863 Report of Test Results

Functional Group ID=RT

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Report of Test Results Transaction Set (863) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to transmit the results of tests performed to satisfy a specified product or process requirement. This includes, but is not limited to, test data such as inspection data, certification data, and statistical process control measurements.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BTR	Beginning Segment for Test Results	M	1		
	050	DTM	Date/Time Reference	O	10		
			LOOP ID - N1			>1	
	080	N1	Name	O	1		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - LIN			>1	
	010	LIN	Item Identification	O	1		
	030	MEA	Measurements	O	20		
			LOOP ID - CID			>1	
	060	CID	Characteristic/Class ID	O	1		
	090	PSD	Physical Sample Description	O	>1		
			LOOP ID - TMD			100	
	201	TMD	Test Method	O	1		
	202	MEA	Measurements	O	>1		

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
	005	CTT	Transaction Totals	O	1		
M	010	SE	Transaction Set Trailer	M	1		

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. Des.	Data Element	Name	Attributes	
M	ST01	143	**Transaction Set Identifier Code**	M	ID 3/3
			Code uniquely identifying a Transaction Set		
			863 Report of Test Results		
M	ST02	329	**Transaction Set Control Number**	M	AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set		

	Segment:	**BTR** Beginning Segment for Test Results
	Position:	020
	Loop:	
	Level:	Heading
	Usage:	Mandatory
	Max Use:	1
	Purpose:	To indicate the beginning of a test results transaction set
	Syntax Notes:	
	Semantic Notes:	

Semantic Notes:
1. If BTR01 equals "01", "02", "03", "04", "05", "18" or "19", then BTR06 is required to identify the original test report reference number transmitted.
2. BTR02 is the date that this transaction set was created by the sending party.
3. BTR03 is the time that this transaction set was created by the sending party.
4. BTR05 specifies test results report reference number created by the sending party.

Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	BTR01	353	**Transaction Set Purpose Code**	M	ID 2/2
			Code identifying purpose of transaction set		
			00 Original		
M	BTR02	373	**Date**	M	DT 8/8
			Date expressed as CCYYMMDD		
	BTR03	337	**Time**	O	TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		
	BTR04	755	**Report Type Code**	O	ID 2/2
			Code indicating the title or contents of a document, report or supporting item		
			12 Mechanical Properties		
	BTR05	127	**Reference Identification**	O	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		

Segment: # DTM Date/Time Reference

Position: 050
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

	Ref. Des.	Data Element	Name		Attributes
M	DTM01	374	**Date/Time Qualifier**	M	ID 3/3
			Code specifying type of date or time, or both date and time		
			011 Shipped		
	DTM02	373	**Date**	X	DT 8/8
			Date expressed as CCYYMMDD		
	DTM03	337	**Time**	X	TM 4/8
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)		

Segment: # N1 Name

Position: 080
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

	Ref. Des.	Data Element	Name	Attributes	
M	N101	98	**Entity Identifier Code**	M	**ID 2/3**

Code identifying an organizational entity, a physical location, property or an individual

BY	Buying Party (Purchaser)
MF	Manufacturer of Goods
OU	Outside Processor
	A resource extraneous to primary material provider that performs additional material processing prior to delivery of the material to the primary provider's customer
SF	Ship From
ST	Ship To
SU	Supplier/Manufacturer

	Ref. Des.	Data Element	Name	Attributes	
	N103	66	**Identification Code Qualifier**	X	**ID 1/2**

Code designating the system/method of code structure used for Identification Code (67)

1	D-U-N-S Number, Dun & Bradstreet
92	Assigned by Buyer or Buyer's Agent

	Ref. Des.	Data Element	Name	Attributes	
	N104	67	**Identification Code**	X	**AN 2/80**

Code identifying a party or other code

Segment: # LIN **Item Identification**

Position: 010
Loop: LIN   Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify basic item identification data
Syntax Notes:
  1 If either LIN04 or LIN05 is present, then the other is required.
  2 If either LIN06 or LIN07 is present, then the other is required.
  3 If either LIN08 or LIN09 is present, then the other is required.
  4 If either LIN10 or LIN11 is present, then the other is required.
  5 If either LIN12 or LIN13 is present, then the other is required.
  6 If either LIN14 or LIN15 is present, then the other is required.
  7 If either LIN16 or LIN17 is present, then the other is required.
  8 If either LIN18 or LIN19 is present, then the other is required.
  9 If either LIN20 or LIN21 is present, then the other is required.
  10 If either LIN22 or LIN23 is present, then the other is required.
  11 If either LIN24 or LIN25 is present, then the other is required.
  12 If either LIN26 or LIN27 is present, then the other is required.
  13 If either LIN28 or LIN29 is present, then the other is required.
  14 If either LIN30 or LIN31 is present, then the other is required.
Semantic Notes:
  1 LIN01 is the line item identification
Comments:
  1 See the Data Dictionary for a complete list of IDs.
  2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**LIN02**	**235**	**Product/Service ID Qualifier**	**M**	**ID 2/2**

Code identifying the type/source of the descriptive number used in Product/Service ID (234)
    VO   Vendor's Order Number

M	**LIN03**	**234**	**Product/Service ID**	**M**	**AN 1/48**

Identifying number for a product or service

	LIN04	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**

Code identifying the type/source of the descriptive number used in Product/Service ID (234)
    VN   Vendor's (Seller's) Item Number

	LIN05	**234**	**Product/Service ID**	**X**	**AN 1/48**

Identifying number for a product or service

	LIN06	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**

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

	LIN07	**234**	**Product/Service ID**	**X**	**AN 1/48**

Identifying number for a product or service

	LIN08	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**

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

	LIN09	**234**	**Product/Service ID**	**X**	**AN 1/48**

Identifying number for a product or service

Segment:	**MEA** Measurements

Position:	030
Loop:	LIN Optional
Level:	Detail
Usage:	Optional
Max Use:	20
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

	Ref. Des.	Data Element	Name		Attributes
	MEA01	**737**	**Measurement Reference ID Code**	**O**	**ID 2/2**

Code identifying the broad category to which a measurement applies

PD	Physical Dimensions

	Ref. Des.	Data Element	Name		Attributes
	MEA02	**738**	**Measurement Qualifier**	**O**	**ID 1/3**

Code identifying a specific product or process characteristic to which a measurement applies

NU	Number per Unit
TH	Thickness
WD	Width
WT	Weight

	Ref. Des.	Data Element	Name		Attributes
	MEA03	**739**	**Measurement Value**	**X**	**R 1/20**

The value of the measurement

	MEA04	**C001**	**Composite Unit of Measure**	**X**	

To identify a composite unit of measure   (See Figures Appendix for examples of use)

M	**C00101**	**355**	**Unit or Basis for Measurement Code**	**M**	**ID 2/2**

Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

CX	Coil
KG	Kilogram
MM	Millimeter

Segment:	**CID** Characteristic/Class ID
Position:	060
Loop:	CID Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify the general class or specific characteristic upon which test results are being reported or are to be taken
Syntax Notes:	1 At least one of CID01 CID02 CID04 or CID05 is required.
	2 If either CID03 or CID04 is present, then the other is required.
	3 If CID06 is present, then both CID03 and CID04 are required.
	4 If CID07 is present, then at least one of CID04 or CID05 is required.
Semantic Notes:	
Comments:	1 CID06 specifies the individual code list of the agency specified in CID03.
	2 CID07 refers to whether or not the characteristic identified in CID04 or CID05 or both is affected by the product change. If it is affected, the value is "Y". A value of "N" is used when it is known that it will not be affected. Any other value indicates it is indeterminate.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
CID02	**750**	**Product/Process Characteristic Code**	**X ID 2/3**
		Code identifying the general class of a product or process characteristic	
		71 Mechanical	

Segment:	**PSD** Physical Sample Description		
Position:	090		
Loop:	CID	Optional	
Level:	Detail		
Usage:	Optional		
Max Use:	>1		
Purpose:	To define the physical sample parameters associated with a test resulting in discrete measurements		
Syntax Notes:	1	If either PSD03 or PSD04 is present, then the other is required.	
	2	Only one of PSD03 or PSD09 may be present.	
Semantic Notes:			
Comments:	1	PSD08 can provide a more complete description of the physical sampling location.	

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
PSD01	939	**Sample Process Status Code**	O ID 2/2
		Code specifying the stage in the product development cycle at which the specimen was selected for testing	
		02　　　　　Finished product specimen	
PSD06	944	**Sample Direction Code**	O ID 2/2
		Code specifying the direction in which the sample was collected or tested	
		01　　　　　Longitudinal	
		02　　　　　Transverse	
PSD07	945	**Position Code**	O ID 2/2
		Code specifying the position of an item such as the location, within a specimen, from which the sample was taken; the position of a coupon within an advertisement; etc	
		11　　　　　Front	

Segment: **TMD** Test Method

Position: 201
Loop: TMD   Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To describe the nature of the test performed
Syntax Notes: 1   If either TMD02 or TMD03 is present, then the other is required.
             2   If TMD09 is present, then TMD02 is required.
Semantic Notes: 1   TMD07 is the date of the test method as assigned by the issuing organization.
             2   TMD08 is the document revision number.
Comments: 1   TMD09 specifies the individual code list of the agency specified in TMD02.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
TMD02	**559**	**Agency Qualifier Code**	**X ID 2/2**
		Code identifying the agency assigning the code values	
		ST American Iron & Steel Institute	
TMD03	**751**	**Product Description Code**	**X AN 1/12**
		A code from an industry code list which provides specific data about a product characteristic	
TMD09	**822**	**Source Subqualifier**	**O AN 1/15**
		A reference that indicates the table or text maintained by the Source Qualifier	

Segment: # MEA Measurements

Position: 202
Loop: TMD   Optional
Level: Detail
Usage: Optional
Max Use: >1
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

	Ref. Des.	Data Element	Name		Attributes
	MEA01	737	**Measurement Reference ID Code**	O	ID 2/2

Code identifying the broad category to which a measurement applies

     TR   Test Results

            Indicates that the data to follow are the results test measurements

	MEA02	738	**Measurement Qualifier**	O	ID 1/3

Code identifying a specific product or process characteristic to which a measurement applies

     CTG   Coating

            Product applied to the top of a substrate or base

     EA   Elongation

     NV   N Value

            The work hardening rate capability of material and predicts the ability to deform in stretch, plane strain, and bending

     TF   Tensile

     YB   Yield

	MEA03	739	**Measurement Value**	X	R 1/20

The value of the measurement

	MEA04	C001	**Composite Unit of Measure**	X	

To identify a composite unit of measure   (See Figures Appendix for examples of use)

M	**C00101**	355	**Unit or Basis for Measurement Code**	M	ID 2/2

Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

     69   Test Specific Scale

     GM   Grams per Sq. Meter

     M8   Mega Pascals

     P1   Percent

	MEA09	752	**Surface/Layer/Position Code**	O	ID 2/2

Code indicating the product surface, layer or position that is being described

     BT   Bottom

     TP   Top

Segment: **CTT** **Transaction Totals**
Position: 005
Loop:
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

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

Segment: **SE** **Transaction Set Trailer**
Position: 010
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)
Syntax Notes:
Semantic Notes:
Comments: 1 SE is the last segment of each transaction set.

Data Element Summary

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