             |                              | RE                                 | Party to receive commercial invoice rer      | nittan | ce                       |
|   |                             |                              | SE                                 | Selling Party                                |        |                          |
|   |                             |                              | SF                                 | Ship From                                    |        |                          |
|   |                             |                              | ST                                 | Ship To                                      |        |                          |
|   | N102                        | 93                           | Name                               |  | Х      | AN 1/60                  |
|   |                             |                              | Free-form name                     |  |        |                          |
|   | N103                        | 66                           | Identification Cod                 | e Qualifier                                  | Х      | ID 1/2                   |
|   |                             |                              | Code designating th<br>Code (67)   | ne system/method of code structure used f    | or Ide | entification             |
|   |                             |                              | 1                                  | D-U-N-S Number, Dun & Bradstreet             |        |                          |
|   |                             |                              | 91                                 | Assigned by Seller or Seller's Agent         |        |                          |
|   | N104                        | 67                           | Identification Cod                 | e  | Х      | AN 2/80                  |
|   |                             |                              | Code identifying a                 | party or other code                          |        |                          |

## Segment: N2 Additional Name Information

| Segment:         | 1 🖌 Additional Name Information  |
|------------------|--|
| Position:        | 080  |
| Loop:            | N1 Optional  |
| Level:           | Heading  |
| Usage:           | Optional   |
| Max Use:         | 2  |
| Purpose:         | To specify additional names or those longer than 35 characters in length |
| Syntax Notes:    |  |
| Semantic Notes:  |  |
| <b>Comments:</b> |  |
|                  |  |

#### **Data Element Summary**

|   |                     |                        | Data Element Summary |                   |
|---|---------------------|------------------------|----------------------|-------------------|
|   | Ref.<br><u>Des.</u> | Data<br><u>Element</u> | Name                 | <u>Attributes</u> |
| Μ | N201                | 93                     | Name                 | M AN 1/60         |
|   |                     |                        | Free-form name       |                   |
|   | N202                | 93                     | Name                 | O AN 1/60         |
|   |                     |                        | Free-form name       |                   |

N3 Address Information Segment: **Position:** 090 Loop: N1 Optional Heading Optional Level: Usage: Max Use: 2 **Purpose:** To specify the location of the named party Syntax Notes: Semantic Notes: **Comments:** 

#### **Data Element Summary**

|   | Ref.<br><u>Des.</u> | Data<br><u>Element</u> |  |   | <u>ibutes</u> |
|---|---------------------|------------------------|--|---|---------------|
| Μ | N301                | 166                    | Address Information<br>Address information | Μ | AN 1/55       |
|   | N302                | 166                    | Address Information                        | 0 | AN 1/55       |
|   |                     |                        | Address information                        |   |               |

| Segment:        | N4 Geographic Location   |
|-----------------|--|
| Position:       | 100  |
| Loop:           | N1 Optional  |
| Level:          | Heading  |
| Usage:          | Optional   |
| Max Use:        | 1  |
| <b>Purpose:</b> | 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   |                  |                           |
|-----------------------------|------------------------------|--|------------------|---------------------------|
| Ref.<br><u>Des.</u><br>N401 | Data<br><u>Element</u><br>19 | <u>Name</u><br>City Name   | <u>Attı</u><br>O | <u>ributes</u><br>AN 2/30 |
|                             |                              | Free-form text for city name   |                  |                           |
| N402                        | 156                          | State or Province Code   | 0                | ID 2/2                    |
|                             |                              | Code (Standard State/Province) as defined by appropriate go                                  | vernn            | nent agency               |
| N403                        | 116                          | Postal Code  | 0                | ID 3/15                   |
|                             |                              | Code defining international postal zone code excluding punct<br>(zip code for United States) | tuatio           | n and blanks              |

| Segment:         | ${f ITD}$ Terms of Sale/Deferred Terms of Sale   |
|------------------|--|
| Position:        | 130  |
| Loop:            |  |
| Level:           | Heading  |
| Usage:           | Optional   |
| Max Use:         | >1   |
| Purpose:         | To specify terms of sale   |
| Syntax Notes:    | 1 If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.              |
|                  | 2 If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.              |
|                  | <b>3</b> If ITD09 is present, then at least one of ITD10 or ITD11 is required.             |
| Semantic Notes:  | <b>1</b> ITD15 is the percentage applied to a base amount used to determine a late payment |
|                  | charge.  |
| <b>Comments:</b> | 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.          |

|       |                | Data Element Summary  |             |                |
|-------|----------------|---|-------------|----------------|
| Ref.  | Data           |   |             |                |
| Des.  | <u>Element</u> | Name  | <u>Attı</u> | <u>ributes</u> |
| ITD01 | 336            | Terms Type Code   | 0           | ID 2/2         |
|       |                | Code identifying type of payment terms                          |             |                |
|       |                | 08 Basic Discount Offered                                       |             |                |
| ITD02 | 333            | Terms Basis Date Code   | 0           | ID 1/2         |
|       |                | Code identifying the beginning of the terms period              |             |                |
|       |                | 3 Invoice Date  |             |                |
| ITD03 | 338            | Terms Discount Percent  | 0           | R 1/6          |
|       |                | Terms discount percentage, expressed as a percent, available    | to the      | e purchaser if |
|       |                | an invoice is paid on or before the Terms Discount Due Date     |             |                |
| ITD05 | 351            | Terms Discount Days Due   | Х           | N0 1/3         |
|       |                | Number of days in the terms discount period by which payme      | ent is      | due if terms   |
|       |                | discount is earned  |             |                |
| ITD07 | 386            | Terms Net Days  | 0           | N0 1/3         |
|       |                | Number of days until total invoice amount is due (discount n    | ot app      | plicable)      |
| ITD08 | 362            | Terms Discount Amount   | 0           | N2 1/10        |
|       |                | Total amount of terms discount                                  |             |                |
| ITD12 | 352            | Description   | 0           | AN 1/80        |
|       |                | A free-form description to clarify the related data elements an | nd the      | eir content    |
| ITD15 | 954            | Percent   | 0           | R 1/10         |
|       |                | Percentage expressed as a decimal                               |             |                |
|       |                |   |             |                |

# **DTM** Date/Time Reference

| Segment:         | DTM Date/Time Reference   |
|------------------|---|
| <b>Position:</b> | 140   |
| 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.                       |
|                  | <b>2</b> If DTM04 is present, then DTM03 is required.                     |
|                  | <b>3</b> If either DTM05 or DTM06 is present, then the other is required. |
| Semantic Notes:  |   |

**Comments:** 

|   |                              |                               | Data Element Summary  |                  |                          |
|---|------------------------------|-------------------------------|---|------------------|--------------------------|
| М | Ref.<br><u>Des.</u><br>DTM01 | Data<br><u>Element</u><br>374 | <u>Name</u><br>Date/Time Oualifier                          | <u>Attı</u><br>M | <u>ributes</u><br>ID 3/3 |
|   |                              |                               | Code specifying type of date or time, or both date and time |                  | 0.0                      |
|   |                              |                               | 011 Shipped   |                  |                          |
|   | DTM02                        | 373                           | Date  | Х                | DT 8/8                   |
|   |                              |                               | Date expressed as CCYYMMDD                                  |                  |                          |

#### FOB F.O.B. Related Instructions Segment: 150 **Position:** Loop: Level: Heading Usage: Optional Max Use: 1 **Purpose:** To specify transportation instructions relating to shipment Syntax Notes: If FOB03 is present, then FOB02 is required. 1 2 If FOB04 is present, then FOB05 is required. If FOB07 is present, then FOB06 is required. 3 If FOB08 is present, then FOB09 is required. 4 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**

|   |                              |                               | 2 4 4 2 4                    | ······································         |                  |                          |
|---|------------------------------|-------------------------------|------------------------------|--|------------------|--------------------------|
| М | Ref.<br><u>Des.</u><br>FOB01 | Data<br><u>Element</u><br>146 | <u>Name</u><br>Shipment Meth | od of Payment                                  | <u>Attı</u><br>M | <u>ributes</u><br>ID 2/2 |
|   |                              |                               | Code identifying             | payment terms for transportation charges       |                  |                          |
|   |                              |                               | CC                           | Collect  |                  |                          |
|   |                              |                               | PP                           | Prepaid (by Seller)                            |                  |                          |
|   | FOB02                        | 309                           | Location Qualif              | ier  | Х                | ID 1/2                   |
|   |                              |                               | Code identifying             | type of location                               |                  |                          |
|   |                              |                               | DE                           | Destination (Shipping)                         |                  |                          |
|   |                              |                               | MI                           | Mill   |                  |                          |
|   | FOB03                        | 352                           | Description                  |  | 0                | AN 1/80                  |
|   |                              |                               | A free-form desc             | ription to clarify the related data elements a | nd the           | eir content              |

| Segment:         | IT1 Baseline Item Data (Invoice)   |
|------------------|--|
| Position:        | 010  |
| Loop:            | IT1 Optional   |
| Level:           | Detail   |
| Usage:           | Optional   |
| Max Use:         | 1  |
| Purpose:         | To specify the basic and most frequently used line item data for the invoice and related transactions  |
| Syntax Notes:    | 1 If any of IT102 IT103 or IT104 is present, then all are required.  |
|                  | 2 If either IT106 or IT107 is present, then the other is required.   |
|                  | <b>3</b> If either IT108 or IT109 is present, then the other is required.  |
|                  | 4 If either IT110 or IT111 is present, then the other is required.   |
|                  | 5 If either IT112 or IT113 is present, then the other is required.   |
|                  | 6 If either IT114 or IT115 is present, then the other is required.   |
|                  | 7 If either IT116 or IT117 is present, then the other is required.   |
|                  | 8 If either IT118 or IT119 is present, then the other is required.   |
|                  | 9 If either IT120 or IT121 is present, then the other is required.   |
|                  | <b>10</b> If either IT122 or IT123 is present, then the other is required.   |
|                  | 11 If either IT124 or IT125 is present, then the other is required.  |
| Semantic Notes:  | <b>1</b> IT101 is the purchase order line item identification.   |
| <b>Comments:</b> | 1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.  |
|                  | <ul> <li>IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.</li> </ul> |

|         |                | Da                         | ta Element Summary   |         |                |
|---------|----------------|----------------------------|--|---------|----------------|
| Ref.    | Data           |                            |  |         |                |
| Des.    | <u>Element</u> | <u>Name</u>                |  | Att     | <u>ributes</u> |
| IT101   | 350            | Assigned I                 | dentification  | 0       | AN 1/20        |
|         |                | Alphanume                  | eric characters assigned for differentiation within  | a tran  | saction set    |
| IT102   | 358            | Quantity In                | nvoiced  | Х       | R 1/10         |
|         |                | Number of                  | units invoiced (supplier units)  |         |                |
| IT103   | 355            | Unit or Ba                 | sis for Measurement Code   | Х       | ID 2/2         |
|         |                | which a me                 | fying the units in which a value is being expresse<br>asurement has been taken<br>4010 Data Element Dictionary for acceptable co |         |                |
| IT104   | 212            | <b>Unit Price</b>          |  | X       | R 1/17         |
|         |                | Price per ur               | nit of product, service, commodity, etc.   |         |                |
| IT105   | 639            | -                          | nit Price Code   | 0       | ID 2/2         |
|         |                | Code identi                | ifying the type of unit price for an item  |         |                |
|         |                | HP                         | Price per Hundred  |         |                |
|         |                | PP                         | Price per Pound  |         |                |
| IT106   | 235            |                            | ervice ID Qualifier  | x       | ID 2/2         |
| 11100   | 200            | Code identi<br>Product/Ser | ifying the type/source of the descriptive number rivice ID (234)   |         |                |
|         |                | VO                         | Vendor's Order Number  |         |                |
| IT107   | 234            | Product/Se                 |  | Х       | AN 1/48        |
|         |                |                            | number for a product or service  |         |                |
| IT108   | 235            |                            | ervice ID Qualifier  | Х       | ID 2/2         |
|         |                |                            | ifying the type/source of the descriptive number<br>rvice ID (234)<br>Buyer's Part Number  | used in | n              |
| IT109   | 234            | Product/Se                 | ervice ID  | Х       | AN 1/48        |
|         |                | Identifying                | number for a product or service  |         |                |
| IT110   | 235            | Product/Se                 | ervice ID Qualifier  | Х       | ID 2/2         |
| 004010) |                |                            | 13   |         | April 19-20    |

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

 IT111
 234
 Product/Service ID

 Identifying number for a product or service

X AN 1/48

| Segment:        | IT3 Additional Item Data  |
|-----------------|---|
| Position:       | 030   |
| Loop:           | IT1 Optional  |
| Level:          | Detail  |
| Usage:          | Optional  |
| Max Use:        | 5   |
| Purpose:        | To specify additional item details relating to variations between ordered and shipped |
|                 | quantities, or to specify alternate units of measures and quantities                  |
| Syntax Notes:   | <b>1</b> If either IT301 or IT302 is present, then the other is required.             |
|                 | 2 At least one of IT301 IT303 IT304 or IT305 is required.                             |
| Semantic Notes: |   |

Comments:

|       |                | Data Elem                                 | ent Summary   |         |                |
|-------|----------------|---|---|---------|----------------|
| Ref.  | Data           |   |   |         |                |
| Des.  | <u>Element</u> | Name                                      |   | Attı    | <u>ributes</u> |
| IT301 | 382            | Number of Units S                         | Shipped   | Х       | R 1/10         |
|       |                | Numeric value of us<br>or transaction set | nits shipped in manufacturer's shipping u                         | nits fo | or a line item |
| IT302 | 355            | Unit or Basis for N                       | Aeasurement Code  | Х       | ID 2/2         |
|       |                | Code specifying the which a measureme     | e units in which a value is being expressed<br>ont has been taken | l, or r | nanner in      |
|       |                | 01  | Actual Pounds   |         |                |
|       |                | 24  | Theoretical Pounds  |         |                |
|       |                | BB  | Base Box  |         |                |
|       |                | DO  | Dollars, U.S.   |         |                |
|       |                | LF  | Linear Foot   |         |                |

| Segment:         | MEA Measurements   |  |  |  |  |  |
|------------------|--|--|--|--|--|--|
| <b>Position:</b> | 059  |  |  |  |  |  |
| Loop:            | IT1 Optional   |  |  |  |  |  |
| Level:           | Detail   |  |  |  |  |  |
| 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.   |  |  |  |  |  |
|                  | <b>3</b> 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:  | <b>1</b> 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          | i Element Summary   |             |           |
|--------|---------|---------------|---|-------------|-----------|
| Ref.   | Data    |               |   |             |           |
| Des.   | Element | <u>Name</u>   |   | Attr        | ributes   |
| MEA01  | 737     |               | nt Reference ID Code  | 0           | ID 2/2    |
|        |         | -             | ying the broad category to which a measurer                           | nent appli  | ies       |
|        |         | PD            | Physical Dimensions   |             |           |
|        |         | WT            | Weights   |             |           |
| MEA02  | 738     | Measuremen    | nt Qualifier  | 0           | ID 1/3    |
|        |         | •             | ying a specific product or process characteris                        | stic to wh  | ich a     |
|        |         | measurement   |   |             |           |
|        |         | TH            | Thickness   |             |           |
|        |         | WD            | Width   |             |           |
|        |         | WT            | Weight  |             |           |
| MEA03  | 739     | Measuremen    |   | Х           | R 1/20    |
|        |         |               | the measurement   |             |           |
| MEA04  | C001    | -             | Jnit of Measure   | Х           |           |
|        |         | •             | composite unit of measure (See Figures A                              | ppendix f   | for examp |
| C00101 | 255     | of use)       | a fan Maagmun ant Cada  | м           | ID 2/2    |
| C00101 | 355     |               | s for Measurement Code  |             | ID 2/2    |
|        |         |               | ing the units in which a value is being expressurement has been taken | essea, or n | nanner in |
|        |         | IN            | Inch  |             |           |
|        |         | KG            | Kilogram  |             |           |
|        |         | LB            | Pound   |             |           |
| C00107 | 355     |               | s for Measurement Code  | 0           | ID 2/2    |
| 000107 | 000     |               | ing the units in which a value is being expre                         | 0           |           |
|        |         |               | surement has been taken   |             |           |
|        |         | Refer to 0040 | 010 Data Element Dictionary for acceptable                            | code valu   | ies.      |
| C00108 | 1018    | Exponent      |   | 0           | R 1/15    |
|        |         | Power to whi  | ch a unit is raised   |             |           |
| C00109 | 649     | Multiplier    |   | 0           | R 1/10    |
|        |         | Value to be u | used as a multiplier to obtain a new value                            |             |           |
| C00110 | 355     |               | s for Measurement Code  | 0           | ID 2/2    |
|        |         | Code specify  | ing the units in which a value is being expre                         | essed, or r | nanner in |
|        |         |               | surement has been taken   |             |           |
|        |         | Refer to 0040 | 010 Data Element Dictionary for acceptable                            | code valu   | ies.      |
|        |         |               |   |             |           |

М

| C00111       | 1018 | Exponent   |        | R 1/15 |
|--------------|------|--|--------|--------|
|              |      | Power to which a unit is raised  |        |        |
| C00112       | 649  | Multiplier   |        | R 1/10 |
|              |      | Value to be used as a multiplier to obtain a new value   |        |        |
| C00113       | 355  | Unit or Basis for Measurement Code   | 0      | ID 2/2 |
|              |      | Code specifying the units in which a value is being expressed<br>which a measurement has been taken  |        |        |
| 000444       | 1010 | Refer to 004010 Data Element Dictionary for acceptable code  |        |        |
| C00114       | 1018 | Exponent   | 0      | R 1/15 |
|              |      | Power to which a unit is raised  |        |        |
| C00115       | 649  | Multiplier   | 0      | R 1/10 |
|              |      | Value to be used as a multiplier to obtain a new value   |        |        |
| MEA05        | 740  | Range Minimum  | Х      | R 1/20 |
|              |      | The value specifying the minimum of the measurement range  |        |        |
| MEA06        | 741  | Range Maximum  | Х      | R 1/20 |
|              |      | The value specifying the maximum of the measurement range  | ;      |        |
| <b>MEA07</b> | 935  | Measurement Significance Code  | 0      | ID 2/2 |
|              |      | Code used to benchmark, qualify or further define a measurer   | nent   | value  |
|              |      | Refer to 004010 Data Element Dictionary for acceptable code  | valu   | ies.   |
| MEA08        | 936  | Measurement Attribute Code   | Х      | ID 2/2 |
|              |      | Code used to express an attribute response when a numeric m<br>cannot be determined<br>Refer to 004010 Data Element Dictionary for acceptable code |        |        |
| MEA09        | 752  | • •  |        | ID 2/2 |
| MEAU9        | 152  | Surface/Layer/Position Code  | 0      |        |
|              |      | Code indicating the product surface, layer or position that is b   | -      |        |
|              |      | Refer to 004010 Data Element Dictionary for acceptable code  |        |        |
| MEA10        | 1373 | Measurement Method or Device   | 0      | ID 2/4 |
|              |      | The method or device used to record the measurement  |        |        |
|              |      | Refer to 004010 Data Element Dictionary for acceptable code  | e valu | ies.   |

| Segment:         | PID Product/Item Description  |
|------------------|---|
| Position:        | 060   |
| 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.   |
|                  | <b>3</b> 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:  | <b>1</b> 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.                         |
|                  | <b>3</b> 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.                                   |
| <b>Comments:</b> | 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.  |
|                  | 2 DID07 and if is the individual and list of the approxy and if a d in DID02                    |

**3** PID07 specifies the individual code list of the agency specified in PID03.

| И | Ref.<br><u>Des.</u><br>PID01 | Data<br><u>Element</u><br>349 | <u>Name</u><br>Item Des | cription Type   | <u>Attı</u><br>M | <u>ributes</u><br>ID 1/1 |
|---|------------------------------|-------------------------------|-------------------------|---|------------------|--------------------------|
|   |                              |                               | Code ind                | icating the format of a description                       |                  |                          |
|   |                              |                               | F                       | Free-form   |                  |                          |
|   | PID02                        | 750                           | Product/                | Process Characteristic Code                               | 0                | ID 2/3                   |
|   |                              |                               | Code idea               | ntifying the general class of a product or process ch     | aracte           | eristic                  |
|   |                              |                               | 08                      | Product   |                  |                          |
|   | PID03                        | 559                           | Agency (                | Qualifier Code  | Х                | ID 2/2                   |
|   |                              |                               | Code idea               | ntifying the agency assigning the code values             |                  |                          |
|   |                              |                               | ST                      | American Iron & Steel Institute                           |                  |                          |
|   |                              |                               | ZZ                      | Mutually Defined  |                  |                          |
|   | PID04                        | 751                           | Product                 | Description Code  | Х                | AN 1/12                  |
|   |                              |                               | A code fr               | om an industry code list which provides specific da istic | ata abo          | out a product            |

| Segment:                     | <b>REF</b> Reference Identification   |
|------------------------------|---|
| Position:                    | 120   |
| Loop:                        | IT1 Optional  |
| 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.        |
|                              | <b>3</b> If either C04005 or C04006 is present, then the other is required. |
| Semantic Notes:<br>Comments: | 1 REF04 contains data relating to the value cited in REF02.                 |

| М | Ref.<br><u>Des.</u><br>REF01 | Data<br><u>Element</u><br>128 | <u>Name</u><br>Reference | Identification Qualifier   | <u>Attı</u><br>M | ributes<br>ID 2/3 |
|---|------------------------------|-------------------------------|--------------------------|--|------------------|-------------------|
|   |                              |                               | Code qualif              | fying the Reference Identification   |                  |                   |
|   |                              |                               | HC                       | Heat Code  |                  |                   |
|   |                              |                               | LS                       | Bar-Coded Serial Number  |                  |                   |
|   |                              |                               | PO                       | Purchase Order Number  |                  |                   |
|   | REF02                        | 127                           | Reference                | Identification   | Х                | AN 1/30           |
|   |                              |                               |                          | nformation as defined for a particular Transaction<br>y the Reference Identification Qualifier | n Set o          | or as             |

# **TDS** Total Monetary Value Summary

| Segment:        | ${f TDS}$ Total Monetary Value Summary   |
|-----------------|--|
| Position:       | 010  |
| Loop:           |  |
| Level:          | Summary  |
| Usage:          | Mandatory  |
| Max Use:        | 1  |
| Purpose:        | To specify the total invoice discounts and amounts   |
| Syntax Notes:   |  |
| Semantic Notes: | <b>1</b> TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).    |
|                 | 2 TDS02 indicates the amount upon which the terms discount amount is calculated.   |
|                 | <b>3</b> TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount). |
|                 | <b>4</b> TDS04 indicates the total amount of terms discount.   |
| Comments:       | <b>1</b> TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.                            |

| N/  |  |
|-----|--|
| IVI |  |
|     |  |

| Data    |                              |   |
|---------|------------------------------|---|
| Element | Name                         | <u>Attributes</u>   |
| 610     | Amount                       | M N2 1/15   |
|         | Monetary amount              |   |
| 610     | Amount                       | O N2 1/15   |
|         | Monetary amount              |   |
| 610     | Amount                       | O N2 1/15   |
|         | Monetary amount              |   |
| 610     | Amount                       | O N2 1/15   |
|         | Monetary amount              |   |
|         | Element<br>610<br>610<br>610 | Element<br>610Name<br>Amount<br>Monetary amount610Amount<br>Monetary amount610Amount<br>Monetary amount610Amount<br>Monetary amount610Amount<br>Monetary amount610Amount<br>Monetary amount |

### CAD Carrier Detail

| Segment:      | CAD Carrier Detail                                    |
|---------------|---|
| Position:     | 030   |
| Loop:         |   |
| Level:        | Summary   |
| Usage:        | Optional  |
| Max Use:      | 1   |
| Purpose:      | To specify transportation details for the transaction |
| Syntax Notes: | 1 At least one of CAD05 or CAD04 is required.         |
|               | 2 If CAD07 is present, then CAD08 is required.        |

Semantic Notes: **Comments:** 

|       |                | Data Eler                                 | nent Summary  |         |                |
|-------|----------------|---|---|---------|----------------|
| Ref.  | Data           |   |   |         |                |
| Des.  | <b>Element</b> | <u>Name</u>                               |   | Att     | <u>ributes</u> |
| CAD01 | 91             | Transportation N                          | Iethod/Type Code  | 0       | ID 1/2         |
|       |                | Code specifying th                        | ne method or type of transportation for the                                     | shipn   | nent           |
|       |                | В   | Barge   |         |                |
|       |                | Μ   | Motor (Common Carrier)  |         |                |
|       |                | R   | Rail  |         |                |
| CAD03 | 207            | Equipment Numl                            | ber   | 0       | AN 1/10        |
|       |                |   | al part of an equipment unit's identifying i equipment number is preferred)     | ıumbe   | er (pure       |
| CAD04 | 140            | Standard Carrier                          | : Alpha Code  | Х       | ID 2/4         |
|       |                | Standard Carrier A                        | Alpha Code  |         |                |
| CAD05 | 387            | Routing                                   |   | Х       | AN 1/35        |
|       |                | Free-form descript<br>originating carrier | tion of the routing or requested routing for<br>'s identity                     | shipn   | nent, or the   |
| CAD08 | 127            | <b>Reference Identif</b>                  | ïcation   | Х       | AN 1/30        |
|       |                |   | tion as defined for a particular Transaction efference Identification Qualifier | 1 Set o | or as          |

| Segment:         | SAC Service, Promotion, Allowance, or Charge Information   |  |  |  |  |
|------------------|--|--|--|--|--|
| Position:        | 040  |  |  |  |  |
|                  | SAC Optional   |  |  |  |  |
| Loop:<br>Level:  | SAC Optional<br>Summary  |  |  |  |  |
| Usage:           | Optional   |  |  |  |  |
| Max Use:         | 1  |  |  |  |  |
| Purpose:         | -  |  |  |  |  |
| i ui pose.       | To request or identify a service, promotion, allowance, or charge; to specify the amount<br>or percentage for the service, promotion, allowance, or charge |  |  |  |  |
| Syntax Notes:    | 1 At least one of SAC02 or SAC03 is required.  |  |  |  |  |
|                  | 2 If either SAC03 or SAC04 is present, then the other is required.   |  |  |  |  |
|                  | 3 If either SAC06 or SAC07 is present, then the other is required.   |  |  |  |  |
|                  | 4 If either SAC09 or SAC10 is present, then the other is required.   |  |  |  |  |
|                  | 5 If SAC11 is present, then SAC10 is required.   |  |  |  |  |
|                  | 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.  |  |  |  |  |
|                  | 7 If SAC14 is present, then SAC13 is required.   |  |  |  |  |
|                  | 8 If SAC16 is present, then SAC15 is required.   |  |  |  |  |
| Semantic Notes:  | 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.   |  |  |  |  |
|                  | 2 SAC05 is the total amount for the service, promotion, allowance, or charge.  |  |  |  |  |
|                  | If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.  |  |  |  |  |
|                  | <b>3</b> SAC08 is the allowance or charge rate per unit.   |  |  |  |  |
|                  | 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is   |  |  |  |  |
|                  | different from the purchase order or invoice quantity.   |  |  |  |  |
|                  | SAC10 and SAC11 used together indicate a quantity range, which could be a dollar   |  |  |  |  |
|                  | amount, that is applicable to service, promotion, allowance, or charge.  |  |  |  |  |
|                  | 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference   |  |  |  |  |
|                  | number as identified by the code used.   |  |  |  |  |
|                  | 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more   |  |  |  |  |
|                  | than one option of the promotion.  |  |  |  |  |
|                  | 7 SAC16 is used to identify the language being used in SAC15.  |  |  |  |  |
| <b>Comments:</b> | <b>1</b> SAC04 may be used to uniquely identify the service, promotion, allowance, or  |  |  |  |  |
|                  | charge. In addition, it may be used in conjunction to further the code in SAC02.   |  |  |  |  |
|                  | 2 In some business applications, it is necessary to advise the trading partner of the  |  |  |  |  |
|                  | actual dollar amount that a particular allowance, charge, or promotion was based on  |  |  |  |  |
|                  | to reduce ambiguity. This amount is commonly referred to as "Dollar Basis  |  |  |  |  |
|                  | Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" -  |  |  |  |  |
|                  | Dollars in SAC09.  |  |  |  |  |

| Data Element Summary |                              |                               |   |   |                  |                          |
|----------------------|------------------------------|-------------------------------|---|---|------------------|--------------------------|
| Μ                    | Ref.<br><u>Des.</u><br>SAC01 | Data<br><u>Element</u><br>248 | <u>Name</u><br>Allowance or Cha                                       | rge Indicator                                 | <u>Attı</u><br>M | <u>ributes</u><br>ID 1/1 |
|                      |                              |                               | Code which indicates an allowance or charge for the service specified |   |                  | fied                     |
|                      |                              |                               | Refer to 004010 Data Element Dictionary for acceptable code values.   |   |                  |                          |
|                      | SAC02                        | 1300                          | Service, Promotio   | Service, Promotion, Allowance, or Charge Code |                  |                          |
|                      |                              |                               | Code identifying the service, promotion, allowance, or charge         |   |                  |                          |
|                      |                              |                               | B320  | Competitive Allowance                         |                  |                          |
|                      |                              |                               | C040  | Delivery                                      |                  |                          |
|                      |                              |                               | C310  | Discount                                      |                  |                          |
|                      |                              |                               | D240  | Freight                                       |                  |                          |
|                      |                              |                               | D920  | Insurance Fee                                 |                  |                          |
|                      |                              |                               | E190  | Labor Charges                                 |                  |                          |
|                      | SAC05                        | 610                           | Amount  |   | 0                | N2 1/15                  |
|                      |                              |                               | Monetary amount   |   |                  |                          |
|                      | SAC08                        | 118                           | Rate  |   | 0                | R 1/9                    |
|                      |                              |                               | Rate expressed in t specified   | he standard monetary denomination for th      | e curi           | rency                    |

### СТТ

| Segment:        | CTT Transaction Totals   |  |  |  |  |  |
|-----------------|--|--|--|--|--|--|
| Position:       | 070  |  |  |  |  |  |
| Loop:           |  |  |  |  |  |  |
| Level:          | Summary  |  |  |  |  |  |
| Usage:          | Optional   |  |  |  |  |  |
| Max Use:        | 1  |  |  |  |  |  |
| Purpose:        | To transmit a hash total for a specific element in the transaction set   |  |  |  |  |  |
| Syntax Notes:   | <b>1</b> 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:       | <b>1</b> This segment is intended to provide hash totals to validate transaction completeness and correctness. |  |  |  |  |  |

|   |       |         | Data Element Summary                              |      |         |
|---|-------|---------|---|------|---------|
|   | Ref.  | Data    |   |      |         |
|   | Des.  | Element | Name  | Attı | ributes |
| Μ | CTT01 | 354     | Number of Line Items                              | Μ    | N0 1/6  |
|   |       |         | Total number of line items in the transaction set |      |         |

| Segment:                         | SE Transaction Set Trailer   |  |  |  |  |
|----------------------------------|--|--|--|--|--|
| Position:                        | 080  |  |  |  |  |
| 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:<br>Semantic Notes: |  |  |  |  |  |
| <b>Comments:</b>                 | <b>1</b> SE is the last segment of each transaction set.   |  |  |  |  |

| М | Ref.<br><u>Des.</u><br>SE01 | Data<br><u>Element</u><br>96 | <u>Name</u><br>Number of Included Segments  | <u>Attr</u><br>M | <u>ributes</u><br>N0 1/10 |  |
|---|-----------------------------|------------------------------|---|------------------|---------------------------|--|
| М | SE02                        | 329                          | Total number of segments included in a transaction set inclu<br>segments<br><b>Transaction Set Control Number</b>                           | ding S<br>M      | T and SE<br>AN 4/9        |  |
|   |                             |                              | Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set |                  |                           |  |