

**STEEL OFFLOAD PROCESS
IMPLEMENTATION GUIDE
MERCEDES-BENZ U.S. INTERNATIONAL, INC.
Version 1.0**

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INTRODUCTION

This implementation guide documents the Electronic Data Interchange (EDI) requirements for Mercedes-Benz U.S. International (MBUSI).

MBUSI uses the Automotive Industry Action Group (AIAG) version 3050 sub-set of the American National Standard Institute (ANSI) Accredited Standard Committee (ASC) X12 Electronic Data Interchange (EDI) Standards. The formats for those business documents are defined herein.

MBUSI uses networking services provided by T-Systems. ISA/GS information is found in Appendix B.

The Steel Offload Process

The Steel Offload Process provides a method to buy steel in large volume, and yet use it in a multiplicity of mid-sized suppliers. Mercedes-Benz negotiates prices for the steel. The suppliers who make stamped steel parts order the steel from the steel suppliers, informing MBUSI of what they have purchased. The steel suppliers ship the steel to the stamping companies, informing MBUSI of what they have shipped. Then, MBUSI pays the steel supplier for the steel, and deducts the cost of the steel from what it pays each stamping company (proportionally to the amount used, of course) for finished parts. The Steel Offload Process is the process by which MBUSI gets all the information related to steel ordering and shipping and calculates the necessary payments. To calculate these payments, MBUSI must receive timely records from suppliers as follows:

Stamping Companies

Material rejection

Steel Suppliers

Shipment Notifications

MBUSI sends Payment Notifications to the stamping companies and steel suppliers indicating details of payments being made. Invoices are not used; owed amounts are conveyed as Debit Memos in Payment Advice.

EDI Unit of Measure Note

Regarding units of measure for EDI in the Steel Offload program. In general the EDI should be conducted in the same unit of measure that the Purchasing contract is quoted in.

1. When the purchasing document contains an imperial unit of measure for the quantities (lb, CTW), then the EDI shall also be conducted in imperial units (lb).
2. When the purchasing document contains a metric unit of measure for the quantities (KG), then the EDI shall also be conducted in metric units (KG).

This requirement applies to all EDI telegram types and all fields that relate to a unit of measure. If an EDI telegram is sent with an imperial unit of measure against a purchasing agreement quoted in metric (or vice versa), this shall cause a failure of processing of the EDI telegram and a resend using the correct units of measure shall be required.

PrePayment Advice(820)

Pre-Payment Order/Remittance Advice

Target Audience

This section deals with the EDI 820, Pre-Payment advice. You can use it in a *cash application* activity to reconcile your records of what you have shipped with the payment you receive by wire transfer. Generally, your bank will send you an (additional) EDI820 that contains payment information summarized by (MBUSI's internal) invoice#. This transaction gives complete detail on the part numbers, quantities, and pricing used to compute the payment. Payments are indicated as Credit Memos. Amounts deducted (negative amounts, such as generated by rejected material or material used) are shown as Debit Memos.

Introduction

MBUSI will send the Payment Order/Remittance Advice using the ANSI X12 820 Transaction Set version 003050.

Only the Remittance Advice portion of the 820 will be used. This detail version is a pre-notification of part level components and is the only payment information that suppliers will receive by EDI directly from MBUSI. This transaction will reflect MBUSI generated ERS (Evaluated Receipts Settlement) invoices. Non-productive ("indirect") materials, Service Parts, or parts bought with purchase orders or "spot buys," are not included in this process.

The final (monthly) payment made may include adjustments and miscellaneous supplier invoices. Suppliers must contact their own bank to get a summarized EDI file of the final payment made. This file is not available from MBUSI or MBUSI's bank.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. An M in the option shows that the element will always be included, an O that it will be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

In the case where a second tier supplier has ordered steel directly, the 820 (debit) will be sent to the responsible first tier supplier. You can tell who the second tier was by checking segment BPR10, which should contain their (MBUSI-issued) supplier code.

ST Transactions Set Header

To indicate the start of a transaction set and to assign a control number.

Section: Header

Loop:

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
ST01	143	Transaction Set Identified Code 820 - Payment Order/Remittance Advice	M	ID 3/3
ST02	329	Transaction Set Control Number (000000001-99999999)	M	AN 9/9

Example:

ST*820*000000001

BPR Beginning Segment for Payment Order/Remittance Advice

Section: Header

Loop:

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
BPR01	305	Transaction Handling Code S - Debit/Credit Advice/Steel Offload	M	ID 1/1
BPR02	782	Monetary Amount <total payment amount>	M	R 1/15
BPR03	478	Credit/Debit Flag Code C A credit to receiver/debit to originator D A debit to receiver/credit to originator	M	ID 1/1
BPR04	591	Payment Method Code NON Non-Payment Data	M	ID 3/3
BPR10	509	Originating Company Identifier <i>(Should match TRN03)</i>	O	AN 10/10
BPR11	510	Originating Company Supplemental Code <i>(Should match TRN04)</i>	O	AN 9/9

Example:

BPR*S*81984.00*C*NON*****3824839872*MBUSI

Notes

The "D" (debit) may occur in situations such as returns of damaged (DMT) material or nonconforming parts. See also section on SLN segment.

Dollar values are always reported as positive numbers, even in debit memos.

TRN Trace

Section: Header

Loop:

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
TRN01	481	Trace Type Code 1 Current Transaction Trace Numbers	M	ID 1/2
TRN02	127	Reference Number <i>(MBUSI Batch Number)</i>	M	AN 1/30
TRN03	509	Originating Company Identifier <i>(Should match BPR10)</i>	O	AN 10/10
TRN04	127	Reference Number <i>(Should match BPR11)</i>	O	AN 1/30

Example:

TRN*1*743-743*3824839872*MBUSI

DTM Date/Time Reference

Section: Header

Loop:

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type	Size
DTM01	374	Date/Time Qualifier 097 Transaction Creation	M	ID	3/3
DTM02	373	Date <i>(Date the 820 was created)</i>	M	DT	6/6
DTM05	624	Century	M	NO	2/2

Example:

DTM*097*050624***20

N1 Name(Payee)

Content: Identifies the partner being credited or debited by the transaction.

Section: Header

Loop: N1

Payee Name Information

Element Position	Element Number	Description Content	Option	Type Size
N101	98	Entity Identifier Code PE - Payee	M	ID 2/2
N102	93	Name (Name)	R	AN 1/35
N103	66	Identification Code Qualifier 92 - Assigned by Buyer or Buyer's Agent	R	ID 2/2
N104	67	Identification Code (Mercedes-Benz-assigned supplier code) (these codes never exceed 10 characters)	R	AN 2/20

Examples:

N1*PE*AMERICAN WIDGET
FACTORY*92*15548622
N1*PE*AMERICAN WIDGET FACTORY*92*015548622A

N1 Name(Payer)

Content: Will always refer to MBUSI.

Section: Header

Loop: N1

Payer Name Information

Element Position	Element Number	Description Content	Option	Type Size
N101	98	Entity Identifier Code PR - Payer	M	ID 2/2
N102	93	Name	M	AN 1/35
N103	66	Identification Code Qualifier 92 - Assigned by Buyer or Buyer's Agent	M	ID 2/2
N104	67	Identification Code "MBUSI"	M	AN 2/6

Example:

N1*PR*MERCEDES-BENZ*92*MBUSI

ENT Entity

Section: Detail

Loop: ENT

Mandatory, 1 Occurrence

Element Option	Element Size	Description	Type	Position	Number	Content
ENT01	554	Assigned Number	M	N0	1	/6

Example:

ENT*<#>

RMR Remittance Advice Accounts Receivable open Item

Section: Detail

Loop: ENT/RMR

Mandatory

Element Position	Element Number	Description Content	Option	Type Size
RMR01	128	Reference Number Qualifier IK - (SAP) Invoice Number	M	ID 2/2
RMR02	127	Reference Number <i>(MBUSI Internal Invoice Number)</i>	M	AN 1/30
RMR05	782	Total Invoice or Credit/Debit Amount <i>(Total Invoice Amount in USD)</i>	M	R 1/15

Example:

RMR*IK*5150018356***1645.32

Notes:

The supplier can refer to the reference number (RMR02) when communicating to MBUSI for resolving discrepancies.

MBUSI Internal Invoice number is generated by MBUSI SAP system.

IT1 Baseline Item Data

Section: Detail

Loop: ENT/RMR/IT1

Mandatory

Element Position	Element Number	Description Content	Option	Type Size
IT101	350	Assigned Identification <i>(Line Item Number)</i>	M	AN 1/11
IT102	358	Quantity Invoiced <i>(Actual Quantity of Parts Used/Received)</i>	M	R 1/10
IT103	355	Unit or Basis for Measurement <i>(Dynamic, based on value in SAP; for piece parts, contains "EA" - Each)</i>	M	ID 2/2
IT104	212	Unit Price (US dollars)	M	R 1/17
IT105	639	Basis of Unit Price Code UM Price per Unit of Measure	M	ID 2/2
IT106	235	Product/Service Qualifier BP Buyers Part Number	M	ID 2/2
IT107	234	Product/Service ID <i>(Mercedes-Benz Part Number)</i> <i>format U 000000 000000 0000</i>	M	AN 1/40
IT108	235	Product/Service Qualifier PD Part Description	M	ID 2/2
IT109	234	Product/Service ID <i>(Mercedes-Benz Part Description)</i>	M	AN 1/40

Example:

IT1*000001*23*EA*80.00*PE*BP*A2512410234*PD*Ground Cable~

REF Reference Numbers

Section: Detail

Loop: ENT/RMR/IT1/REF

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier "VV" Voucher Number	M	AN 1/11
REF02	127	Reference Number MBUSI (SAP) Internal Invoice No.	M	AN 1/30

DTM Date/Time Reference

Section: Detail

Loop: ENT/RMR/IT1/DTM

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
DTM01	374	Date/Time Qualifier 050 Received	M	ID 3/3
DTM02	373	Date <i>(Receipt Date or Off-Line Date)</i>	M	DT 6/6
DTM05	624	Century "20"	O	NO 2/2

Example:

DTM*050*050409***20

SLN Subline Item Detail

Section: Detail

Loop: ENT/RMR/IT1/SLN Repeat: > 1

Mandatory

Element Position	Element Number	Description Content	Option	Type	Size
SLN01	350	Assigned Identification Voucher Number	M	N	1/11
SLN02	350	Assigned Identification Part Number ID Number	O	AN	1/11
SLN03	662	Configuration Code "I" (included)	M	ID	1/1
SLN04	380	Quantity (Quantity received/consumed)	M	R	1/15
SLN05	355	Unit or Basis for Measurement Code	M	ID	2/2
SLN09	235	Product/Service ID Qualifier "PO" if SLN10 contains GLOBUS contract# "SI" if SLN10 contains ASN# "RN" if SLN10 contains Return (RA) Authorization Number (<i>Steel Offload chargeback only</i>)	X	ID	2/2
SLN10	234	Product/Service ID GLOBUS contract# (if SLN09="PO") ASN Number (If SLN09="SI") RA Number (If SLN09="RN")	X	AN	1/30
SLN11	235	Product/Service ID Qualifier "ZZ" if SLN10 contains ASN-line#	X	ID	2/2
SLN12	234	Product/Service ID ASN-Line#	X	AN	1/31

Notes .

If stamper submits material claim (return of steel), the stamper will later receive a credit memo and the steel mill will receive a debit memo for the valuation of the return. SLN10 contains the RA# in this case.

Note to stampers: 820 transactions related to steel and to finished parts will come separately.

REF Reference Numbers

Section: Detail

Loop: ENT/RMR/IT1/SLN/REF

Included for material returns (debit memo) where a textual reason sent in the 847.

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier "ZZ" - reject reason text	M	AN 1/11
REF03	352	Description Reason stamper rejected material	M	AN 1/80

Material Claim(847)

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ANSI 847 – Material Claim

The ANSI 847 is used to indicate a Material Claim. In the Steel Offload process, this is used for the case where the stamper has determined a steel coil is non-conforming and is rejecting/returning it.

The segments and elements used from the 847 Transaction set are described below by segment. Each segment is described as Mandatory, and must always be sent, or Optional, and need only be sent as needed. The minimum and maximum number of occurrences within the transaction is listed. If the segment is part of a loop, there is a Loop ID shown.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. A code within parentheses is the MBUSI database reference, and for MBUSI internal use only. An M in the option shows that the element will always be included and an O that it will be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

For the inexperienced user, Appendix A has a full description of the syntax rules of ANSI X12.

ST Transactions Set Header

To indicate the start of a transaction set and to assign a control number.

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
ST01	143	Transaction Set Identifier Code 847 – Material Claim	M	ID 3/3
ST02	329	Transaction Set Control Number (00000000-99999999)	M	AN 4/9

Example:

ST*847*000056789

BHT Beginning of Hierarchical Transaction

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type	Size
BHT01	1005	Hierarchical Structure Code 0010 - Information Source		M	ID 4/4
BHT02	353	Transaction Set Purpose Code <i>00 - Original</i> <i>04 - Change</i> <i>(will be handled as a replacement by MBUSI)</i> <i>05 - Replacement</i>		M	ID 2/2
BHT03	127	Reference Number <i>Authorization Code</i>		M	AN 1/30
BHT04	373	Date <i>(YYMMDD - Date Sent)</i>		M	DT 6/6

Example:

BHT*0010*00*12345*080202

Note: The Authorization Code (BHT03) is issued by the steel mill. The stamper must get this number (manually) from the mill before filing a claim using the 847.

AMT Monetary Amount (of Claim)

Mandatory, 1

Occurrence

Element Position	Element Number	Description Content	Option	Type	Size
ATM01	522	Code to qualify amount CM – Claimant requested total	M	ID	1/2
AMT02	782	Monetary Amount <i>Total Amount of Claim, in US\$ The field is ANSI-mandatory, but stamper Should put zero here; mill will calculate valuation of the return.</i>	M	R	1/15

Example:

AMT*CM*0

DTM Date / Time Reference

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type	Size
DTM01	374	Date/Time Reference 011 - Date/time returned.	M	ID	3/3
DTM02	373	Date (YYMMDD - Shipment Date) NOTE: Date left dock.	M	DT	6/6
DTM03	337	Time (HHMM - Shipment time)	M	TM	4/4

Example:

DTM*011*170220*1434

N1 Name

Names and supplier codes of parties to transaction

Mandator

Y

Element Position	Element Number	Description Content	Option	Type	Size
N101	98	Entity Identifier Code SU - Selling Party (Steel mill) ST - Ship-to (stamper) BP - Buying party	M	ID	2/2
N102	93	Name <i>(Company Name)</i>	M	AN	1/35
N103	66	Identification Code Qualifier "92"	M	ID	2/2
N104	67	Identification Code MBUSI internal code for the entity <i>(SU, BP: Mercedes-Benz supplier# of Company)</i> <i>(ST MBUSI-assigned ship-to code)</i>	M	AN	8/10

Examples:First Tier stamper

N1*SU*US STEEL*92*18504432
N1*ST*GESTAMP*92*700590
N1*BP*GESTAMP*92*18404432

Above, we see that the first tier supplier is both ship-to and buying party.

Second Tier stamper, with first tier responsible as buyer

N1*SU*US STEEL*92*18504432
N1*ST*ACME STAMPING*92*700443
N1*BP*GESTAMP*92*18404432

Note: send all three for both first-tier and second tier case.

HL Hierarchical Level (Tare Loop)

Mandatory

One item loop for each unit load or modular container in the shipment.

Identifies the Loop as a unit load (Tare Loop).

Element Position	Element Number	Description Content	Option	Type Size
HL01	628	Hierarchical ID Number <i>(Sequence Number)</i>	M	AN 1/12
HL03	735	Hierarchical Level Code T - Tare	M	ID 1/2

Example:

HL*1**T

Note 1: One item loop for each unit load or modular container in the shipment. Identifies the tare the item is shipped on; carries only hierarchy information for Steel Offload Process.

Note 2: The use of the HL hierarchy in this transaction set does not imply the use of returnable containers for the Steel Offload process. It is a mandatory part of the ANSI specification and is used solely for compliance. A claim for returnable containers are not supported.

HL Hierarchical Level (Item Loop)

Mandatory

Identifies the tare the item is shipped on; carries only hierarchy information for Steel Offload Process.

Element Position	Element Number	Description Content	Option	Type Size
HL01	628	Hierarchical ID Number <i>(Sequence Number)</i>	M	AN 1/12
HL02	734	Hierarchical Parent ID Number	M	AN 1/12
HL03	735	Hierarchical Level Code I - Item Level	M	ID 1/2

Example:

HL*50*1*I

Mandatory, minimum 1 Occurrence

Purpose is to charge back a returned steel coil.

LIN Line Identification

Mercedes-Benz part number information and other data to identify material and related financial documents.

Element Position	Element Number	Description Content	Option	Type Size
LIN01	350	Assigned ID Sequential counter	M	ID 3/11
LIN02	235	Product/Service ID Qualifier BP - Buyer Part Number	M	ID 2/2
LIN03	234	Product/Service ID <i>(Mercedes-Benz Part Number)</i>	M	AN 1/24
LIN06	235	Product/Service ID Qualifier LI - Line Item	M	ID 2/2
LIN07	234	Product/Service ID ASN Line Item No.	M	AN 1/6
LIN10	235	Product/Service ID Qualifier CT - Charge Type	O	ID 2/2
LIN11	234	Product/Service ID <i>(Text providing reason for charge)</i>	O	AN 1/40
LIN12	235	Product/Service ID Qualifier DM - Damaged Material Tag #	O	ID 2/2
LIN13	234	Product/Service ID <i>(Number identifying non-conforming item)</i>	O	AN 1/24

Example:

LIN*001*BP*U0000000064300000***LI*0001

(continued)

Notes:

The ANSI 847 Material Claim is only intended to handle the chargeback related to the material cost of a returned coil. (Other charges such as handling, overtime, etc., must be handled manually).

LOOP ID-LIN

1

Mandatory, 1 Occurrence per LIN line.

QTY Quantity

Mandatory

Gives the quantity of items returned in the immediately preceding LIN statement.

Element Position	Element Number	Description Content	Option	Type Size
QTY02	380	Quantity	M	N 1/12
QTY03	355	Unit of Measure	M	AN 2/2

Example:

QTY**25*TN

REF Reference Number (ASN#)

Mandatory, 1 Occurrence

Note: If no Bill of Lading exists, use another shipment identifier here, such as the packing slip number.

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier SI - Shipper's ID (ASN#/Delivery#)	M	ID 2/2
REF02	127	Reference Number (ASN#/Delivery#, from BSN02 in 856)	M	AN 1/30

Example:

REF*SI*1141231

REF Reference Number (ASN#)

Optional, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type	Size
REF01	128	Reference Number Qualifier BM - Shipper's Bill of Lading#	M	ID	2/2
REF02	127	Reference Number (BOL#, from REF02 in 856)	M	AN	1/30

Example:

REF*BM*B1141231

END OF LIN LOOP

SE Transaction Set Trailer

Element Position	Element Number	Description Content	Option	Type	Size
SE01	96	Number of Included Segments	M	NO	1/10
SE02	329	Transaction Set Control Number	M	AN	4/9

Example:

SE*10*000001234

Ship Notice (ASN) (856)

(856) Ship Notice / Manifest (ASN)

Steel suppliers are required to send an Advance Shipping Notice (ASN, ANSI 856) to the stamping company when steel is shipped, and to send MBUSI this data in the format described here. It is possible that this format may differ from what the mill sends the stamper (i.e., ANSI version).

The ASN should follow the attached specifications using the AIAG subset of Transaction Set 856 of the ANSI X12 standard, version 003050. Recipient of the ASN should acknowledge receipt with a Functional Acknowledgment(997), within one hour. The 997 is an acknowledgment of receipt and interpretation, and not an acceptance of delivery.

The segments and elements to be used from the 856 Transaction set are described below by segment. Each segment is described as mandatory, and will always be sent to MBUSI, or optional, and will only be sent as needed. The minimum and maximum number of occurrences within the transaction is listed. If the segment is part of a loop, there is a loop ID shown.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. A code within parentheses is the MBUSI database

reference, and for MBUSI internal use only. An M in the option shows that the element should always be included, an O that it should be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

For the inexperienced user, Appendix A has a full description of the syntax rules of ANSI X12.

ST Transactions Set Header

To indicate the start of a transaction set and to assign a control number.

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
ST01	143	Transaction Set Identifier Code 856 - Ship Notice/Manifest	M	ID 3/3
ST02	329	Transaction Set Control Number (000000000-999999999)	M	AN 4/9

Example:

ST*856*000056789

BSN Beginning Segment for Ship Notice

Header information for the Ship Notice

Mandatory, 1 Occurrence Maximum

Element Position	Element Number	Description Content	Option	Type Size
BSN01	353	Transaction Set Purpose Code 00 - Original 04 - Change <i>(change treated same as replace by MBUSI)</i> 05 - Replace	M	ID 2/2
BSN02	396	Shipment Identification <i>(Unique for each Shipment. Also called "ASN number" or "Delivery number")</i>	M	AN 7/7
BSN03	373	Date <i>(YYMMDD - Ship Notice Creation Date)</i>	M	DT 6/6
BSN04	337	Time <i>(HHMM - Ship Notice Creation Time)</i>	M	TM 4/4
BSN06	640	Transaction Type Code 01 - Steel Offload Process	M	AN 2/2

Example:

BSN*00*1000123*170420*1456**01

DTM Date / Time Reference - Shipped Date and Time

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type	Size
DTM01	374	Date/Time Reference 011 - Time Shipped	M	ID	3/3
DTM02	373	Date (YYMMDD - <i>Shipment Date</i>) NOTE: Date shipment actually left dock.	M	DT	6/6
DTM03	337	Time (HHMM - <i>Shipment time</i>)	M	TM	4/4

Example:

DTM*011*170420*1434

DTM Date / Time Reference – Estimated Time of Arrival

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type	Size
DTM01	374	Date/Time Reference 017 - Time Shipped	M	ID	3/3
DTM02	373	Date (YYMMDD - <i>Shipment Date</i>) NOTE: Date shipment actually left dock.	M	DT	6/6
DTM03	337	Time (HHMM - <i>Shipment time</i>)	M	TM	4/4

Example:

DTM*017*170421*0834

HL Hierarchical Level(Shipment Loop)

Mandatory, 1

Occurrence

Element Position	Element Number	Description Content	Option	Type Size
HL01	628	Hierarchical ID Number 1-Always one for shipment Loop	M	AN 1
HL03	735	Hierarchical Level Code S-Shipment level	M	ID 1/1

Example:

HL*1**S

MEA Measurement – Gross Weight

Optional, 1

Occurrence

Element Position	Element Number	Description Content	Option	Type Size
MEA02	738	Measurement Reference ID Code G – Gross Weight	M	ID 1
MEA03	739	Measurement Value <i>(Gross weight of shipment)</i>	M	R 1/10
MEA04	355	Unit or Basis for Measurement Code LB – Pound (<i>preferred</i>) CW – Hundredweight (hundreds of pounds) NS – Short Ton (2000 LB) KG – Kilogram	M	ID 2/2

Example:

MEA**G*2345.5*LB

MEA Measurement – Net Weight

Optional, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
MEA02	738	Measurement Qualifier N – Actual Net Weight	M	ID 1
MEA03	739	Measurement Value <i>(Net weight of shipment)</i>	M	R 1/10
MEA04	355	Unit or Basis for Measurement Code LB – Pound <i>(preferred)</i> CW – Hundredweight (hundreds of pounds) NS – Short Ton (2000 LB) KG – Kilogram	M	ID 2/2

Example:

EA**G*1000*KG

TD1 Carrier Details (Quantity and Weight)

Optional, 1 Occurrence

Used to identify number of pieces in shipment.

Element Position	Element Number	Description Content	Option	Type Size
TD101	103	Packaging Code (PCS - Pieces)	M	AN 5/5
TD102	80	Lading Quantity (Number of pieces in shipment)	M	NO 1/7

Example:

TD1*PCS*100

TD5 Carrier Detail (Routing Sequence/Transit Time)(SCAC)

Identification of originating carrier.

Optional, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
TD502	66	Identification Code Qualifier 2 - Standard Carrier Alpha Code	M	ID 1/1
TD503	67	Identification Code <i>(Standard Carrier Alpha Code)</i>	M	AN 2/20
TD504	91	Transportation Method/Type Code A - Air J - Motor R - Rail S - Ocean H - Customer Pickup	M	ID 1/2

Example:

TD5**2*RW*J

TD3 Carrier Detail (Equipment)

Equipment identification. Required for any movement, truckload, carload, or container, including route pickup.

Optional, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
TD301	40	Equipment Description Code <i>(Any code except mutually defined)</i>	M	ID 2/2
TD302	206	SCAC Code <i>(Initial on container, trailer, or rail car)</i>	M	AN 1/4
TD303	207	Equipment Number <i>(Number on container, trailer or rail car)</i>	M	AN 1/10

Example:

TD3*TF*NSZ*552234

REF Reference Number (*Bill of Lading*)

Mandatory, 1 Occurrence, at Least One REF Segment Must be Included in the Shipment Loop

Note: If no Bill of Lading exists, use another shipment identifier here, such as the packing slip number.

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier BM - Bill of Lading	M	ID 2/2
REF02	127	Reference Number (<i>Bill of Lading Number</i>)	M	AN 1/30

Example:

REF*BM*1141231

REF Reference Number (Carrier Reference - PRO/Invoice)

Optional, 0-1 Occurrences, at least one REF segment must be included in the shipment loop. This segment is required if there is no equipment identification

Used primarily with less than truckload shipments.

Element Position	Element Number	Description Content	Option	Type	Size
REF01	128	Reference Number Qualifier CN - Carrier Reference	M	ID	2/2
REF02	127	Reference Number <i>(PRO Number)</i>	M	AN	1/30

Example:

REF*CN*4322233

REF Reference Number (Packing List Number)

Optional, 0-1 Occurrences, at least one REF segment must be included in the shipment loop. This segment is required if there is no equipment identification

Used primarily with less than truckload shipments.

Element Position	Element Number	Description Content	Option	Type	Size
REF01	128	Reference Number Qualifier PK - Packing List Number	M	ID	2/2
REF02	127	Reference Number <i>(Packing list number)</i>	M	AN	1/30

Example:

REF*PK*5647841

REF Reference Number (Freight Bill Number)

Optional, 0-1 Occurrences, at least One REF segment must be included in the shipment loop

Used when freight bill exists

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier FR - Freight Bill Number	M	ID 2/2
REF02	127	Reference Number <i>(Freight Bill Number)</i>	M	AN 1/30

Example:

REF*FR*432234A

REF Reference Number (Unloading Point)

Mandatory, 1 Occurrence, at least One REF segment must be included in the shipment loop

Used when freight bill exists

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier DK – Dock	M	ID 2/2
REF02	127	Reference Number <i>(Unloading Point)</i>	M	AN 1/30

Remark:

Field REF02 Unloading Point – Dock door

E4P1 will be used as the unloading point for steel offload process.

E5P1 will be used as the unloading point for aluminum offload process.

If there is a change of the unloading point the supplier will be informed by MBUSI.

Example:

REF*DK*E4P1

REF Reference Number (Packing List Number)

Optional, 0-1 occurrences, at least one REF segment must be included in the shipment loop

Used when numbered packing list exists

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier PK - Packing Number	M	ID 2/2
REF02	127	Reference Number <i>(Packing List Number)</i>	M	AN 1/30

Example:

REF*PK*55443333

N1 Name

Names and supplier codes of parties to transaction

Mandat

ory

Element Position	Element Number	Description Content	Option	Type Size
N101	98	Entity Identifier Code SU - Supplier (Steel mill) ST - Ship-to (stamper)	M	ID 2/2
N102	93	Name <i>(Company Name)</i>	M	AN 1/35
N103	66	Identification Code Qualifier 92 or 93	M	ID 2/2
N104	67	Identification Code MBUSI internal code for the entity <i>(SU: Mercedes-Benz supplier# of Company)</i> <i>(ST: MBUSI-assigned ship-to code)</i>	M	AN 6/10

Examples:

N1*SU*US STEEL*92*18504432

N1*ST*GESTAMP*92*700321

END OF SHIPMENT LOOP

HL Hierarchical Level (Tare Loop)

Mandatory

One item loop for each unit load in the shipment.

Identifies the Loop as a unit load (Tare Loop).

Element Position	Element Number	Description Content	Option	Type Size
HL01	628	Hierarchical ID Number <i>(Sequence Number)</i>	M	AN 1/12
HL02	734	Hierarchical Parent ID Number 1 - Shipment Level	M	AN 1/12
HL03	735	Hierarchical Level Code T - Tare	M	ID 1/2

Example:

HL*45*1*T

HL Hierarchical Level (Item Loop)

Mandatory

Identifies the tare the item is shipped on; carries only hierarchy information for Steel Offload Process.

Element Position	Element Number	Description Content	Option	Type Size
HL01	628	Hierarchical ID Number <i>(Sequence Number)</i>	M	AN 1/12
HL02	734	Hierarchical Parent ID Number <i>(Tare Level ID if Shipped on Tare, 1 if not)</i>	M	AN 1/12
HL03	735	Hierarchical Level Code I - Item Level	M	ID 1/2

Example:

HL*50*45*I

LIN Line Identification

Mandatory, One Occurrence

Identifies the Part Number of the Item Shipped. If Part Number in LIN03 is not a Mercedes-Benz part number, then the Mercedes-Benz Part Number must be supplied in LIN07.

Element Position	Element Number	Description Content	Option	Type Size
LIN01	350	Assigned ID ASN Line Number <i>Must be unique within the ASN.</i>	M	AN 3/11
LIN02	235	Product/Service ID Qualifier BP - Buyer Part Number	M	ID 2/2
LIN03	234	Product/Service ID <i>(Mercedes-Benz Part Number)</i>	M	AN 1/24
LIN04	235	Product/Service ID Qualifier PO - Customer Order Number	M	ID 2/2
LIN05	234	Product/Service ID <i>(Order#)</i> <i>From LIN07 of corresponding 830 from stamper.</i>	M	AN 10/10
LIN08	235	Product/Service ID Qualifier LI - Line Item#	X	ID 2/2
LIN09	234	Product/Service ID <i>(Line Item#)</i> <i>From FST09 of corresponding 830 from stamper.</i>	X	AN 1/15
LIN10	235	Product/Service ID Qualifier CR - ProQ Contract#	X	ID 2/2
LIN11	234	Product/Service ID <i>(ProQ Contract#)</i>	X	AN 10/10
LIN12	235	Product/Service ID Qualifier BL - ProQ Contract Line#	M	ID 2/2

LIN13	234	Product/Service ID <i>(ProQ contract line#)</i> <i>Mercedes-Benz contract line item# for bulk steel purchase,</i> <i>Issued by ProQ.</i>	M	AN	10/10
-------	-----	---	---	----	-------

(continued)

Examples:

Where customer used a one-line order

LIN**BP* U0000000023100000*PO*3000046*****CR*1135700137*BL*002

Where customer used a multiple-line order

LIN**BP* U0000000023100000*PO*3000046*LI*001***CR*825405765*BL*001

SN1 Item Detail (Shipment)

Mandatory, One Occurrence

Identifies the Quantity of the Item Shipped by RAN from LIN.

Element Position	Element Number	Description Content	Option	Type Size
SN101	350	Assigned Identification <i>(A unique number for the shipment line)</i>	M	AN 1/6
SN102	382	Number of Units Shipped	M	R 1/13
SN103	355	Unit or Basis for Measurement Code <i>(Same as on corresponding 830)</i>	M	ID 2/2

Examples:

SN1*42*20000*LB

Note. You must use the same unit of measure for reporting the shipment as how the material was ordered. Specifically, this must match UIT01 in the corresponding 830 order.

REF Reference Number (Coil Serial No.)

Optional, 0-1 Occurrences.

Used for reporting the serial number of steel coil. If supplied, this will be reported in the 824 ASN Acknowledgement.

Element Position	Element Number	Description Content	Option	Type Size
REF01	128	Reference Number Qualifier LS - Serial#	M	ID 2/2
REF02	127	Reference Number (Coil Serial#)	M	AN 1/30

Example:

REF*LS*S-5865

End of Item Loop

End of Tare Loop

CTT Transaction Line items counter

Element Position	Element Number	Description Content	Option	Type Size
CTT01	354	Number of line items	M	N0 1/6

Example:

CTT*3

SE Transaction Set Trailer

Element Position	Element Number	Description Content	Option	Type	Size
SE01	96	Number of Included Segments	M	NO	1/10
SE02	329	Transaction Set Control Number	M	AN	4/9

Example:

SE*45*1122112

Functional Acknowledgment(997)

(997) Functional Acknowledgment

MBUSI will require Functional Acknowledgments for all transactions. It is the intent to use the lack of Functional Acknowledgments within expected maximum times of transmission to cause exception handling routines to be invoked.

MBUSI will send Functional Acknowledgments in response to all incoming messages (except incoming Functional Acknowledgments), and will expect trading partners to institute exception proceedings if they do not receive them within agreed times.

The Functional Acknowledgment is sent using the AIAG subset of Transaction Set 997 of the ANSI X12 standard, version 003050. Functional Acknowledgments are issued upon receipt of the transmission. The 997 acknowledges the receipt NOT the content of the message.

The segments and elements used from the 997 Transaction set are described below by segment. Each segment is described as Mandatory, and will always be sent by MBUSI, or optional, and will only be sent as needed. The minimum and maximum number of occurrences within the transaction is listed. If the segment is part of a loop, there is a loop ID shown.

For each segment, the elements of the segment are described. The element position shows the relative position in the segment (the segment identifier is not shown or counted). The element number is the ANSI X12 element references. The description shows the description of the element, and under the description are the possible values of the element. An M in the option shows that the element will always be included, an O that it will be included only as needed. The type and size are of the format Type Min/Max, where Type is AN for alphanumeric, N for integer, R for Real, and ID for a defined code. Min and Max are the minimum and maximum number of characters in the field. One or more examples are shown for each segment.

For the inexperienced user, Appendix A has a full description of the syntax rules of ANSI X12.

ST Transactions Set Header

To indicate the start of a transaction set and to assign a control number.

Mandatory, 1 Occurrence

Element Position	Element Number	Description Content	Option	Type Size
ST01	143	Transaction Set Identified Code 997 - Functional Acknowledgment	M	ID 3/3
ST02	329	Transaction Set Control Number (00000001-99999999)	M	AN 9/9

Example:

ST*997*000000001

AK1 Functional Group Response Header

Mandatory, 1

Occurrence

Element Position	Element Number	Description Content	Option	Type Size
AK101	479	Functional Identifier Code <i>(Specific value of the GS01 of the functional group being acknowledged)</i>	M	ID 2/2
AK102	28	Group Control Number <i>(Specific value of the GS06 of the functional group being acknowledged)</i>	M	NO 1/9

Examp**le:**

AK1*PO*1

LOOP ID-AK2 Transaction Set

AK2 Transaction Set Response Header

Optional, 1

Occurrence

Element Position	Element Number	Description Content	Option	Type Size
AK201	143	Transaction Set Identifier Code <i>(Any valid code)</i>	M	ID 3/3
AK202	329	Transaction Set Control Number <i>(Contains the value in the ST02 in the transaction set being acknowledged)</i>	M	AN 4/9

Example:

AK2*850*1234

LOOP ID-**AK2/AK3** **Data Segment**

AK3 Data Segment Note

Optional, 1

Occurrence

Element Position	Element Number	Description Content	Option	Type Size
AK301	721	Segment ID Code <i>(Any valid code)</i>	M	ID 2/3
AK302	719	Segment Position in Transaction Set	M	NO 1/6
AK303	447	Loop Identifier Code	O	AN 1/4
AK304	720	Segment Syntax Error Code <i>(Any valid code)</i>	O	ID 1/3

Example:

AK3*DTM*4

AK4 Data Element Note

Optional, 0-99

Occurrences

Element Position	Element Number	Description Content	Option	Type Size
AK401	722	Element Position in Segment <i>(Element position)</i>	M	ID 1/1
AK402	725	Data Element Reference Number	O	NO 1/4
AK403	723	Data Element Syntax Error Code	M	ID 1/3
AK404	724	Copy of Bad Data Element <i>(Any valid code)</i>	O	AN 1/99

Example:

AK4*1*374*4*92

END OF DATA SEGMENT LOOP

AK5 Transaction Set Response Trailer

Mandatory, 1

Occurrence

Element Position	Element Number	Description Content	Option	Type	Size
AK501	717	Transaction Set Acknowledgement Code <i>(Any valid code)</i>	M	ID	1/1
AK502	718	Transaction Set Syntax Error Code <i>(Any valid code)</i>	O	ID	1/3
AK503	718	Transaction Set Syntax Error Code <i>(Any valid code)</i>	O	ID	1/3
AK504	718	Transaction Set Syntax Error Code <i>(Any valid code)</i>	O	ID	1/3
AK505	718	Transaction Set Syntax Error Code <i>(Any valid code)</i>	O	ID	1/3
AK506	718	Transaction Set Syntax Error Code <i>(Any valid code)</i>	O	ID	1/3

Examples:

AK5*R*5

END OF TRANSACTION SET LOOP

AK9 Functional group Response Trailer

Mandatory, 1

Occurrence

Element Position	Element Number	Description Content	Option	Type Size
AK901	715	Functional group Acknowledge Code <i>(Any valid code)</i>	M	ID 1/1
AK902	97	Number of Transaction Sets Included <i>(Number of transaction sets (value of GE01 in the received functional group))</i>	M	NO 1/6
AK903	123	Number of Received Transaction Sets <i>(Receiver's count)</i>	M	NO 1/6
AK904	2	Number of Accepted Transaction Sets	M	NO 1/6
AK905	716	Functional Group Syntax Error Code <i>(Any valid code)</i>	O	ID 1/3
AK906	716	Functional Group Syntax Error Code <i>(Any valid code)</i>	O	ID 1/3
AK907	716	Functional Group Syntax Error Code <i>(Any valid code)</i>	O	ID 1/3
AK908	716	Functional Group Syntax Error Code <i>(Any valid code)</i>	O	ID 1/3
AK909	716	Functional Group Syntax Error Code <i>(Any valid code)</i>	O	ID 1/3

Examples:

AK9*E*1*1*0

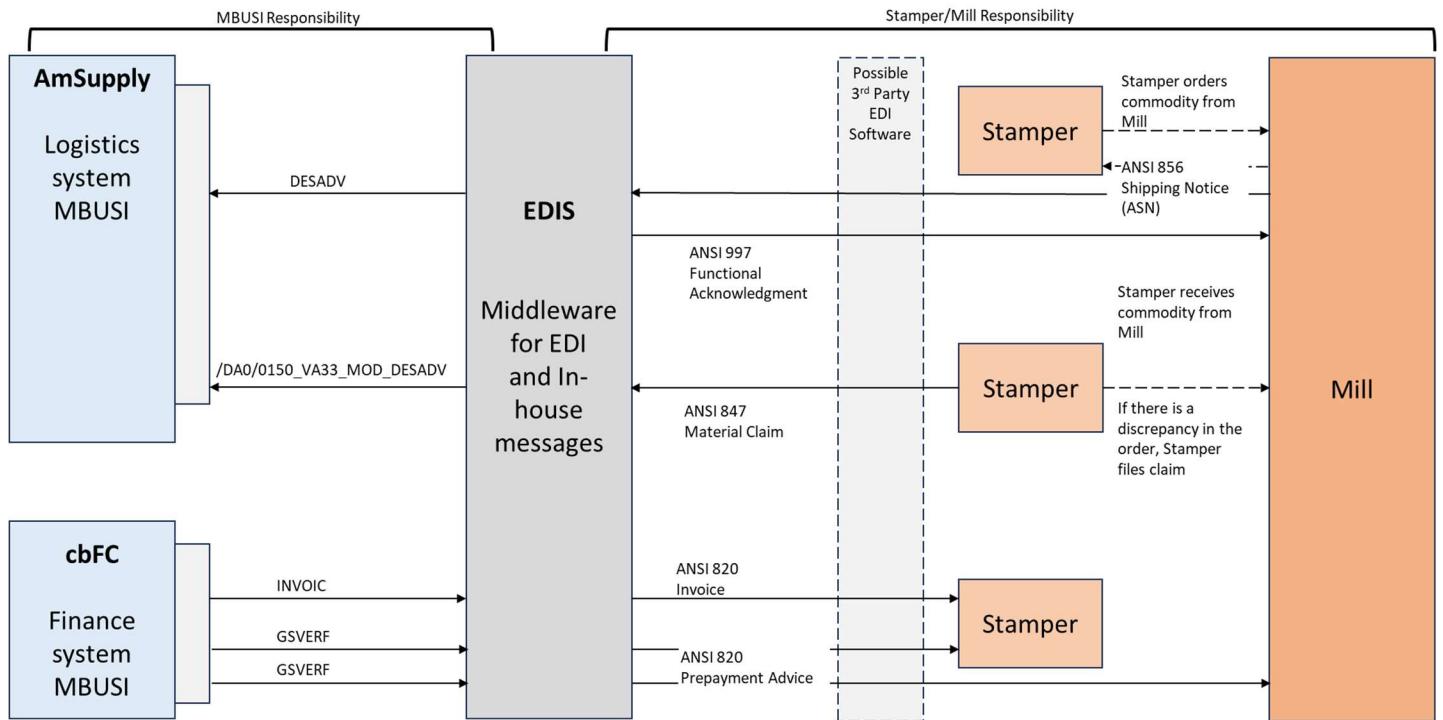
SE Transaction Set Trailer

Element Position	Element Number	Description Content	Option	Type Size
SE01	96	Number of Included Segments	M	NO 1/10
SE02	329	Transaction Set Control Number	M	AN 4/9

Example:

SE*45*000001234

Appendices

APPENDIX A: Process Overview**PLANNED PROCESS**

Appendix B: Examples of EDI Files

Note: EDI messages outbound from MBUSI will show VAN mailbox "MBUS002" as the sending mailbox. Mailbox MBUS002 is never checked for incoming traffic. When sending data to MBUSI, send test data to mailbox "MBUS005" with test flag activated in ISA segment; send production data to mailbox "MBUS003".

Example 820

Here is a debit memo sent to a stamper for a shipment:

```

ISA*00*          *00*          *ZZ*MBUS      MBUS002  *ZZ*AHA70739
*081014*1147*U*00200*00000001*0*T*>~
GS*RA*MBUS002T*AHA70739*081014*1124*1*X*003050~
ST*820*0167~
BPR*S*7700*D*NON*****0070000058*MBUSI      ~
TRN*1*194267377*0070000058*MBUSI~
DTM*097*081008***20~
N1*PR*Mercedes-Benz U.S. International, I*92*0000600061~
N1*PE*MAGNA DRIVE*92*0018551648~
ENT*1~
RMR*IK*0070000058***7700~
IT1*000010*11000*LB*70*HP*BP*U 000000 002431 0000*PD*BAND STAHL
MBN11250 LAC 300Y370T~
REF*VV*0070000058~
DTM*050*081003***20~
SLN*0070000058**I*11000*LB****SI*0080232901*ZZ*000020~
SE*13*0167~
GE*1*1~
IEA*1*000000001~

```

Example 847 (Material Claim)

```

ISA~00~          ~00~          ~01~789782190      ~ZZ~MBUS      MBUS005
~080926~0940~U~00200~900000018~0~T~<
GS~MX~18561589~MBUS005T~080926~0940~8~X~003040
ST~847~0004
BHT~0010~00~TEST1234~20080926
AMT~CM~0
DTM~011~080925~1212
N1~SE~~92~18505297
N1~ST~~92~700795
N1~BP~~92~18561589

```

HL~1~ ~T
 HL~2~1~I
 LIN~001~BP~U 000000 002375 0000~~~LI~0001
 QTY~~1000~LB
 REF~SI~0080232869
 REF~BM~0080232869
 SE~14~0004
 GE~1~8
 IEA~1~900000018

Example 856 (ASN)

```

ISA*00*          *00*          *ZZ*15441751          *ZZ*MBUS      MBUS005
*080926*1029*U*00300*000000030*0*P*>
GS*SH*15441751*MBUS005T*080926*1029*00030*X*003050
ST*856*1061
BSN*00*541DY04338*080926*1029**01
DTM*011*080926*0726
HL*1*1*S
MEA**G*40820*LB
MEA**N*40820*LB
TD1*COL52*2
TD5**2*R.C.T.*J
TD3*TL*RCTY*711
REF*PK*541DY04338
REF*BM*541DY04338
N1*ST**92*700810
N1*SU**92*15441751
HL*3***T
HL*3*3*I
LIN*1*BP*U 000000 002596
0000*PO*P123455***LI*P123455@002*CR*1154303662*BL*40
SN1*1*20860*LB
REF*LS*537054P11A
HL*4*3*I
LIN*2*BP*U 000000 002596
0000*PO*P123455***LI*P123455@002*CR*1154303662*BL*40
SN1*2*19960*LB
REF*LS*537054P12A
SE*23*1061
GE*1*000030
IEA*1*000000030
  
```

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