

**Implementation Guidelines: ANSI X12 Transaction Set 810  
Invoice**

**DOCUMENT NUMBER ICS 004010 810 S Invoice**

**ESSAR Steel Algoma Inc.**

**Information Systems and Business Process Improvement**

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**Effective date: 2002-02-14**

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**SECTION 1. REVISION STATUS**

REVISION NUMBER	DATE	PAGES	AUTHOR
R00/A	2002 01 18	original draft	G. Masters
R00	2002 02 14	original	G. Masters
R01	2003 03 11	Added SAC02	G. Masters
R02	2007 12 01	Change contact order	K. Rathwell
R03	2008 06 23	Name change	G. Masters
R04	2011 03 21	e-mail changes	G. Masters

**SECTION 2. PREFACE**

This document is intended to provide the details for an electronic Invoice from Algoma to its customers. If this specification does not meet your requirements, please forward a copy of your specification to the address below.

Essar Steel Algoma Inc. is committed to supporting and using the Automotive Industry Action Group and American National Standards Institute (AIAG/ANSI) X12 national standards.

Any questions or concerns regarding the Algoma Invoice or electronic data communication with Algoma may be directed to:

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**SECTION 3. SUMMARY**

Essar Steel Algoma Inc. has implemented this Invoice ANSI X12 810 transaction set to send customers their invoice details. If this transaction specification does not meet your requirements, please forward your Invoice implementation guidelines.

Algoma does use the Functional Acknowledgement, 997 transaction set, in order for Algoma to ensure the receipt of the 810 transaction.

Essar Steel Algoma Inc. uses the GXS network for electronic data interchange.

Algoma's DUNS number is 201495124.

**SECTION 4. INTERCHANGE ENVELOPE**

**4.1 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\*201495124 \*  
 01\*9999999999 \*20020115\*1312\*U\*00401\*000000001\*1\*  
 P\*~ N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
ISA01	744	Authorization Information Qual	M ID 02/02	"00" (Zeros) 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" (Zeros) 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
ISA06	705	Interchange Sender ID	M ID 15/15	"201495124"
ISA07	704	Interchange Receiver ID Qualifier	M ID 02/02	"01" for DUNS number
ISA08	706	Interchange Receiver ID	M ID 15/15	Your company's DUNS number.
ISA09	373	Interchange Date	M DT 08/08	Date of Transmission (CCYYMMDD)
ISA10	337	Interchange Time	M TM 04/04	Time of Transmission (HHMM) 24 hour clock

Segment: ISA - Interchange Control Header

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
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 N0 09/09	Sequential Number starting with 1 and incremented by 1 for each ISA sent.
ISA14	749	Acknowledgement 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 the element separator.

**4.2 Element separators and segment terminator**

Algoma uses the following characters:

- Segment terminator            EBCDIC    Hex "1C"
- Element separator            EBCDIC    Hex "5C"
- Sub element separator        EBCDIC    Hex "A1"

**4.3 IEA - Interchange Control Trailer**

Segment: IEA - 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\*3\*000000001 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
IEA01	405	Number of Included Groups	M N0 01/05	Number of GS segments included between ISA and this IEA
IEA02	709	Interchange Control Number	M N0 09/09	Must match ISA13

**SECTION 5. FUNCTIONAL GROUP ENVELOPE**

**5.1 GS - Functional Group Header**

Segment: GS - Functional Group Header

Level: n/a

Max Usage/Loops: 1/None

Purpose: The GS segment is used to indicate the beginning of a functional group and to provide control information

General Information: None

Example: GS\*IN\*999999999\*201495124\*20020115\*1312\*1\*X\*004010 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
GS01	479	Functional ID	M ID 02/02	"IN"
GS02	142	Application Sender Code	M ID 02/12	"201495124"
GS03	124	Application Receiver Code	M ID 02/12	Your company's DUNS number.
GS04	29	Data Interchange Date	M DT 08/08	Date created (CCYYMMDD)
GS05	30	Data Interchange Time	M TM 04/04	Time created (HHMM)
GS06	28	Data Interchange Control Number	M N0 01/09	Start with 1 and increment by 1 for each subsequent GS between interchanges
GS07	455	Responsibility Agency	M ID 01/02	Use "X" for ANSI X12 code formats
GS08	480	Version	M ID 01/12	"004010"

**5.2 GE - Functional Group Trailer**

Segment: GE - Functional Group Trailer

Level: n/a

Max Usage/Loops: 1 per functional group/none

Purpose: To define (specify) the end of a functional group of related transaction sets.

General Information: None

Example: GE\*3\*1 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
GE01	97	Number of Included Transaction Sets	M N0 01/06	Total count of transaction sets in functional group
GE02	28	Data Interchange Control Number	M N0 01/09	Same as GS06 in the associated group header

**SECTION 6. 810 TRANSACTION SET**

**6.1 Data Segment Sequence**

ST	Transaction Set Header
BIG	Beginning Segment for Invoice
CUR	Currency
REF	Reference Numbers
N1	Name
N2	Additional Name Information
N3	Address Information
ITD	Terms of Sale/Deferred Terms of Sale
DTM	Date/Time Reference
FOB	FOB Related Instructions
PID	Product/Item Description
IT1	Baseline Item Data
QTY	Quantity
PO4	Item Physical Details
SLN	Subline Item Detail (currently not available)
TDS	Total Monetary Value Summary
TXI	Tax Information
CAD	Carrier Detail
SAC	Service
CTT	Transaction Totals
SE	Transaction Set Trailer

**6.2 ST - Transaction Set Header**

Segment: ST - Transaction Set Header

Level: Header

Max Usage/Loops: 1/None

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

General

Information: This segment is required. The transaction set control number (ST02) in the header must match the transaction set control number (SE02) in the transaction set trailer (SE).

Example: ST\*810\*0001 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
ST01	143	Transaction Set ID Code	M ID 03/03	Use "810"
ST02	329	Transaction Set Control Number	M AN 04/09	A unique number assigned to each transaction set within a functional group.

**6.3 BIG - Beginning Segment for Invoice**

Segment: BIG - Beginning Segment for Invoice

Level: Header

Max Usage/Loops: 1/None

Purpose: To indicate the beginning of an invoice transaction and to transmit identifying numbers and dates.

General Information: The date is invoice date.

Example: BIG\*20020131\*0198765\*\*98273651\*\*\*DI N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
BIG01	373	Date	M DT 08/08	Invoice date. (CCYYMMDD)
BIG02	76	Invoice Number	M AN 01/22	Invoice number.
BIG03	373	Date	O DT 08/08	Not used.
BIG04	324	Purchase Order Number	O AN 01/22	Purchase order number.
BIG05	328	Release Number	O AN 01/30	Not used.
BIG06	327	Change Order Sequence Number	O AN 01/08	Not used.
BIG07	640	Transaction Type Code	O ID 02/02	"DI" for Debit Invoice.
BIG08	353	Transaction Set Purpose Code	O ID 02/02	Not used.
BIG09	353	Action Code	O ID 01/02	Not used.
BIG10	76	Invoice Number	O AN 01/22	Not used.

**6.4 CUR - Currency**

Segment: CUR - Currency

Level: Header

Max Usage/Loops: 1/None

Purpose: To specify the currency used in a transaction.

General Information: One occurrence of the CUR segment will be sent.

Example: CUR\*II\*CAD N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
CUR01	98	Entity Identifier Code	M AN 02/03	"II" - issuer of invoice
CUR02	100	Currency Code	M ID 03/03	"CAD" - Canadian dollars "USD" - US dollars
CUR03	280	Exchange Rate	O R 04/10	Not used.
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.				
.				
CUR21	337	Time	C AN 01/35	Not used.

**6.5 REF - Reference Numbers**

Segment: REF - Reference Numbers

Level: Header

Max Usage/Loops: 12.

Purpose: To specify identifying numbers.

General Information: Used to specify bill of lading, shipper's number and Algoma's mill order number.

Example: REF\*BM\*L0127 N/L  
 REF\*SI\*382418 N/L  
 REF\*MI\*12345 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
REF01	128	Reference Number Qualifier	M AN 02/03	"BM" for Bill of Lading "SI" for Shipper's Number "MI" for Mill Order Number
REF02	127	Reference Number	M AN 01/30	Bill of lading. Shipper's Number. Mill Order Number.
REF03	352	Description	O AN 01/80	Not used.
REF04	128	Reference Identification	O AN 01/99	Not used.

**6.6 N1 - Name**

Segment: N1 - Name

Level: Header

Max Usage/Loops: 1 per N1 loop whose max usage is 200 loops.

Purpose: To identify a party by type of organization, name and code.

General

Information: 3 N1 loops will be sent. For the RI and BY loops the DUNS number will be included.

Example: N1\*RI\*ESSAR STEEL ALGOMA INC. BOX 12345\*1\*201495124 N/L  
 N1\*BY\*ANYCOMPANY\*1\*999999999 N/L  
 N1\*ST\*ANYCOMPANY N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
N101	98	Entity Identifier Code	M AN 02/03	"RI" for Remit-to "ST" for Ship-to "BY" for Buyer
N102	93	Name	M AN 01/60	Organization's name or Code.
N103	66	ID Code Qualifier	O ID 01/02	"1" for DUNS number.
N104	67	ID Code	C AN 02/80	DUNS number.
N105	706	Entity Relationship Code	O ID 02/02	Not used.
N106	98	Entity Identifier Code	O AN 02/03	Not used.

**6.7 N2 – Additional Name Information**

Segment: N2 - Additional Name Information

Level: Header

Max Usage/Loops: 1 per N1 loop

Purpose: To specify additional name information.

General Information: One N2 segment will be sent containing additional name information in free form.

Example: N2\*PO BOX 9100 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
N201	93	Name	M AN 01/60	Name.
N202	93	Name	O AN 01/60	Not used.

**6.8 N3 – Address Information**

Segment: N3 – Address Information

Level: Header

Max Usage/Loops: 2 per N1 loop

Purpose: To specify the location of the named party.

General Information: Up to two N3 segments will be sent containing address information in free form.

Example: N3\*POSTAL STATION F\*TORONTO, ONTARIO N/L  
N3\*M4Y 3A5 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
N301	166	Address Information	M AN 01/55	Address information.
N302	166	Address Information	O AN 01/55	Address information.

**6.9 ITD – Terms of Sale / Deferred Terms of Sale**

Segment: ITD - Terms of Sale / Deferred Terms of Sale

Level: Header

Max Usage/Loops: 5.

Purpose: To specify terms of sale.

General Information: One ITD segment will be sent.

Example: ITD\*01\*3\*\*\*\*\*30\*\*\*\*\*Net 30 Days N/L

Elem ID	Elem#	Name	Features	Comments
ITD01	336	Terms Type Code	O ID 02/02	"01" for Basic
ITD02	333	Terms basis Date Code	O ID 01/02	"3" for Invoice date.
ITD03	338	Terms discount Percent	O R 01/06	Not used.
ITD04	370	Terms Discount Due Date	O DT 08/08	Not used.
ITD05	351	Terms Discount Days Due	C N0 01/03	Not used.
ITD06	446	Terms Net Due Date	O DT 08/08	Not used.
ITD07	386	Terms Net Days	O N0 01/03	Net days due.
ITD08	362	Terms Discount Amount	O N2 02/10	Not used.
ITD09	388	Terms Deferred Due Date	O DT 08/08	Not used.
ITD10	389	Deferred Amount Due	C N2 01/10	Not used.
ITD11	342	Percent of Invoice Payable	C R 01/05	Not used.
ITD12	352	Description	O AN 01/80	Terms text.
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.				
.				
ITD15	954	Percent	O R 01/10	Not used.

**6.10 DTM - Date/Time Reference**

Segment: DTM - Date/Time Reference

Level: Header

Max Usage/Loops: 10/None

Purpose: To specify pertinent dates and times.

General Information: One occurrence of the DTM segment will be sent.

Example: DTM\*011\*200020125 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
DTM01	374	Date/Time Qualifier	M ID 03/03	"011" for shipment date.
DTM02	373	Date	M DT 08/08	Date (CCYYMMDD)
DTM03	337	Time	O TM 04/08	Not used.
DTM04	623	Time Code	O ID 02/02	Not used.
DTM05	1250	Date Time Period Format Qualifier	C ID 02/03	Not used.
DTM06	1251	Date Time Period	C AN 01/35	Not used.

**6.11 FOB - F.O.B. Related Instructions**

Segment:                    FOB - F.O.B. Related Instructions

Level:                     Header

Max Usage/Loops:        1.

Purpose:                    To specify transportation instructions relating to a shipment.

General Information:    To specify arrangements for paying freight.

Example:                 FOB\*CC N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
FOB01	146	Shipment Method of Payment	M ID 02/02	"CC" for collect "PP" for prepaid
FOB02	309	Location Qualifier	O ID 01/02	Not used.
FOB03	352	Description	O AN 01/80	Not used.
FOB04	334	Transportation Terms Qualifier Code	O ID 02/02	Not used.
FOB05	335	Transportation Terms Code	O ID 03/03	Not used.
FOB06	309	Location Qualifier	O ID 01/02	Not used.
FOB07	352	Description	O AN 01/80	Not used.
FOB08	54	Risk of Loss Qualifier	O ID 02/02	Not used.
FOB09	352	Description	O AN 01/80	Not used.

**6.12 PID - Product/Item Description**

Segment: PID - Product/Item Description

Level: Header

Max Usage/Loops: 200.

Purpose: To describe a product or process in coded or free-form format.

General Information: Up to four freeform PID segments will be used to provide customer specification information.

**Note:** Algoma's invoices are generated for a single product. The PID segment can be sent in the detail area but it will be repeated for each item on the invoice. It is preferred to send the PID at the header level.

Example: PID\*F\*\*\*COLD ROLLED SHEET, ASTM A366, OIL N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
PID01	349	Item Description Type	M ID 01/01	"F" for free-form format.
PID02	750	Product/Process Characteristic Code	O ID 02/03	Not used.
PID03	559	Agency Qualifier Code	C ID 02/02	Not used.
PID04	751	Product Description Code	C AN 01/12	Not used.
PID05	352	Description	C AN 01/80	Product description.
PID06	752	Surface/Layer/ Position Code	O ID 02/02	Not used.
PID07	822	Source Sub-qualifier	O AN 01/15	Not used.
PID08	1073	Yes/No Condition Or Response Code	O ID 01/01	Not used.
PID09	819	Language Code	O ID 02/03	Not used.

**6.13 IT1 – Baseline Item Data**

Segment: IT1 - Baseline Item Data

Level: Detail

Max Usage/Loops: 1 / 200,000.

Purpose: To specify basic line item data.

General

Information: Used to specify Algoma's mill order number and mill item number. The buyer's part number and item number may or may not be present.

Example: IT1\*3\*31242\*LB\*19.5\*HP\*VN\*001\*BP\*12345053 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
IT101	350	Assigned Identification	O AN 01/20	Customer item number.
IT102	358	Quantity Invoiced	M R 01/10	Quantity.
IT103	355	Unit or Basis for Measurement	M ID 02/02	Units for quantity.
IT104	212	Unit Price	M R 01/17	Unit price.
IT105	639	Basis of Unit Price Code	M ID 02/02	Units for unit price.
IT106	235	Product/Service ID Qualifier	O ID 02/02	"VN" for Algoma's Mill Item number.
IT107	234	Product/Service ID	O AN 01/48	Algoma's mill item number.
IT108	235	Product/Service ID Qualifier	O ID 02/02	"BP" for Buyer's Part Number.
IT109	234	Product/Service ID	O AN 01/48	Buyer's part number.
IT110	235	Product/Service ID Qualifier	C ID 02/02	Not used.
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.				
.				
IT131	234	Product/Service ID	C AN 01/48	Not used.

**6.14 IT3 – Additional Item Data**

Segment: IT3 - Additional Item Data

Level: Detail

Max Usage/Loops: 1.

Purpose: To specify alternate units of measure and quantities.

General Information: Used to specify additional quantity information: piece count.

Example: IT3\*2\*PC N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
IT301	382	Number of Units Shipped	C R 01/10	Number of pieces shipped.
IT302	355	Unit or Basis for Measurement	C ID 02/02	"PC" for pieces.
IT303	368	Shipment / Order Status Code	C ID 02/02	Not used.
IT304	383	Quantity Difference	C R 01/09	Not used.
IT305	371	Change Reason Code	C ID 02/02	Not used.

**6.15 PO4 - Item Physical Details**

Segment: PO4 - Item Physical Details

Level: Detail

Max Usage/Loops: 1 per HL loop.

Purpose: To specify the physical qualities, packing, weights and dimensions relating to the item.

General

Information: There will be one PO4 segment to provide the thickness, width, length (if cut to length product) and total weight for each baseline item (IT1 segment).

Example: PO4\*\*\*COL\*N\*19450\*LB\*\*\*.125\*52.25\*IN N/L  
 PO4\*\*\*N\*19450\*LB\*\*\*120\*.125\*52.25\*IN N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
PO401	356	Pack	O N0 01/06	Not used.
PO402	357	Size	O R 01/08	Not used.
PO403	355	Unit of Measurement Code	O ID 02/02	Not used.
PO404	103	Packing Code	O AN 05/05	"COL" for coil only.
PO405	187	Weight Qualifier	O ID 01/02	"N" for net weight.
PO406	384	Gross Weight per Pack	O R 01/09	Weight.
PO407	355	Unit of Measure Code	O ID 02/02	"LB" for pounds. "KG" for kilograms.
PO408	385	Gross Volume per Pack	O R 01/09	Not used.
PO409	355	Unit of Measure Code	O ID 02/02	Not used.
PO410	082	Length	O R 01/08	Length, if cut to length material.
PO411	189	Width	O R 01/08	Width.
PO412	65	Height	O R 01/08	Gauge.
PO413	355	Unit of Measure Code	O ID 02/02	"IN" for inches. "MM" for millimeters.

**6.16 SLN - Subline Item Detail**

Segment: SLN - Subline Item Detail

Level: Detail

Max Usage/Loops: 1 / 1000.

Purpose: To specify product subline detail item data.

General

Information: There will be one SLN segment for each piece represented by the IT1 segment. Used to provide individual piece IDs and weights.

Example: SLN\*1\*\*O\*19450\*LB\*\*\*BN\*9212345 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
SLN01	356	Assigned Identification	M AN 01/20	Unique number starting at one.
SLN02	356	Assigned Identification	O AN 01/20	Not used.
SLN03	662	Relationship Code	M ID 01/01	"O" for Informational.
SLN04	380	Quantity	O R 01/15	Piece weight.
SLN05	355	Unit or Basis for Measurement Code	O ID 02/02	"LB" for pounds. "KG" for kilograms.
SLN06	212	Unit Price	O ID 01/02	Not used.
SLN07	639	Basis of Unit Price	O R 01/09	Not used.
SLN08	662	Relationship Code	O R 01/09	Not used.
SLN09	235	Product/Service ID Qualifier	O ID 02/02	"BN" for bar coded serial number.
SLN10	234	Product/Service ID	O AN 01/48	Algoma's piece ID.
SLN11	235	Product/Service ID Qualifier	C ID 02/02	Not used.
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.				
.				
SLN28	234	Product/Service ID	C AN 01/48	Not used.

**6.17 TDS – Total Monetary Value Summary**

Segment: TDS - Total Monetary Value Summary

Level: Summary

Max Usage/Loops: 1.

Purpose: To specify the total invoice discounts and amounts.

General Information: To provide the total invoice amount.

Example: TDS\*558139 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
TDS01	610	Amount	O N2 01/15	Total invoice amount.
TDS02	610	Amount	O N2 01/15	Not used.
TDS03	610	Amount	O N2 01/15	Not used.
TDS04	610	Amount	O N2 01/15	Not used.

**6.18 TXI – Tax Information**

Segment: TXI - Tax Information

Level: Summary

Max Usage/Loops: 4 per HL loop.

Purpose: To describe a product or process in coded or free-form format.

General Information: Up to 2 TXI segments can be provided. One for GST and one for provincial tax.

Example: TXI\*GS\*1024.46\*7\*\*\*\*\*14635.14\*R132470642 N/L  
TXI\*SP\*0\*0\*\*\*G\*\*\*1234-123 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
TXI01	963	Tax Type Code	M ID 02/02	"GS" for GST. "SP" for Provincial Tax.
TXI02	782	Monetary Amount	C R 01/18	Tax amount if not Exempt.
TXI03	954	Percent	C R 01/10	Tax rate if not Exempt.
TXI04	955	Tax Jurisdiction Code Qualifier	C ID 02/02	Not used.
TXI05	956	Tax Jurisdiction Code	C AN 01/10	Not used.
TXI06	441	Tax Exempt Code	C ID 01/01	"F" for Exempt GST. "G" for Exempt provincial.
TXI07	662	Relationship Code	C ID 01/01	Not used.
TXI08	828	Dollar Basis for Percent	C R 01/09	Taxable amount if not exempt.
TXI09	325	Tax Identification Number	O AN 01/20	Registered ID number if available.
TXI10	350	Assigned Identification	O AN 01/20	Not used.

**6.19 CAD – Carrier Detail**

Segment: CAD - Carrier Detail

Level: Summary

Max Usage/Loops: 10.

Purpose: To specify transportation details for the transaction.

General Information: One CAD will be provided for carrier information.

Example: CAD\*M\*\*\*\*LAIDLAW CARRIERS INC N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
CAD01	91	Transportation Method/Type Code	O ID 01/02	"M" for common carrier.
CAD02	206	Equipment Initial	O AN 01/04	Algoma's carrier ID.
CAD03	207	Equipment Number	O AN 01/10	Carrier's trailer number.
CAD04	140	Standard Carrier Alpha Code	C ID 02/04	Not used.
CAD05	387	Routing	C AN 01/35	Carrier name.
CAD06	368	Shipment / Order Status Code	O ID 02/02	Not used.
.				
.				
.				
CAD09	284	Standard Carrier Alpha Code	O ID 02/02	Not used.

**6.20 SAC – Terms of Sale / Deferred Terms of Sale**

Segment: SAC - Service

Level: Summary

Max Usage/Loops: 1 / 25.

Purpose: To specify allowances, charges or services.

General Information: Up to 10 SAC segments can be sent.

Example: SAC\*C\*D240\*\*\*6880\*\*\*.16\*CW\*43000\*\*06\*\*\*Plus Freight N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
SAC01	248	Allowance or Charge Indicator	M ID 01/01	"C" for charge. "A" for allowance.
SAC02	1300	Service Promotion Allowance	C ID 04/04	X.12 code describing the allowance or charge.
SAC03	559	Agency Qualifier Code	C ID 02/02	Not used.
SAC04	1301	Agency Service Promotion Allowance	C AN 01/10	Not used.
SAC05	610	Amount	O N2 01/15	Total amount for charge or allowance.
SAC06	378	Allowance / Charge Percent Qualifier	C ID 01/01	Not used.
SAC07	332	Percent	C R 01/06	Not used.
SAC08	118	Rate	C R 01/09	Allowance or charge rate.
SAC09	355	Unit or Basis for Measurement	C ID 02/02	Units for rate.
SAC10	380	Quantity	C R 01/15	Amount rate is charge against.
SAC11	380	Quantity	O R 01/15	Not used.
SAC12	331	Allowance or Charge Method of Handling Code	O ID 02/02	"06" for charge to be paid by customer. "02" for off invoice.
SAC13	127	Reference Identification	C AN 01/30	Not used.
SAC14	770	Option Number	O AN 01/20	Not used.

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Segment: SAC - Service

Elem ID -----	Elem# -----	Name -----	Features -----	Comments -----
SAC15	352	Description	C AN 01/80	Description of charge or allowance.
SAC16	819	Language Code	O ID 02/03	Not used.

**6.21 CTT - Transaction Totals**

Segment: CTT - Transaction Totals

Level: Summary

Max Usage/Loops: 1/none.

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

General Information: CTT01 and CTT02 will be sent.

Example: CTT\*2\*123543 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
CTT01	354	Number of Line Items	M N0 01/06	Total number of IT1 segments.
CTT02	347	Hash Total	O R 01/10	Hash total of IT102 elements.
CTT03	81	Weight	O R 01/08	Not used.
CTT04	355	Unit of Measurement Code	O ID 02/02	Not used.
CTT05	183	Volume	O R 01/08	Not used.
CTT06	355	Unit of Measurement Code	O ID 02/02	Not used.
CTT07	352	Description	O AN 01/80	Not used.

**6.22 SE - Transaction Set Trailer**

Segment: SE - Transaction Set Trailer

Level: Summary

Max Usage/Loops: 1/none.

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segment).

General Information:

Example: SE\*23\*0001 N/L

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

**SECTION 7. DATA ELEMENT DICTIONARY**

66	ID Code Qualifier
1	DUNS number
91	Transportation Method/Type Code
M	Common Carrier
98	Entity Identifier Code
BY	Buyer
II	Issuer of Invoice
RI	Remit-to
ST	Ship-to
100	Currency Code
CAD	Canadian Dollars
USD	US Dollars
103	Packing Code
COL	Coil
128	Reference Number Qualifier
BM	Bill of lading
MI	Mill order number
SI	Shipper's number
146	Shipment Method of Payment
CC	Collect
PP	Prepaid
187	Weight Qualifier
N	Net
235	Product/Service ID Qualifier
BN	Bar coded serial number
BP	Buyer's part number
VN	Vendor's item number
248	Allowance or Charge Indicator
A	Allowance
C	Charge
331	Allowance or Charge Method of Handling
02	Off invoice
06	Charge to be paid by customer
333	Terms Basis Date Code
3	Invoice date
336	Terms Type Code
01	Basic
349	Item Description Type
F	Free-form format

355 Unit of Measurement Code  
FT Feet  
IN Inches  
KG Kilogram  
LB Pound  
MM Millimeters  
MR Metre  
PC Pieces

374 Date/Time Qualifier  
11 Date/time shipment leaves the supplier's premises

441 Tax Exempt Code  
F Exempt GST  
G Exempt provincial tax

639 Basis of Unit Price Code  
HP Price per Hundred  
PE Price per Each  
PT Price per Ton

640 Transaction Type Code  
DI Debit Invoice

662 Relationship Code  
O Informational

963 Relationship Code  
GS GST  
SP Provincial sales tax

1300 Service Promotion Allowance  
A000 Special Allowance  
A700 Bridge Tolls  
A721 Brokerage  
B660 Contract Allowance (Less allowance)  
B820 Exchange Amount (US Exchange)  
B940 Special Cutting (Gas Cutting)  
C350 Distributors Discount  
C530 Duty  
D240 Freight  
D270 Fuel Surcharge  
D360 GST  
E410 Special Loading Charges  
F155 Handling Charges (Lift/Bundle charges)  
F970 Rebate  
G270 Registration of Export for Reentry (TIB Entry)  
H390 Drop Off Charges  
H850 State (Provincial) Taxes  
I390 Unloading  
ZZZZ Mutually Defined

**SECTION 8. 810 SAMPLE TRANSACTION**

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ISA~00~ ~00~ ~01~201495124 ~01~999999999  
~020212~1247~U~00401~000006143~1~P~<"  
GS~IN~201495124 ~999999999 ~20020212~1247 ~000000683~X ~004010  
"  
ST~810~000010014"  
BIG~20020207~0201462~~Z4451A~~~DI"  
CUR~II~CAD"  
REF~BM~E4868"  
REF~MI~28895"  
REF~SI~020229"  
N1~RI~ESSAR STEEL ALGOMA INC. BOX #B9201~1~201495124"  
N2~P.O. BOX 9100"  
N3~POSTAL STATION F~TORONTO, ONTARIO"  
N3~M4Y 3A5"  
N1~BY~ANY COMPANY SALES~1~999999999"  
N2~DIV COMPANY LTD"  
N3~PO BOX 1111 99 EAST AVE~ANY CITY ONTARIO A8V 4M8"  
N1~ST~ANY COMPANY"  
N2~C/O PROCESSING PLANT"  
N3~135 WEST ST~NEW CITY ONTARIO"  
ITD~01~3~~~~~30~~~~~NET 30 DAYS"  
DTM~011~20020207"  
FOB~PP"  
PID~F~~~~ HR MULTIPLE CERTIFIED PLATE - HSLA - CSA G40.21 50W (98)/ASTM A572  
GR 50 TYPE"  
PID~F~~~~ 2 (01) - FLATNESS TOLERANCE TO 1/2 A-6"  
IT1~ 1~15312~LB~99.99~HP~VN~001"  
IT3~3~PC"  
PO4~~~~~N~15312~LB~~~120~60~.625~IN"  
SLN~~~O~~~~~BN~9212345"  
SLN~~~O~~~~~BN~9212346"  
SLN~~~O~~~~~BN~9212347"  
IT1~ 2~61240~LB~99.99~HP~VN~002"  
IT3~4~PC"  
PO4~~~~~N~61240~LB~~~120~60~.75~IN"  
SLN~~~O~~~~~BN~9212348"  
SLN~~~O~~~~~BN~9212349"  
SLN~~~O~~~~~BN~9212350"  
SLN~~~O~~~~~BN~9212351"  
TDS~7164070"  
TXI~GS~5365.89~7~~~~~76655.55~R132470642"  
TXI~PS~0~0~~~~~11170819"  
CAD~M~0245~454~~MCBURNEY TRANSPORT LTD."  
SAC~C~D240~~~12320~~~.16~CW~77000~~06~~~PLUS FREIGHT"  
CTT~2~76552"  
SE~0000000036~000010014"  
IEA~00001~000006143"