

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:

	<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	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:

	<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 - 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:

	<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>
	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

	<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	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: **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:

- 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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	BTR01	353	Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original	M ID 2/2
M	BTR02	373	Date Date expressed as CCYYMMDD	M DT 8/8
	BTR03	337	Time 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
	BTR04	755	Report Type Code Code indicating the title or contents of a document, report or supporting item 12 Mechanical Properties	O ID 2/2
	BTR05	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	O AN 1/30

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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 011 Shipped	M ID 3/3
	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8
	DTM03	337	Time 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)	X TM 4/8

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.	Data Element	Name	Attributes
M	N101	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	
	N103	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	
	N104	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

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	LIN02	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) VO Vendor's Order Number	M ID 2/2
M	LIN03	234	Product/Service ID Identifying number for a product or service	M AN 1/48
	LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) VN Vendor's (Seller's) Item Number	X ID 2/2
	LIN05	234	Product/Service ID Identifying number for a product or service	X AN 1/48
	LIN06	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) HN Heat Number	X ID 2/2
	LIN07	234	Product/Service ID Identifying number for a product or service	X AN 1/48
	LIN08	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SN Serial Number	X ID 2/2
	LIN09	234	Product/Service ID Identifying number for a product or service	X AN 1/48

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

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
MEA01	737	Measurement Reference ID Code	O ID 2/2
		Code identifying the broad category to which a measurement applies	
		PD Physical Dimensions	
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	
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	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

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
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

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
PSD01	939	Sample Process Status Code Code specifying the stage in the product development cycle at which the specimen was selected for testing 02 Finished product specimen	O ID 2/2
PSD06	944	Sample Direction Code Code specifying the direction in which the sample was collected or tested 01 Longitudinal 02 Transverse	O ID 2/2
PSD07	945	Position Code 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	O ID 2/2

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

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

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.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
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	
		ZFE Iron	
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

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

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

	<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