



SSAB Information Technology

Implementation Guide Document
For
EDI 850 – Purchase Orders

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Table of Contents

Purpose of This Document	3
Revision History	3
1. Introduction.....	4
2. Message Interchange Envelope	4
3. Functional Group Envelope	7
4. 850 Transaction Set	8

Purpose of This Document

The EDI 850 – Purchase Order Document Implementation Guide Document captures the complete requirements for the SSAB EDI 850 messages. This document provides a high level functional overview of the EDI 850 messages being implemented

Revision History

Date	Version	Description	Author
07/18/2018	1.0	Original draft	Arun Parupalli
04/15/2019	1.1	Revision to add additional segments	Arun Parupalli

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Current Version Distribution

Notes:

- 1) *Boilerplate text in this document appears in italics. Project specific information appears in regular text.*
- 2) *Replace the text enclosed in the shaded areas with project specific information*
- 3) *Update the table of contents (TOC) by right clicking on the TOC and selecting "Update Field" and clicking the "Update Page Numbers Only" radio button.*

1. Introduction

The purpose of this documentation is to provide a detailed description of the electronically transmitted Purchase Order (850) Transaction Set from trading partners to SSAB Americas. The Purchase Order document provides specifications of the material manufactured by the SSAB Americas for its trading partners.

SSAB expects an EDI 850 document in Version 4010 of the ANSI x12 standards.

SSAB uses Kleinschmidt for electronic data interchange as a Value Added Network provider.

SSAB’s DUNS ISA/GS Id for EDI 850 message type is 963032677 and Qualifier 01.

2. Message Interchange Envelope

2.1. ISA – Interchange Control Header

Segment: ISA – Interchange Control Header
 Level: N/A
 Max Use/Loops: 1 per Interchange / none
 Purpose: To start and identify an interchange of one or more functional groups and interchange related control segments.
 General Information: None

Example:

ISA*00* *00* *01*007172703 *01*963032677 *180727*1440**00501*022947430*0*P*|~

Elem ID	Elem #	Name	Features	Comments
ISA01	744	Authorization Information Qual	M ID 02/02	“00” (Zeroes) No authorization Information present
ISA02	745	Authorization Information	M AN 10/10	Use 10 spaces
ISA03	746	Security Information Qual	M ID 02/02	“00” (Zeroes) No security Information present
ISA04	747	Security Information	M AN 10/10	Use 10 spaces

ISA05	704	Interchange Sender ID Qualifier	M ID 02/02	“01” for DUNS number “ZZ” for Network Interchange Qualifier Number
ISA06	705	Inter Change Sender ID	M ID 15/15	Your company’s DUNS number OR Interchange Qualifier Number
ISA07	704	Interchange Receiver ID Qualifier	M ID 02/02	“01” for DUNS number “ZZ” for Network Interchange Qualifier Number
ISA08	706	Interchange Receiver ID	M ID 15/15	SSAB DUNS number 963032677 OR Interchange Qualifier “SSAB”
ISA09	373	Interchange Date	M DT 06/06	Date of Transmission (YYMMDD)
ISA10	337	Interchange Time	M TM 04/04	Time of transmission (HHMM) 24 hour clock
ISA11	726	Interchange Standard ID	M ID 01/01	“U” for USA
ISA12	703	Interchange Version ID	M ID 05/05	“00401”
ISA13	709	Interchange Control ID	M NO 09/09	Sequential Number incremented by 1 for each ISA sent
ISA14	749	Acknowledgment ID	M ID 01/01	“0” for TA1 not required
ISA15	748	Test Indicator	M ID 01/01	“P” for Production “T” for Test
ISA16	701	Sub Element Separator	M AN 01/01	Must be different than element Separator

2.2. IEA – Interchange Control Trailer

Segment: ISA – Interchange Control Trailer

Level: N/A

Max Use/Loops: 1 per Interchange / none

Purpose: To define the end of an interchange of one or more functional groups and interchange related control segments.

General Information: None

Example: IEA*1*003113640<NL>

<u>Elem ID</u>	<u>Elem #</u>	<u>Name</u>	<u>Features</u>	<u>Comments</u>
IEA01	405	Number of included Groups	M NO 01/05	Number of GS segments included between ISA and this IEA
IEA02	709	Interchange Control Number	M NO 09/09	Must match ISA13

3. Functional Group Envelope

3.1 Transaction Set Header

Segment: ST – Transaction Set Header

Level: Heading

Loop:

Max Use: 1

Usage: Mandatory

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

Example: ST*850*0001

Elem ID	Elem #	Name	Features	Comments
ST01	143	Transaction Set ID	M ID 03/03	Use '850'
ST02	329	Transaction Set Control #	M AN 04/09	Must have the same control number in SE02

4. 850 Transaction Set

Segment: BEG - Beginning Segment

Level: Heading

Loop:

Max Use: 1

Usage: Mandatory

Purpose: To indicate the beginning of a PO transaction and to transmit identifying numbers and date.

Example: BEG*00*NE*6121234**20080101

Elem ID	Elem #	Name	Features	Comments
BEG01	0353	Transaction Set Purpose	M ID 02/02	00 - Original 04 - Change
BEG02	0092	Purchase Order Type Code	M ID 02/02	NE - New Order
BEG03	0324	Purchase Order Number	M AN 01/22	
BEG05	0373	Date	M DT 08/08	YYYYMMDD

Segment: FOB - FOB Instructions
Level: Heading
Loop: None
Max Use: 1
Usage: Mandatory
Purpose: To specify transportation instructions relating to shipment
Example: FOB*PP*DE****CL*Tampa

Elem ID	Elem #	Name	Features	Comments
FOB01	0146	Shipment Method of Payment	M ID 02/02	PP - Prepaid CC - Collect
FOB02	0309	Location Qualifier	C ID 01/02	DE - Destination
FOB06	0309	Location Qualifier	C ID 01/02	CL - National Rate Basis
FOB07	0352	Description	O AN 01/80	Ship-to location

Segment: ITD - Terms of Sale
 Level: Heading
 Loop: None
 Max Use: 1
 Usage: Optional
 Purpose: To specify the terms used in the sale
 Example: ITD*01*3*0.75**10**30*****3/4% 10 Days, Net 30

Elem ID	Elem #	Name	Features	Comments
ITD01	0336	Terms Type Code	O ID 02/02	01 - Basic
ITD02	0333	Terms Basis Date Code	O ID 01/02	3 - Invoice date
ITD03	0338	Terms Discount Percent	O R6 01/06	
ITD05	0351	Terms Discount Days Due	C N0 01/03	
ITD07	0386	Terms Net Days	O N0 01/03	
ITD12	0352	Description) AN 01/80	Terms description

Segment: PWK - Paperwork

Level: Heading

Loop: None

Max Use: 1

Usage: Mandatory

Purpose: Specifies where to send test reports

Example: PWK*13*FX*1****Fax test report at time of shipping to 678-259-8894

Elem ID	Elem #	Name	Features	Comments
PWK01	0755	Report Type Code	M ID 02/02	13 - Certified test report
PWK02	0756	Report Transmission Code.	O ID 01/02	FX - By fax
PWK03	0757	Report Copies Needed	O N0 01/02	Number of copies
PWK07	0352	Description	O AN 01/80	Instructions on where to fax test Reports

Segment: MSG - Message Text
Level: Heading
Loop: N9
Max Use: 2
Usage: Optional
Purpose: To specify special messages
Example: MSG* rolling 2/11

Elem ID	Elem #	Name	Features	Comments
MSG01	0933	Free Form Message Text	M AN 01/80	Contains buyer comments

Segment: N1 - Name
 Level: Heading
 Loop: N1
 Max Use: 1
 Usage: Mandatory
 Purpose: To identify a party by type of organization, name and code
 Example: N1*BT*ACCORN
 N1*ST*Accorn Steel *01*80XZ0X020
 N1*SU*SSAB*01*963032677

Elem ID	Elem #	Name	Features	Comments
N101	0098	Entity Identifier Code	M AN 02/03	BT - Bill to ST - Ship to SU - Supplier
N102	0093	Name	C AN 01/60	
N103	0066	Identification Code Qual.	C ID 01/02	01 - Duns number
N104	0067	Identification Code	C AN 02/80	Duns number. List of Customer duns numbers provided provided for ship to.

Segment: N3 - Address Information
Level: Heading
Loop: N1
Max Use: 1
Usage: Mandatory
Purpose: Specifies a party's street address
Example: N3*500 COLONIAL CENTER PKWY, SUITE 500

Elem ID	Elem #	Name	Features	Comments
N301	0166	Address Information	M AN 01/55	

Segment: N4 - Geographic Location
Level: Heading
Loop: N1
Max Use: 1
Usage: Mandatory
Purpose: Specifies a party's city, state and zip code
Example: N4*ROSWELL*GA*30076

Elem ID	Elem #	Name	Features	Comments
N401	0019	City Name	M AN 02/30	
N402	0156	State or Province Code	O ID 02/02	
N403	0116	Postal Code	O ID 03/15	

Segment: PER - Contact
Level: Heading
Loop: N1
Max Use: 1
Usage: Optional
Purpose: Specifies the product buyer
Example: PER*BD*Bill Buyer

Elem ID	Elem #	Name	Features	Comments
PER01	0366	Contact Function Code	M ID 02/02	BD - Buyer name
PER02	0093	Name	O AN 01/60	

Segment: PO1 - Baseline Item Data
 Level: Detail
 Loop: PO1
 Max Use: 1
 Usage: Mandatory
 Purpose: Specifies basic line item data
 Example: PO1*1*160000*LB*49*HP*BP*GALV20GACOIL403155.6950.033

Elem ID	Elem #	Name	Features	Comments
PO101	0350	Assigned Identification	O AN 01/20	Customer purchase order line number
PO102	0330	Quantity Ordered	C R 01/15	
PO103	0355	Units	O ID 02/02	SF - Square feet PC - Pieces LB - Pound FT - Feet TN - Net tons MP - Metric tons
PO104	0212	Unit Price	C R 01/17	
PO105	0639	Unit Price Code	O ID 02/02	PE - per Each HP - per Hundredweight PF - per Foot HF - per Hundred feet PT - per Net ton PP - per Pound
PO106	0235	Product ID Qualifier	C ID 02/02	BP - Buyer part number
PO107	0234	Product ID	C ID 01/48	Customer part number

Segment: MEA – Measurements
 Level: Detail
 Loop: PO1
 Max Use: 10
 Usage: Mandatory
 Purpose: To specify dimensions for material.

Example: MEA*PD*TH*0.033*EM*0.033*0.037
 MEA*PD*WD*55.695*IN*55.695*55.945
 MEA*PD*WT*160000*LB*40000*47500
 MEA*PD*ID*24.0*IN
 MEA*PD*OD*72.0*IN

Elem ID	Elem #	Name	Features	Comments
MEA01	0737	Measurement Reference ID Code	M ID 02/02	PD – Physical dimension
MEA02	0738	Measurement Qualifier	M ID 01/03	TH – Thickness WD – Width LN - Length WT - Weight ID – Inside Diameter OD – Outside Diameter
MEA03	0739	Measurement Value	M R 01/18	Required
MEA04	0355	Unit of Measurement Code	M ID 02/02	EM – Inches, Decimal - Minimum ED – Inches, Decimal- Nominal IN – Inch LB – Pound
MEA05	0740	Range Minimum	M R 01/18	
MEA06	0741	Range Maximum	M R 01/18	

Segment: N9 – Reference Identification

Level: Detail

Loop: N9

Max Use: N/A

Usage: Optional

Purpose: To transmit identifying information as specified by the Reference Identification Qualifier. In this case, this segment is used to define whether the PO is for a Flat rolled Product or specialty Blast and Paint product.

Example: N9*ZZ*PLATE~
N9*ZZ*BLAST~

Elem ID	Elem #	Name	Features	Comments
N901	128	Reference ID Qualifier	M ID 02/03	
N902	127	Mutually Defined	M ID 01/03	ZZ
N903	0739	Reference Identification	M R 01/18	

Segment: PID - Product Description

Level: Detail

Loop: PID

Max Use: 3

Usage: Mandatory

Purpose: Specifies a description of the product

Example: PID*F*08***Galvanized 20GA Coil, 55.695" ASTM-A36 / A6 and ASME-SA36

Elem ID	Elem #	Name	Features	Comments
PID01	0349	Item Description Type	M ID 01/01	F - Free form
PID02	0750	Product Characteristic Code	O ID 02/03	08 - Product
PID05	0352	Description	C AN 01/80	

Segment: SCD - Line Item Schedule
 Level: Detail
 Loop: SCH
 Max Use: 1
 Usage: Mandatory
 Purpose: Specifies the product quantity and delivery date
 Example: SCH*160000*LB***002*20250215

Elem ID	Elem #	Name	Features	Comments
SCH01	0380	Quantity	M R 01/15	
SCH02	0355	Units	M ID 02/02	SF - Square feet PC - Pieces LB - Pound FT - Feet TN - Net tons MP - Metric tons
SCH05	0374	Date Qualifier	M AN 03/03	002 - Delivery requested
SCH06	0373	Date	M DT 08/08	Estimated delivery date

Segment: CTT – Transaction Totals

Level: Summary

Loop:

Max Use: 1

Usage: Optional

Purpose: To transmit hash totals for a specific element in the transaction set

Example: CTT*1

Elem ID	Elem #	Name	Features	Comments
CTT01	354	Number of Line Items	M N0 01/06	Total number of PO1 segments

Segment: SE – Transaction Set Trailer

Level: Summary

Loop: None

Max Use: 1

Usage: Mandatory

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.

Example: SE*22*0001

Elem ID	Elem #	Name	Features	Comments
SE01	96	Number of Included Segments	M N0 01/06	
SE02	329	Transaction Set Control	M AN 04/09	Same as ST02 Number



Example EDI 850 Message:

ISA*00* *00* *08*005381447 *ZZ*SSAB
*180813*1138*U*00400*000013193*0*P*~
GS*PO*005381447*SSAB*20180813*1138*2114*X*004010~
ST*850*000002725~
BEG*00*NE*AK13603004**20180813~
N9*FF*2***11381946*ET~
MSG*SPL INST RAIL = SHIP COVERED GONS, OR WRAPPED FLAT BED~
MSG*SPL INST 4 X 4 BLOCKING ON ALL 72 X 144 LASER QUALITY LOADS~
MSG*SPL INST PROTECTIVE HEAD AND EYE GEAR REQ'D IN OUR PLANTS~
MSG*SPL INST LOADS MUST BE TARPED AND PROTECTED FROM WEATHER~
MSG*SPL INST ADVISE OUR PURCHASING AGENT OF ALL DATE CHANGES~
MSG*SPL INST ISO 9001:2008~
MSG*SPL INST We AND/OR CUSTOMERS RESERVE RIGHT TO AUDIT~
MSG*SPL INST OUR PURCHASE ORDER MUST APPEAR ON BILL OF LADING~
MSG*SPL INST IF SHIPPING LTL PACKING SLIP MUST BE AFFIXED TO~
MSG*SPL INST MATERIAL AND ALSO FAXED TO THE SHIP-TO LOCATION~
MSG*SPL INST 4 X 4 VERTICAL BLOCKING REQUIRED ON ALL SHIPMENTS~
MSG*SPL INST We MUST BE NOTIFIED OF ANY CHANGES TO DESIGN,~
MSG*SPL INST PRODUCTION, AND OR PROCESSING OF MATERIAL.~
MSG*SPL INST THIRD PARTY FREIGHT BILLING SEND TO RYDER CMS~
MSG*SPL INST 39550 13 MILE RD. STE. 101 NOVI, MI 48377~
N1*SU*SSAB INC*92*278140~
N3*1770 BILL SHARP BLVD~
N4*MUSCATINE*IA*52761~
N1*ST*Ackron*1*00458403~
N3*4787 STATE RD.~
N4*Water City Falls*OH*44223
N1*BT*JACKSON*1*005381447~
N3*3100 Main St.*P.O. Box 927~
N4*Detroit*MI*48204-0927~
PO1*00001*44107*LB*48*HP*BP*07004857~
PID*F****1/2 A-36 PLATE 72 X 144~
PID*F****LASER QUALITY~
PID*F****A-36 MODIFIED / .80-1.20 MN~
PID*F**** APT ONLY:CALL 331-187-4660/EMAIL LACKRECV@CUST.COM~
PID*F**** HOURS:PLT/BAR=7:00AM-2:00PM; SHT=10:00AM-2:00PM~
PID*F**** MAX LIFT: SHT/BAR = 10000LBS; PLT = 40000LBS~
PID*F****ALL 3/4" AND THINNER MUST BE A36 MOD (.80-1.20 MN)~
PID*F****CERTIFY ALL A36 PLATE TO CAT 1E0065 UP TO 2"~
MEA*PD*TH*48*HP~
SCH*44107*LB***106*20181102~
N9*FF*2***11381946*ET~
CTT*1*44107~
SE*41*000002725~
GE*1*2114~
IEA*1*000013193~