

**Implementation Guidelines: ANSI X12 Transaction Set 824  
Application Advice**

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Information Systems and Business Process Improvement**

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**SECTION 1. REVISION STATUS**

REVISION NUMBER	DATE	PAGES	AUTHOR
R00/A	1995 12 05	original draft	G. Masters
R00	1995 12 12	original	G. Masters
R01	1995 12 22	fixed GS elements	G. Masters
R02	1996 01 31	revised N1 segment	G. Masters
R03	1998 09 04	added 080 to DTM01	G. Masters
R04	2000 03 07	revised summary	G. Masters
R05	2000 03 22	converted to 4010	G. Masters
R06	2001 01 15	added REF~SE	G. Masters
R07	2001 04 24	for suppliers RMR	G. Masters
R08	2003 04 04	Revised element & sub-element separator.	G. Masters
R09	2008 06 23	Name change	G. Masters
R10	2017 03 22	Changed contacts	G. Masters

**SECTION 2. PREFACE**

This document is intended to provide the details on the construct of an electronic Application Advice 824 transaction set to satisfy Algoma's requirements.

Algoma Steel Inc. is committed to supporting and using the American National Standards Institute (ANSI) X12 national standards. However, the standards are broad in scope and flexible in methods of implementing. These are the Algoma specific requirements for the Application Advice.

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

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**SECTION 3. SUMMARY**

In order for Algoma Steel Inc. to efficiently service its customers, Algoma has implemented the Application Advice ANSI X12 824 transaction set. This transaction set will be used to report errors found in the data content edit of inbound transactions (856, 861 and 870).

It is very important not to confuse the Application Advice (824) with the Functional Acknowledgement (997). The 997 only provides the results of a syntactical check of the incoming transaction and is not concerned with the data content.

The 824 reports on the results of the analysis of the actual data as processed by Algoma. All data fields on the inbound transaction are checked for validity and adherence to Algoma's requirements. Any discrepancies in the inbound data will be reported via the 824. The supplier of the inbound transaction must use this information to resolve the discrepancies and retransmit corrected data immediately.

**NOTE:** If any one piece of information is rejected on an ASN, the entire ASN is rejected. The ASN must be corrected and the complete ASN must be resent to Algoma.

All 824 transactions must be acknowledged with a Functional Acknowledgement (997).

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

Algoma's DUNS number is 201495124.



**SECTION 4. INTERCHANGE ENVELOP**

**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 ~940901~1312~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" left justified.
ISA07	704	Interchange Receiver ID Qualifier	M ID 02/02	"01" for DUNS number. "09" for phone number. "ZZ" for mutually defined.
ISA08	706	Interchange Receiver ID	M ID 15/15	Receiver's ID number left justified.
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

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 acknowledge- ment 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 then the element separator.

**4.1 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"

**4.2 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**

**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~AG~201495124~999999999~20010420~1312~1~X~004010 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
GS01	479	Functional ID	M ID 02/02	"AG"
GS02	142	Application Sender Code	M ID 02/12	Sender's ID number.
GS03	124	Application Receiver Code	M ID 02/12	Receiver's ID 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"

**5.1 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. 824 TRANSACTION SET**

**Data Segment Sequence**

ST	Transaction Set Header
BGN	Beginning Segment for Application Advice
N1	Name
OTI	Original Transaction Identification
REF	Reference Numbers
DTM	Date/Time Reference
TED	Technical Error Description
SE	Transaction Set Trailer

**6.1 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 this header must match the transaction set control number (SE02) in the transaction set trailer (SE).

Example: ST~824~0001 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
ST01	143	Transaction Set ID Code	M ID 03/03	Use "824"
ST02	329	Transaction Set Control Number	M AN 04/09	A unique number assigned to each transaction set within a functional group.

**6.2 BGN - Beginning Segment for Application Advice**

Segment: BGN - Beginning Segment for Application Advice

Level: Header

Max Usage/Loops: 1/None

Purpose: To indicate the beginning of an Application Advice Transaction Set and to transmit an identifying number, date and other basic data relating to the transaction set.

General Information: The date and time are the date and local time of the creation of the transaction.

Example: BGN~00~123456~19940916~1421 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
BGN01	353	Transaction Set Purpose Code	M ID 02/02	"00" - original
BGN02	127	Reference Number	M AN 01/30	A unique number generated by the receiver of the original document.
BGN03	373	Date	M DT 08/08	Creation date (CCYYMMDD)
BGN04	337	Time	C TM 04/08	Creation time (HHMM) 24 hour clock.
BGN05	623	Time Code	O ID 02/02	Not used.
BGN06	127	Reference Identification	O AN 01/30	Not used.
BGN07	640	Transaction Type Code	O ID 02/02	Not used.
BGN08	306	Action Code	O ID 01/02	Not used.
BGN09	786	Security Level Code	O ID 02/02	Not used.

**6.3 N1 - Name**

Segment: N1 - Name

Level: Header

Max Usage/Loops: 1 per N1 loop whose max usage is 2.

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

General Information: Ship-to and consignor or ship-to and ship-from segments will be sent.

Example: N1~CI~ACME~1~745942164 N/L  
 N1~ST~ACCURIDE N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
N101	98	Entity Identifier Code	M AN 02/03	"ST" for ship-to "CI" for consignor "SF" for ship-from
N102	93	Name	M AN 01/60	Organization's name.
N103	66	ID Code Qualifier	O ID 01/02	"1" for DUNS number. "ZZ" for mutually defined.
N104	67	ID Code	O 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.

**6.4 OTI - Original Transaction Identification**

Segment: OTI - Original Transaction Identification

Level: Detail

Max Usage/Loops: 1/10,000

Purpose: To identify the edited transaction set, the level at which the results of the edit are reported, and to indicate the accepted, rejected or accepted with change edit results.

General Information: One OTI loop is generated for each line item.

Example: OTI~IR~SI~123456~~~~~3452~3452~856 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
OTI01	110	Application Acknowledgement Code	M ID 01/02	"IA" item accepted. "IE" item accepted with error. "IR" item rejected: re-check transaction set to insure accuracy before resending.
OTI02	128	Reference Number Qualifier	M ID 02/02	"SI" Shipper's Identification (SID) number. See Data Element Dictionary section for complete list of values.
OTI03	127	Reference Number	M AN 01/30	Based on the value of OTI02.
OTI04	142	Application Sender's Code	O AN 02/12	Not used.
OTI05	124	Application Receiver's Code	O AN 02/12	Not used.
OTI06	373	Date	O DT 08/08	Not used.
OTI07	337	Time	O TM 04/08	Not used.
OTI08	28	Group Control Number	O N0 01/09	GS06 from original transaction.
OTI09	329	Transaction Set Control Number	O AN 04/09	ST02 from original transaction

OTI10      143      Transaction Set Identifier Code      O ID 03/03      Original transaction set ID.

Segment:                      OTI - Original Transaction Identification

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
OTI11	480	Version/Release/ Industry ID Code	O ID 01/12	Original transaction version.
OTI12	353	Transaction Set Purpose Code	O ID 02/02	Not used.
OTI13	640	Transaction Type Code	O ID 02/02	Not used.
OTI14	346	Application Type Code	O ID 02/02	Not used.
OTI15	306	Action Code	O ID 01/02	Not used.
OTI16	305	Transaction Handling Code	O ID 01/02	Not used.
OTI17	641	Status Reason Code	O ID 03/03	Not used.

**6.5 REF - Reference Numbers**

Segment: REF - Reference Numbers

Level: Detail

Max Usage/Loops: 12 per OTI loop.

Purpose: To transmit identifying numbers.

General Information: Used to specify reference numbers from the original transaction (i.e. bill of lading, heat, mill order item, processor piece ID, Algoma's mill/tag number).

Example: REF~BM~32418 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
REF01	128	Reference Number Qualifier	M AN 02/03	"BM" for BOL. "HC" for heat. See Data Element Dictionary section for a complete list of values.
REF02	127	Reference Number	M AN 01/30	Based on REF01.
REF03	352	Description	O AN 01/80	Not used.



DTM - Date/Time Reference

Segment: DTM - Date/Time Reference

Level: Detail

Max Usage/Loops: 2 per OTI loop

Purpose: To specify pertinent dates and times.

General

Information: At least one occurrence of the DTM segment will be sent.  
 DTM01 will be 011 when in response to a shipment.  
 DTM01 will be 080 when in response to a ready status ASN.

Example: DTM~011~19940916~1421 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
DTM01	374	Date/Time Qualifier	M AN 03/03	"011" for ASN ship date/time. "009" Algoma process date/time. "080" for date/time from ready status ASN
DTM02	373	Date	M DT 08/08	Date (CCYYMMDD)
DTM03	337	Time	M TM 04/08	Time (HHMM) 24 hour clock.
DTM04	623	Time Code	O ID 02/02	Not used.
DTM05	1250	Date Time Period Format Qualifier	O ID 02/03	Not used.
DTM06	1251	Date Time Period	O AN 01/35	Not used.

TED - Technical Error Description

Segment: TED - Technical Error Description

Level: Detail

Max Usage/Loops: 1/TED 10,000/OTI

Purpose: To identify the error and, if feasible, the erroneous segment, or data element, or both.

General Information: This segment will only be sent when an error is encountered.

Example: TED~003~INVALID ORDER NUMBER~~~~~33212 N/L

Elem ID	Elem#	Name	Features	Comments
-----	-----	-----	-----	-----
TED01	647	Application Error Condition Code	M ID 01/03	Algoma assigned error number.
TED02	3	Free Form Message	O AN 01/60	Error message.
TED03	721	Segment ID Code	O ID 02/03	Not used.
TED04	719	Segment Position in Transaction Set	O N0 01/06	Not used.
TED05	722	Element Position in Segment	O N0 01/02	Not used.
TED06	725	Data Element Reference Number	O N0 01/04	Not used.
TED07	724	Copy of Bad Data Element	O AN 01/99	Copy of bad element.
TED08	961	Data Element New Content	O AN 01/99	Not used.

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

98 Entity Identifier Code  
CI Consignor  
SF Ship from  
ST Ship to

110 Application Acknowledgement Code  
IA Item accepted  
IE Item accepted with error  
IR Item rejected

128 Reference Number Qualifier  
BM Bill of lading  
F8 Reference identification  
HC Heat number  
LS Mill/tag number  
MI Mill order item  
SI Shipper's Identification (SID) number  
SE Serial Number (Processor piece ID.)

353 Transaction Set Purpose Code  
00 Original

374 Date/Time Qualifier  
009 Receiver process date/time  
011 ASN ship date/time

647 Application Error Condition Code  
006 Duplicate  
007 Missing data  
009 Invalid date  
011 Not matching  
012 Invalid combination  
024 Other unlisted reason  
848 Incorrect data  
H Missing or invalid processing  
MQT Missing quantity  
ZZZ Mutually defined

**SECTION 8. 824 SAMPLE TRANSACTION**

ISA~00~                    ~00~                    ~01~201495124                    ~01~  
207663412                    ~940901~1312~U~00302~000000001~1~P~`  
GS~AG~207663412~201495124~20010420~1312~1~X~004010  
ST~824~0001  
BGN~00~20030401043000001~20030401~0430  
N1~ST~MISSING DATA~ZZ~ABCDEFG    00  
N1~CI~MISSING DATA~ZZ~ABCDEFG    00  
OTI~IR~SI~J425984~~~~~24~000240002~856~004010  
REF~BM~13097000  
DTM~011~20030331~0000  
DTM~009~20030401~0409  
TED~011~PO LINE ITEM DOES NOT EXIST ON PO/RLSE.~~~~~215472 0000 004  
TED~ZZZ~~~~~CORRECT AND RESEND ENTIRE ASN  
SE~21~0001  
ST~824~0002  
BGN~00~20030329050100001~20030329~0501  
N1~ST~ALGOMA STEEL INC~1~201495124  
N1~SF~ANY COMPANY~ZZ~ABCDEFG    00  
OTI~IR~SI~J415383~~~~~22~000220002~856~004010  
REF~PK~J415383  
REF~BV~000  
DTM~011~20030328~0000  
DTM~009~20030329~0432  
TED~007~MISSING PART NUMBER  
TED~ZZZ~~~~~CORRECT AND RESEND ENTIRE ASN  
SE~12~0002  
GE~2~1  
IEA~1~000000001