ALLOY BLENDING SYSTEM

(ABS)

DATA FILE LAYOUTS

Prepared by:

Keystone Systems, Inc.
P.O. Box 1084
Butler, PA 16003-1084

Phone: 724-234-2064 • Fax: 781-394-1096
E-mail: ksi584@aol.com
Website: www.keystone-systems.com

October 19, 2004

Table of Contents

DETAILED RECEIPTS FILE LAYOUT

The Detailed Receipts File is updated when 1) new material receipts are entered via the Inventory Material Receipts function, 2) material is imported from a user-supplied import file, 3) scrap receipts are entered via the Scrap Control System's Receipts function, and/or 4) material is released (transferred) from the Scrap Control System's Scrap Holding File to the active inventory via the Scrap Transfer function. Each of these activities are indicated in postion 112.

The Detailed Receipts File is an ASCII text file named "RE*mmyyyy*.KSI", where *mm* equals the month *(i.e., 01=January, 02=February, etc.)* and *yyyy* equals the 4-digit year *(i.e., 2000).* A new file is automatically created each month. The receipts file is located in your "home" directory. Your "home" directory is defined in record #1 in your ABS.INI file, and is normally the "[drive:]\ABS\DATA\" directory. The Detailed Receipts File and the optional Exported Receipts File "RECEIPTS.DAT" contain the following data:

POSITION	***DESCRIPTION***	***LENGTH***	***TYPE***
1	*(blank)*	1	
2-5	Year Received/Transferred (4 digits)	4	I***
6-7	Month Received/Transferred (01-12)	2	I
8-9	Day Received/Transferred (01-31)	2	I
10	*(blank)*	1	
11-18	Time Received/Transferred (hh:mm:ss)	8	I
19	*(blank)*	1	
20-24	"License Plate" Identifier (00000-ZZZZZ)	5	A/N*
25-34	Material Name	10	A/N
35-44	Lot Number	10	A/N
45-53	Quantity Received/Transferred	^9.0	R**
54-59	Vendor Code	6	A/N
60-65	Material Class Code	6	A/N
66-75	P.O. Number (from Scrap Control file)	10	A/N
76-83	Tally Number (from Scrap Control System)	8	A/N
84-94	Actual Cost/Lb. (Kg.) [Received]	^^^11.5	R
95-105	Standard Cost/Lb. (Kg.) [Received]	^^^11.5	R
106-111	Material File Name	6	A/N
112	Transaction Type (**I**-mport, **R**-eceipt, **S**-crap Receipt, or **T**-ransfer)	1	A/N
113-117	Account Number	5	A/N
118-119	User Number (0-99)	2	I
120-131	Book Quantity	^^12.2	R
132-143	Actual Book Value	^^12.2	R
144-155	Standard Book Value	^^12.2	R
156-180	Vendor Description	25	A/N
181-205	Material Description	25	A/N
206-207	Material Type	2	A/N
208-210	ABS Serial Number	3	I
211-220	Bill of Lading Number #	10	A/N
221-230	Receiver Number #	10	A/N
231-234	Carrier Id #	4	A/N
235-245	Actual Cost/Lb. (Kg.) [After]	^^^11.5	R
246	If Import Transaction, which file imported to (**M** for Material or **S** for Scrap)	1	A/N
247-254	Material Location	8	A/N

**Denotes alphanumeric character.* ***Denotes real value.* ****Denotes integer value.*

^Fields indicated are stored with 0 decimal places of accuracy - field size includes the decimal point.
^^Fields indicated are stored with 2 decimal places of accuracy.
^^^Fields indicated are stored with 5 decimal places of accuracy.

#Fields indicated are only valid when using a customized receiving program.

DETAILED USAGE FILE LAYOUT

The Detailed Usage File is updated when material usage is entered via the Inventory Material Usage function. The usage file is an ASCII text file named "US*mmyyyy*.KSI", where mm equals the month *(i.e., 01=January, 02=February, etc.)* and *yyyy* equals the 4-digit year *(i.e., 2000).* A new file is automatically created each month and is located in your "home" directory. Your "home" directory is defined in record #1 in your ABS.INI file, and is normally the "[drive:]\ABS\DATA" directory. The detailed usage file and the optional exported usage file "USAGE.DAT" contain the following data:

POSITION	***DESCRIPTION***	***LENGTH***	***TYPE***
1	*(blank)*	1	
2-5	Year Usage Entered (4 digits)	4	I***
6-7	Month Usage Entered (01-12)	2	I
8-9	Day Usage Entered (01-31)	2	I
10	*(blank)*	1	
11-18	Time Usage Entered (hh:mm:ss)	8	I
19	*(blank)*	1	
20-29	Heat Number	10	A/N*
30-39	Grade Code	10	A/N
40-41	Furnace Id	2	A/N
42-49	Melt Date (yyyymmdd)	8	A/N
50	Cancel Flag (Y or N)	1	A/N
51-52	User Number	2	A/N
53-57	Grade Family	5	A/N
58-62	"License Plate" Identifier (00000-ZZZZZ)	5	A/N
63-72	Material Name	10	A/N
73-82	Lot Number	10	A/N
83	*(blank)*	1	
84-88	Account Number	5	A/N
89-94	Class Code	6	A/N
95-96	Melt Stage	2	A/N
97-106	Amount Used	^10.2	R**
107-117	Actual Cost/Lb. (Kg.)	^^11.5	R
118-128	Standard Cost/Lb. (Kg.)	^^11.5	R
129-140	Book Quantity	^12.2	R
141-152	Actual Book Value	^12.2	R
153-164	Standard Book Value	^12.2	R
165-179	Grade Name	15	A/N
180-189	MARS Secondary Key	10	A/N
190-191	Material Type	2	A/N
192-197	Vendor Code	6	A/N
198-212	Material Description	15	A/N
213-215	ABS Serial Number	3	I
216-225	P.O. Number	10	A/N
226-233	Tag/Tally Number	8	A/N
234-241	Material Location	8	A/N
242-247	Material File Name	6	A/N
248-253	Material Recovery %	^6.2	R

* *Denotes alphanumeric character.*
** *Denotes real value.*
*** *Denotes integer value.*
^ *Fields indicated are stored with 2 decimal places of accuracy.*
^^ *Fields indicated are stored with 5 decimal places of accuracy.*

MATERIAL EXPORT FILE LAYOUT

The Material Export File is either a fixed format or a comma separated ASCII text file that is created via the Material Editor's "Export" function. The file name is either MATEXP.EXP (fixed format) or MATEXP.CSV (comma separated) and will be located in the user's working directory (i.e., \ABS\USER1). **NOTE:** A comma separated file is only available for a partial export.

When a "full" export is performed, multiple records of types 04, 05 and 06 shown below may be created. An 09 record will automatically be created as a separator for each record. The "full" export file layout for the fixed format file MATEXP.EXP is as follows:

RECORD	*POSITION*	*DESCRIPTION*	*LENGTH*	*TYPE*
01	1	*(blank)*	1	
	2-3	01	2	A/N*
	4-13	Material Name	10	A/N
	14-23	Lot Number	10	A/N
	24-29	File Name	6	A/N
	30-34	Account Number	5	A/N
	35-42	Unit Name	8	A/N
	43-48	Class Code	6	A/N
	49	Available for Use [Y or N]	1	A/N
	50-54	Furnace Codes	5	A/N
	55-62	Date Last Changed (yyyymmdd)	8	A/N
	63-64	Print Rank	2	A/N
	65-72	Date Received (yyyymmdd)	8	A/N
	73-80	Date Last Used (yyyymmdd)	8	A/N
	81	*(reserved)*	1	
	82-83	Material Type	2	A/N
02	1	*(blank)*	1	
	2-3	02	2	A/N
	4-8	Balance Element	5	A/N
	9-16	Tag Number	8	A/N
	17	Report in Units [Y or N]	1	A/N
	18-20	Material Usage Codes	3	A/N
	21-28	Location	8	A/N
	29-34	Vendor	6	A/N
	35	Accuracy [0, 1, or 2]	1	I**
	36-44	Minimum Usage	9.0	R***
	45-53	Maximum Usage (% or weight)	9.0	R
	54-63	Purchase Order Number	10	A/N
	64-78	Material Description	15	A/N
03	1	*(blank)*	1	
	2-3	03	2	A/N
	4-12	Actual Cost/Lb. (Kg.)	#9.5	R
	13-21	Standard Cost/Lb. (Kg.)	#9.5	R
	22-30	Optimizing Cost/Lb. (Kg.)	#9.5	R
	31-40	Quantity Available	^10.1	R
	41-50	Reserved Quantity	^10.1	R
	51-60	Book Quantity	^10.1	R
	61-69	Reorder Point	9.0	R
	70-78	Unit Weight	9.0	R
	79-84	Material Recovery %	^^6.2	R

(continued on the next page)

MATERIAL EXPORT FILE LAYOUT *(cont'd)*

RECORD	POSITION	DESCRIPTION	LENGTH	TYPE
04	1	*(blank)*	1	
	2-3	04	2	A/N
	4-13	Sub-Lot Name	10	A/N
	14-22	Sub-Lot Quantity	^9.1	R
05	1	*(blank)*	1	
	2-3	05	2	A/N
	4-8	Element Symbol	5	A/N
	9-16	Element Analysis	^^^8.4	R
06	1	*(blank)*	1	
	2-3	06	2	A/N
	4-53	Material Comments	50	A/N
07	1	*(blank)*	1	
	2-3	07	2	A/N
	4-14	Expected Returns Value	11.0	R
	15-25	Market Quantity Value	11.0	R
	26-36	Forecasted Quantity On-Hand	11.0	R
	37-46	Original Material Name	10	A/N
	47-56	Original Lot Number	10	A/N
	57-64	Date Deleted (yyyymmdd)	8	A/N
	65-72	Original Date Received (yyyymmdd)	8	A/N
	73	(blank)	1	
	74-83	Original Book Quantity	^10.1	R
	84-92	Original Cost/Lb. (Kg.)	#9.5	R
	93-97	Time Received (hh:mm)	5	A/N
08	1	*(blank)*	1	
	2-3	08	2	A/N
	4	*(blank)*	1	
	5-9	"License Plate" Identifier (00000-ZZZZZ)	5	A/N
09	1	*(blank)*	1	
	2-3	09 (end of record)	2	A/N

* *Denotes alphanumeric character.*
** *Denotes integer value.*
*** *Denotes real value.*
[ ] Denotes valid entries.

^ *Fields indicated are stored with 1 decimal places of accuracy.*
^^ *Fields indicated are stored with 2 decimal places of accuracy.*
^^^ *Fields indicated are stored with 4 decimal places of accuracy.*
# *Fields indicated are stored with 5 decimal places of accuracy.*

MATERIAL EXPORT FILE LAYOUT *(cont'd)*

When a "partial" export is performed, there is one record (type 10) created for each raw material. The "partial" export file layout for the fixed format ASCII file MATEXP.EXP is as follows:

RECORD	POSITION	DESCRIPTION	LENGTH	TYPE
10	1	*(blank)*	1	
	2-3	10	2	A/N
	4-13	Material Name	10	A/N
	14-23	Lot Number	10	A/N
	24-28	Account Number	5	A/N
	29-34	Class Code	6	A/N
	35-40	File Name	6	A/N
	41-46	Vendor Code	6	A/N
	47-55	Actual Quantity	^9.1	R
	56-64	Book Quantity	^9.1	R
	65-73	Reserved Quantity	^9.1	R
	74-82	Actual Cost/Lb. (Kg.)	#9.5	R
	83-91	Optimizing Cost/Lb. (Kg.)	#9.5	R
	92-100	Standard Cost/Lb. (Kg.)	#9.5	R
	101-109	Reorder Point	9.0	R
	110-111	Material Type	2	A/N
	112-121	Purchase Order Number	10	A/N
	122-129	Location	8	A/N
	130-144	Material Description	15	A/N
	145-152	Tag/Tally Number	8	A/N
	153-160	Unit Weight	8	I
	161	Which File [M for Material or S for Scrap]	1	A/N
	162	Available for Use [**Y** or **N**]	1	A/N

The "partial" export file layout for the comma separated ASCII file MATEXP.CSV is as follows *(fields not documented are comma separators):*

POSITION	DESCRIPTION	LENGTH	TYPE
1-10	Material Name	10	A/N
12-21	Lot Number	10	A/N
23-27	Account Number	5	A/N
29-34	Class Code	6	A/N
36-41	File Name	6	A/N
43-48	Vendor Code	6	A/N
50-58	Actual Quantity	^9.1	R
60-68	Book Quantity	^9.1	R
70-78	Reserved Quantity	^9.1	R
80-88	Actual Cost/Lb. (Kg.)	#9.5	R
90-98	Optimizing Cost/Lb. (Kg.)	#9.5	R
100-108	Standard Cost/Lb. (Kg.)	#9.5	R
110-118	Reorder Point	9.0	R
120-121	Material Type	2	A/N
123-132	Purchase Order Number	10	A/N
134-141	Location	8	A/N
143-157	Material Description	15	A/N
159-166	Tag/Tally Number	8	A/N
168-175	Unit Weight	8	I
177	Which File [M for Material or S for Scrap]	1	A/N
179	Available for Use [Y or N]	1	A/N

MATERIAL IMPORT FILE LAYOUT

The Alloy Blending System has the ability to import material receipts from an externally created data file. Examples where this feature might be used are:

- When the current in-house inventory system is used for receiving materials, then passes quantity and cost data to the Alloy Blending System;
- When a bar code data collection system is used for incoming and recycled scraps.

Material receipts can be imported into either the active inventory or the scrap inventory. Imported receipts are processed by the material import program "MATIMP.EXE". MATIMP can be activated via a batch file or interactively. The import file name for importing to active material file is MATEXP.EXP, and must be located in the user's working directory (i.e., \ABS\USER1). The import file name for importing to the scrap file is SCREXP.EXP, and must also be located in the user's working directory. Both file layouts are identical, and shown below:

RECORD	*POSITION*	*DESCRIPTION*	*LENGTH*	*TYPE*
10	1	*(blank)*	1	
	2-3	Tranaction Code (10, 11, or 12)	2	A/N*
	4-13	Material Name#	10	A/N
	14-23	Lot Number	10	A/N
	24-28	Account Number	5	A/N
	29-34	Class Code	6	A/N
	35-40	File Name	6	A/N
	41-46	Vendor Code	6	A/N
	47-55	Actual Quantity#	^9.1	R
	56-64	Book Quantity	^9.1	R
	65-73	Reserved Quantity	^9.1	R
	74-82	Actual Cost/Lb.	^^9.5	R
	83-91	Optimizing Cost/Lb.	^^9.5	R
	92-100	Standard Cost/Lb.	^^9.5	R
	101-109	Reorder Point	9.0	R
	110-111	Material Type	2	A/N
	112-121	Purchase Order Number	10	A/N
	122-129	Location	8	A/N
	130-144	Material Description	15	A/N
	145-152	Tag/Tally Number	8	A/N
	153-160	Unit Weight	8	I
	161	Which File [**M**=Material or **S**=Scrap]	1	A/N
	162	Available for Use [**Y**=Yes or **N**=No]	1	A/N

* *Denotes alphanumeric character.* ** *Denotes real value.*
^ *Fields indicated are stored with 1 decimal place of accuracy.*
^^ *Fields indicated are stored with 5 decimal places of accuracy.*
\# *Indicates fields required for an import.*

Transaction Code 10 - Material Replace - Used when you want to replace existing data. Most often used when you want to refresh the ABS inventory from another source.

Transaction Code 11 - Material Receipt - Add quantity to an existing material file record. Create a new material if not found, and Name matches Name in the "AVERAGE" file. If importing to the Scrap System (input file is "SCREXP.EXP"), T/C 11 will create a new record if the name is found in Scrap Average file.

Transaction Code 12 - Scrap File Receipt - Add quantity to existing material. Create a new material if not found, and Name matches Name in the "SCRAP AVERAGE" file. Transaction Code 12 was developed to allow mixing of Material receipts and Scrap receipts within the same import file. Transaction Code 12 will ALWAYS add to Scrap files, regardless of the import file name.

INVENTORY ADJUSTMENTS FILE LAYOUT

The Inventory Adjustments File is an ASCII text file named "AD*mmyyyy*.KSI", where mm equals the month *(i.e., 01=January, 02=February, etc.)* and *yyyy* equals the 4-digit year in which the changes occurred *(i.e., 2000).* A new file is automatically created for each month. This file is located in your "home" directory. Your "home" directory is defined in record #1 in your ABS.INI file, and is normally the "[drive:]\ABS\DATA\" directory. The Inventory Adjustments File contains the following data:

POSITION	***DESCRIPTION***	***LENGTH***	***TYPE***
1	*(blank)*	1	
2-5	Year of Change (4 digits)	4	I**
6-7	Month of Change (01-12)	2	I
8-9	Day of Change (01-31)	2	I
10	*(blank)*	1	
11-18	Time of Change (hh:mm:ss)	8	I
19	*(blank)*	1	
20-21	Transaction Code (01-99)#	2	I
22	*(blank)*	1	
23-27	"License Plate" Identifier (00000-ZZZZZ)	5	A/N*
28	*(blank)*	1	
29-38	Material Name	10	A/N
39	*(blank)*	1	
40-49	Lot Number	10	A/N
50	*(blank)*	1	
51-52	User Number (from ABS.INI file)	2	I
53	File Code Where Change Occurred - Valid Codes are: **A**=Average File, **C**=Chemistry File, **E**=Expired File, **M**=Material File, **P**=Purchasing File (Market or Quoted), **S**=Scrap File, **V**=Scrap Average File	1	A/N
54-56	ABS Serial Number	3	I
57-157	Varies by Transaction Code	##	A/N

\# *Valid transaction codes are defined below, and also shown in the Inventory Reports section (sub-section "Inventory Change/Corrections") in the ABS Reference Guide.*

This field size varies and is dependent upon the description of the item changed. Refer to the table below for more details.

The valid Transaction Codes are shown below, along with the corresponding data beginning at position 57:

CODE	***DESCRIPTION***	***POSITION***	***DATA***	***LENGTH***	***TYPE***
01	Material Name Changed	57-66	New Name	10	A/N
		67	*(blank)*	1	
		68-78	Current Book Qty.	^^11.2	R***
		79-89	Current Cost/Lb.	^^^11.5	R
		90-95	Vendor Code	6	A/N
		96-100	Account Number	5	A/N
02	Lot Number Changed	57-66	New Lot	10	A/N
		67-100	(same as TC 01 above)		
04	Account Number Changed	57-61	Old Account Number	5	A/N
		62	*(blank)*	1	
		63-67	New Account Number	5	A/N
		68-73	Vendor Code	6	A/N
		74	*(blank)*	1	
		75-85	Current Book Qty.	^^11.2	R
		86-96	Current Cost/Lb.	^^^11.5	R

(continued on the next page)

INVENTORY ADJUSTMENTS FILE LAYOUT *(cont'd)*

CODE	DESCRIPTION	POSITION	DATA	LENGTH	TYPE
05	Actual Cost Changed	57-67	Old Cost	^^^11.5	R
06	Optimal Cost Changed	68	*(blank)*	1	
07	Optimal Cost Changed	69-79	New Cost	^^^11.5	R
		80	*(blank)*	1	
		81-85	Change Reason Code	5	A/N
		86-110	Change Reason Desc.	25	A/N
		111-121	Current Book Qty.	^^11.2	R
		122-126	Account Number	5	A/N
		127-132	Vendor Code	6	A/N
08	Chemistry Changed	57-61	Element	5	A/N
		62	*(blank)*	1	
		63-71	Old Analysis	^^^9.5	R
		72	*(blank)*	1	
		73-81	New Analysis	^^^9.5	R
		82	*(blank)*	1	
		83-91	Quantity Reserved	^^^^9.0	R
09	Composite Chemistry Assigned (where chemistry came from). TC 09 may be repeated up to ten (10) times.				
		57-66	Material Name	10	A/N
		67	*(blank)*	1	
		68-77	Lot Number	10	A/N
		78	*(blank)*	1	
		79	Which File - Valid Files are: **A**=Average, **M**=Material, **S**=Scrap	1	A/N
		80	*(blank)*	1	
		81-86	Percentage Used	^^6.2	R
10	Qty. Available Changed	57-67	Old Qty. Available	^^11.2	R
11	Book Qty. Changed	68	*(blank)*	1	
40	Qty. Available-Material Split	69-79	New Qty. Available	^^11.2	R
41	Qty. Available-Material Reclassify	80	*(blank)*	1	
42	Qty. Available-Material Merge	81-85	Change Reason Code	5	A/N
53	Qty. Available-Material Transfer	86-110	Change Reason Desc.	25	A/N
		111-121	Current Actual Cost	^^^11.5	R
		122-126	Account Number	5	A/N
		127-132	Vendor Code	6	A/N
		133-142	P.O. Number	10	A/N
43	Book Qty.-Material Split	57-67	Old Qty. Available	^^11.2	R
44/47#	Book Qty.-Material Reclassify	68	*(blank)*	1	
54	Book Qty.-Transfer into New Mat.	69-79	New Qty. Available	^^11.2	R
55	Book Qty.-Transfer into Existing Material	80	*(blank)*	1	
		81-85	Change Reason Code	5	A/N
		86-110	Change Reason Desc.	25	A/N
		111-121	Current Actual Cost	^^^11.5	R
		122-126	Account Number	5	A/N
		127-132	Vendor Code	6	A/N
		133-142	Material Name (from)	10	A/N
		143-152	Lot Number (from)	10	A/N
		153-157	License Plate (from)	5	A/N

 # TC 44 represents a book quantity change to the original "parent" record during a material reclassify (weight was subtracted). TC 47 represents a book quantity change to an existing "child" record during a material reclassify (weight was added). New materials created via the reclassify option will have TC 88.

(continued on the next page)

INVENTORY ADJUSTMENTS FILE LAYOUT *(cont'd)*

CODE	DESCRIPTION	POSITION	DATA	LENGTH	TYPE
45	Book Qty.-Material Merge	57-67	Old Qty. Available	^^11.2	R
		68	*(blank)*	1	
		69-79	New Qty. Available	^^11.2	R
		80-85	*(blank)*	6	
		86-95	New Material Name (to)	10	A/N
		96-105	New Lot Number (to)	10	A/N
		106-116	Old Cost/Lb.	^^^11.5	R
		117-121	Old Account Number	5	A/N
		122-127	Old Vendor Code	6	A/N
12	Material Recovery % Chg.	57-61	Old Recovery	^5.1	R
		62	*(blank)*	1	
		63-67	New Recovery	^5.1	R
13	Unit Weight Changed	57-67	Old Unit Weight	^^11.2	R
		68	*(blank)*	1	
		69-79	New Unit Weight	^^11.2	R
		80-90	Current Actual Cost	^^^11.5	R
15	Date Received Chg.	57-66	Old Value	10	A/N
19	P.O. Number Changed	67	*(blank)*	1	
22	Availability Changed	68-77	New Value	10	A/N
16	Material File Changed	57-62	Old Value	6	A/N
17	Class Code Changed	63	*(blank)*	1	
18	Vendor Code Changed	64-69	New Value	6	A/N
		70	*(blank)*	1	
		71-75	Account Number	5	A/N
Transaction Code 17 has the following layout after position 75:					
		76	*(blank)*	1	
		77-87	Current Book Qty.	^^11.2	R
		88-98	Current Cost/Lb.	^^^11.5	R
		99-104	Vendor Code	6	A/N
Transaction Code 18 has the following layout after position 75:					
		76	*(blank)*	1	
		77-87	Current Book Qty.	^^11.2	R
		88-98	Current Cost/Lb.	^^^11.5	R
		99-104	Class Code	6	A/N
20	Location Changed	57-64	Old Value	8	A/N
21	Tag/Tally Number Changed	65	*(blank)*		
		66-73	New Value	8	A/N
23	Material Type Changed	57-58	Old Type	2	A/N
		59	*(blank)*	1	
		60-61	New Type	2	A/N

(continued on the next page)

INVENTORY ADJUSTMENTS FILE LAYOUT *(cont'd)*

CODE	DESCRIPTION	POSITION	DATA	LENGTH	TYPE
86	Created via MARS Enter pgm.	57-62	Old File	6	A/N
87	Material Transfer	63-73	Current Actual Cost	^^^11.5	R
88	Material Reclassified	74	*(blank)*	1	
89	Material Split	75-85	Current Book Qty.	^^11.2	R
90	Material Imported	86	*(blank)*	1	
91	Material Created/Copied	87-88	Number of Materials Merged if	2	I
92	Material Merged		Transaction Code is 92		
93	Scrap Transfer	89-99	New Quantity	^^11.2	R
		100-109	Master Material (from)	10	A/N
		110-119	Master Lot (from)	10	A/N
		120-124	Master License Plate	5	A/N
94	Transfer to Expired File	All pertinent information is contained in fields 1-44			
95	Retrieve from Expired	for these codes.			
98	Record Undeleted				
99	Record Deleted				

**Denotes alphanumeric character.*
***Denotes integer value.*
****Denotes real value.*

^ *Fields indicated are stored with 1 decimal place of accuracy.*
^^ *Fields indicated are stored with 2 decimal places of accuracy.*
^^^ *Fields indicated are stored with 5 decimal places of accuracy.*
^^^^*Fields indicated are stored with 0 decimal places of accuracy — field size indicated includes decimal point.*

MONTH-TO-DATE / YEAR-TO-DATE EXPORT FILE LAYOUTS

The Month-To-Date Export file is either a fixed format or a comma separated ASCII text file that is created via the Month-To-Date Consumable program's "Export" function. The file name is either "MD*mmyyyy*.TXT" (fixed format), where mm equals the month *(i.e., 01=January, 02=February, etc.)* and *yyyy* equals the 4-digit year *(i.e., 2000)* or "MD*mmyyyy*.CSV" (comma separated). The name of the file will correspond to the ending month indicated when the export was performed. The MTD export file will be located in the ABS user's working directory *(i.e., \ABS\USER1)* where the export was performed.

The Year-To-Date export file is a recreation of *(and identical to)* the Month-To-Date export file. The Year-To-Date export file is also created via the Month-To-Date Consumable program's "Export" function.

The MTD (or YTD) export files contain the following data *(fields not documented are blank in the fixed format file or commas in the comma separated files):*

POSITION	***——— DESCRIPTION ———***	***LENGTH***	***TYPE***
1	*(blank)*	1	
2-5	Export Year	4	A/N*
7-8	Export Month	2	A/N
10-14	Account Number	5	A/N
16-25	Material Name	10	A/N
27-36	Lot Number	10	A/N
38-43	Material Class Code	6	A/N
45-50	Vendor Code	6	A/N
52-61	Beginning Quantity (Lbs./Kgs.)	^10.1	R**
63-74	Beginning Total - Actual Cost	^^12.2	R
76-87	Beginning Total - Standard Cost	^^12.2	R
89-98	Received Quantity (Lbs./Kgs.)	^10.1	R
100-111	Received Total - Actual Cost	^^12.2	R
113-124	Received Total - Standard Cost	^^12.2	R
126-135	Usage Quantity (Lbs./Kgs.)	^10.1	R
137-148	Usage Total - Actual Cost	^^12.2	R
150-161	Usage Total - Standard Cost	^^12.2	R
163-172	Adjustments Quantity (Lbs./Kgs.)	^10.1	R
174-185	Adjustments Total - Actual Cost	^^12.2	R
187-198	Adjustments Total - Standard Cost	^^12.2	R
200-209	Ending Quantity (Lbs./Kgs.)	^10.1	R
211-222	Ending Total - Actual Cost	^^12.2	R
224-235	Ending Total - Standard Cost	^^12.2	R
237-246	Export Date (mm/dd/yyyy)	10	A/N
248-255	Export Time (hh:mm:ss)	8	A/N
257-258	User Number	2	I***
260-262	Company Number	3	I

** Denotes alphanumeric character.*
*** Denotes real value.*
**** Denotes integer value.*

^ Fields indicated are stored with 1 decimal place of accuracy.
^^ Fields indicated are stored with 2 decimal places of accuracy.

GRADE IMPORT/EXPORT FILE LAYOUT

The Grade Export File is either a fixed format or a comma separated ASCII text file created via the Grade Editor's Export Utility program. The file name is either GRADE.EXP (fixed format) or GRADE.CSV (comma separated) and will be located in the user's working directory *(i.e., \ABS\USER1).* The export program must be executed from a user's working directory.

When importing grade records, only the fixed format file (GRADE.EXP) can be used as the import file. This file must be located in the working directory you're running ABS from *(i.e., \ABS\USER1).*

The fixed format Grade Import/Export File (GRADE.EXP) contains the following data *(fields not documented are blank):*

RECORD	*POSITION*	*DESCRIPTION*	*LENGTH*	*TYPE*	*MAXIMUM RECORDS*
01	1	*(blank)*	1		1
	2-3	01 (general information)	2	A/N*	
	5-14	Grade/Alloy Code	10	A/N	
	16-30	Grade Name	15	A/N	
	31-38	Date Created (yyyymmdd)	8	I**	
	39-46	Date Changed (yyyymmdd)	8	I	
	47-55	Standard Heat Size	#9.0	R***	
	56-60	Grade Family	5	A/N	
	61	Master Alloy [**Y**-es or **N**-o]	1	A/N	
	62-66	Balance Element	5	A/N	
	67-71	Grade Account	5	A/N	
	72-76	Grade License Number	5	A/N	
02	1	*(blank)*	1		1
	2-3	02 (general information cont'd)	2	A/N	
	5-16	Standard Cost/Lb. (Kg.)	^^^12.5	R	
	18-29	Scrap Value/Lb. (Kg.)	^^^12.5	R	
	31-38	Standard Yield Percentage	^8.2	R	
	40-45	Charge Variance Percentage	^6.2	R	
03	1	*(blank)*	1		30 (10 per aim code)
	2-3	03 (comments)	2	A/N	
	5	Grade/Alloy Aim Code - Valid Codes are: **C**=Charge, **I**=Intermediate, **F**=Final	1	A/N	
	7-56	Grade Comments	50	A/N	
04	1	*(blank)*	1		90 (30 per aim code)
	2-3	04 (aims)	2	A/N	
	5	Grade/Alloy Aim Code - Valid Codes are: **C**=Charge, **I**=Intermediate, **F**=Final	1	A/N	
	7-11	Element	5	A/N	
	12-20	Charge Design Minimum Aim	^^9.4	R	
	21-29	Charge Design Maximum Aim	^^9.4	R	
	30-39	Recovery Factor	^^^10.5	R	
	40-49	Elemental Constraint	^^^10.5	R	
05	1	*(blank)*	1	##	
	2-3	05 (exclude restrictions)	2	A/N	
	5	Grade/Alloy Aim Code - Valid Codes are: **C**=Charge, **I**=Intermediate, **F**=Final	1	A/N	
	7	Restriction Type - Valid Types are: **A**=Account, **F**=File, **L**=Lot, **T**=Material Type, **V**=Vendor	1	A/N	
	8-17	Restriction Name	10	A/N	

GRADE IMPORT/EXPORT FILE LAYOUT *(cont'd)*

RECORD	POSITION	DESCRIPTION	LENGTH	TYPE	MAXIMUM RECORDS
06	1	*(blank)*	1	##	
	2-3	06 (controlled restrictions)	2	A/N	
	5	Grade/Alloy Aim Code - Valid Codes are: C=Charge, I=Intermediate, F=Final	1	A/N	
	7	Restriction Type - Valid Types are: C=Class, M=Material	1	A/N	
	8-17	Restriction Name	10	A/N	
	18-29	Minimum Value	^^12.4	R	
	30-41	Maximum Value	^^12.4	R	
	42	Control Method [% or #]	1	A/N	
07	1	*(blank)*	1		30
	2-3	07 (company specifications)	2	A/N	
	5-9	Element	5	A/N	
	10-18	Company Spec. Minimum	^^^9.5	R	
	19-27	Company Spec. Maximum	^^^9.5	R	
	28-36	Company Spec. Aim	^^^9.5	R	
08	1	*(blank)*	1		10
	2-3	08 (scrap profile)	2	A/N	
	5-14	Scrap Name	10	A/N	
	16-21	Scrap Class	6	A/N	
	23-28	Scrap Percentage	^6.2	R	
	30-32	Scrap Days	3	I	

The comma separated Grade Export File (GRADE.CSV) contains the following data *(fields not documented are comma separators):*

POSITION	DESCRIPTION	LENGTH	TYPE
1	*(blank)*	1	
2-11	Grade/Alloy Code	10	A/N
13-17	Balance Element	5	A/N
19-23	Element	5	A/N
25-33	Company Spec. Minimum	^^^9.5	R
35-43	Company Spec. Maximum	^^^9.5	R
45-53	Company Spec. Aim	^^^9.5	R

* *Denotes alphanumeric character.*
** *Denotes integer value.*
*** *Denotes real value.*

\# *Fields indicated are stored with 0 decimal places of accuracy - field size indicated includes decimal point.*
^ *Fields indicated are stored with 2 decimal places of accuracy.*
^^ *Fields indicated are stored with 4 decimal places of accuracy.*
^^^ *Fields indicated are stored with 5 decimal places of accuracy.*

Maximum records are 45 for Charge Aim and 40 for Intermediate/Final Aim.

GRADE/ALLOY ADJUSTMENTS FILE LAYOUT

The Grade/Alloy Adjustments File is an ASCII text file named “ADJG*yyyy*.KSI” *(where yyyy represents the year in which the changes occurred).* A new file is automatically created for each year. This file is located in your “home” directory. Your “home” directory is defined in record #1 in your ABS.INI file, and is normally the “[drive:]\ABS\DATA\” directory. The Grade/Alloy Adjustments File contains the following data:

POSITION	***DESCRIPTION***	***LENGTH***	***TYPE***
1	*(blank)*	1	
2-9	Date of Change (yyyymmdd)	8	A/N*
10	*(blank)*	1	
11-15	Time of Change (hh:mm)	5	A/N
16	*(blank)*	1	
17-21	Grade License Number	5	A/N
22	*(blank)*	1	
23-24	Transaction Code (01-99)^	2	I**
25	*(blank)*	1	
26-35	Grade Code	10	A/N
36	*(blank)*	1	
37-38	User Number (from ABS.INI file)	2	I
39	File Code Where Change Occurred - Valid Codes are: **C**=Charge Aim File, **I**=Intermediate Aim File, **F**=Final Aim File	1	A/N
40-75	Description of Item Changed	^^	A/N

^ Valid transaction codes are as follows:

01 - Grade Code Change
02 - Grade Name Change
03 - Standard Base Weight Change
04 - Standard Cost Change
05 - Standard Yield Change
06 - Remelt Value Change
07 - Grade Family Change
08 - Master Alloy Change
09 - Balance Element Change
10 - Account Number Change
11 - Aims Minimum Value Change
12 - Aims Maximum Value Change
13 - Aims Recovery Factor Change
14 - Aims Elemental Constraint Change
16 - Restriction Name Change
17 - Restriction Minimum Value Change
18 - Restriction Maximum Value Change
19 - Control Method Change
20 - Co. Spec. Min. Value Change
21 - Co. Spec. Max. Value Change
22 - Co. Spec. Aim
30 - Charge Variance
31 - Scrap Name Changed
32 - Scrap Class Changed
33 - Scrap % Changed
34 - Scrap Days Changed
60 - 30 Character Grade Name Changed (Custom)
80 - Added Aims
81 - Added Restriction
82 - Added Specification
90 - Deleted Aims
91 - Deleted Restriction
92 - Deleted Specification
93 - Free Format Reason Desc.
94 - Code/Table Editor Reason Desc.

^^ *This field size varies and is dependent upon the description of the item changed.*
* *Denotes alphanumeric character.*
** *Denotes integer value.*

MARS LOG AND STANDARD EXPORT FILE LAYOUTS

The record layout for the Standard Detailed MARS Log File and the Exported Log File "X*mmddyyn*.EXP" is shown below; *mm* equals the month *(i.e., 01=January, 02=February, etc.), dd* equals the day of the month, *yy* equals the 2-digit year *(i.e., 00=2000),* and *n* equals a letter from A-Z *(this letter identifier will automatically be incremented each time the export function is executed on one particular day. Therefore, a maximum of 26 exports may be performed each day).* These files will be located in the \ABS\LOGS directory/folder:

RECORD	***POSITION***	***———— DESCRIPTION ————***	***LENGTH***	***TYPE***
01	1-2	01	2	
	3	*(blank)*	1	
	4-13	Heat/Charge Number	10	A/N*
	14	*(blank)*	1	
	15-24	Grade/Alloy Code	10	A/N
	25	*(blank)*	1	
	26-33	Melt Date (yyyymmdd)	8	A/N
	34	(blank)	1	
	35-36	Furnace/Melter Id	2	A/N
	37	*(blank)*	1	
	38-49	Total Actual Cost	^^12.2	R**
	50	*(blank)*	1	
	51-62	Total Standard Cost	^^12.2	R
	63	*(blank)*	1	
	64-73	Total Pounds Used	^^12.2	R
	74	Usage Flag	1	A/N
	75	Final Chemistry Flag	1	A/N
	76	Audit Flag	1	A/N
	77	Export Flag	1	A/N
	78	Enter Flag	1	A/N
	79-82	*(reserved)*	4	
	83-92	MARS Secondary Key	10	A/N
02	1-2	02	2	
	3-4	*(blank)*	2	
	5-15	Grade Standard Cost/Lb. (Kg.)	#11.5	R
	16	*(blank)*	1	
	17-27	Grade Yield %	#11.5	R
	28	*(blank)*	1	
	29-39	Grade Remelt Value/Lb. (Kg.)	#11.5	R
	40-44	Grade Group	5	A/N
	45-59	Grade Name	15	A/N
	60-64	Grade Balance	5	A/N
	65-72	Usage Date (yyyymmdd)	8	A/N
	73	*(blank)*	1	
	74-81	Final Chemistry Entered (yyyymmdd)	8	A/N
	82	*(blank)*	1	
	83-90	Enter Date (yyyymmdd)	8	A/N
	91	*(blank)*	1	
	92-99	Audit Date (yyyymmdd)	8	A/N
	100	*(blank)*	1	
	101-108	Export Date (yyyymmdd)	8	A/N
	109-116	Export File Name	8	A/N
	117-121	Grade Account	5	A/N

(continued on the next page)

MARS LOG AND STANDARD EXPORT FILE LAYOUTS *(cont'd)*

RECORD	POSITION	DESCRIPTION	LENGTH	TYPE
03	1-2	03	2	
	3-4	*(blank)*	2	
	5-14	Material Name	10	A/N
	15	*(blank)*	1	
	16-25	Lot/Bin Number	10	A/N
	26	*(blank)*	1	
	27-32	Class Code	6	A/N
	33	*(blank)*	1	
	34-38	Account Number	5	A/N
	39	*(blank)*	1	
	40-41	Melt Stage	2	A/N
	42	*(blank)*	1	
	43-50	Unit Name	8	A/N
	51	*(blank)*	1	
	52-56	Unit Weight	5	I***
	57	*(blank)*	1	
	58-68	Actual Cost/Lb. (Kg.)	#11.5	R
	69	*(blank)*	1	
	70-80	Standard Cost/Lb. (Kg.)	#11.5	R
	81	*(blank)*	1	
	82-90	Ordered Weight	^^9.2	R
	91	*(blank)*	1	
	92-100	Weight Used	^^9.2	R
	101-115	Material Description	15	A/N
	116-117	Material Type	2	A/N
	118-122	"License Plate" Identifier (00000-ZZZZZ)	5	A/N
04	1-2	04	2	
	3-4	*(blank)*	3	
	5-13	Heel Weight	^^9.2	R
	14	*(blank)*	1	
	15-23	Intermediate Bath Weight	^^9.2	R
	24	*(blank)*	1	
	25-33	Preliminary Bath Weight	^^9.2	R
	34	*(blank)*	1	
	35-43	Total IC Weight	^^9.2	R
	44	*(blank)*	1	
	45-53	Total IA Weight	^^9.2	R
	54	*(blank)*	1	
	55-63	Total FA Weight	^^9.2	R
	64	*(blank)*	1	
	65-73	Total Metallic Weight	^^9.2	R
	74	*(blank)*	1	
	75-83	Total Non-Metallic Weight	^^9.2	R
	84	*(blank)*	1	
	85-93	Tap Weight	^^9.2	R

(continued on the next page)

MARS LOG AND STANDARD EXPORT FILE LAYOUTS *(cont'd)*

RECORD	*POSITION*	*DESCRIPTION*	*LENGTH*	*TYPE*
05	1-2	05	2	
	3	*(blank)*	1	
	4-8	Element Symbol	5	A/N
	9-16	Minimum Company Specification	#8.5	R
	17-24	Maximum Company Specification	#8.5	R
	25-32	Final Chemistry	#8.5	R
	33-40	Minimum Charge Aim Chemistry	^^^8.4	R
	41-48	Maximum Charge Aim Chemistry	^^^8.4	R
	49-57	Elemental Charge Weight	^9.1	R
	58-65	Minimum Intermediate Chemistry	^^^8.4	R
	66-73	Maximum Intermediate Chemistry	^^^8.4	R
	74-82	Elemental Intermediate Weight	^9.1	R
	83-90	Minimum Final Chemistry	^^^8.4	R
	91-98	Maximum Final Chemistry	^^^8.4	R
	99-107	Elemental Final Weight	^9.1	R
	108-115	Heel Chemistry	^^^8.4	R
	116-123	Intermediate (P1) Chemistry	^^^8.4	R
	124-131	Preliminary (P2) Chemistry	^^^8.4	R
	132	*(blank)*	1	
	133-141	Company Specification Aim	#9.5	R

* *Denotes alphanumeric character.*
** *Denotes real value.*
*** *Denotes integer value.*
^ *Fields indicated are stored with 1 decimal place of accuracy.*
^^ *Fields indicated are stored with 2 decimal places of accuracy.*
^^^ *Fields indicated are stored with 4 decimal places of accuracy.*
# *Fields indicated are stored with 5 decimal places of accuracy.*

MARS LOG AND STANDARD EXPORT FILE LAYOUTS *(cont'd)*

MARS CONSUMPTION EXPORT FILE

The MARS exported Consumption Data is an ASCII text file named "USAGE.CSV". This file is comma delimited and will be located in the user's working directory *(i.e., \ABS\USER1)*. Positions not defined are comma separators:

POSITION	***DESCRIPTION***	***LENGTH***	***TYPE***
1-10	Heat/Charge Number	10	A/N*
12-21	Grade/Alloy Code	10	A/N
23-30	Melt Date (yyyymmdd)	8	A/N
32-33	Furnace/Melter Id	2	A/N
35-39	Grade Family Name	5	A/N
41-50	MARS Secondary Key	10	A/N
52-61	Material Name	10	A/N
63-72	Lot/Bin Number	10	A/N
74-79	Class Code	6	A/N
81-85	Account Number	5	A/N
87-88	Melt Stage	2	A/N
90-97	Unit Name	8	A/N
99-103	Unit Weight	5	I***
105-115	Actual Cost/Lb. (Kg.)	^^11.5	R**
117-127	Standard Cost/Lb. (Kg.)	^^11.5	R
129-137	Ordered Weight	^9.2	R
139-147	Weight Used	^9.2	R
149-163	Material Description	15	A/N
165-166	Material Type	2	A/N
168-172	"License Plate" Identifier (00000-ZZZZZ)	5	A/N

* *Denotes alphanumeric character.*
** *Denotes real value.*
*** *Denotes integer value.*

^ *Fields indicated are stored with 2 decimal places of accuracy.*
^^ *Fields indicated are stored with 5 decimal places of accuracy.*

MARS LOG AND STANDARD EXPORT FILE LAYOUTS *(cont'd)*

MARS CHEMISTRY EXPORT FILE

The MARS exported Chemistry Data is an ASCII text file named "CHEMDAT.CSV". This file is comma delimited and will be located in the user's working directory *(i.e., \ABS\USER1).* Positions not defined are comma separators:

POSITION	***——— DESCRIPTION ———***	***LENGTH***	***TYPE***
1-10	Heat/Charge Number	10	A/N*
12-21	Grade/Alloy Code	10	A/N
23-30	Melt Date (yyyymmdd)	8	A/N
32-33	Furnace/Melter Id	2	A/N
35-39	Grade Family Name	5	A/N
41-50	MARS Secondary Key	10	A/N
52	"Others Each" Element Indicator	1	A/N
54-58	Element Symbol	5	A/N
60-67	Minimum Company Specification	^^^8.5	R**
69-76	Maximum Company Specification	^^^8.5	R
78-86	Final Chemistry	^^^8.5	R
88-95	Minimum Charge Aim Chemistry	^^8.4	R
97-104	Maximum Charge Aim Chemistry	^^8.4	R
106-114	Elemental Charge Weight	^9.1	R
116-123	Minimum Intermediate Chemistry	^^8.4	R
125-132	Maximum Intermediate Chemistry	^^8.4	R
134-142	Elemental Intermediate Weight	^9.1	R
144-151	Minimum Final Chemistry	^^8.4	R
153-160	Maximum Final Chemistry	^^8.4	R
162-170	Elemental Final Weight	^9.1	R
172-179	Heel Chemistry	^^8.4	R
181-188	Intermediate (P1) Chemistry	^^8.4	R
190-197	Intermediate (P2) Chemistry	^^8.4	R
199-207	Company Specification Aim	^^^9.5	R

* *Denotes alphanumeric character.*
** *Denotes real value.*

^ *Fields indicated are stored with 1 decimal places of accuracy.*
^^ *Fields indicated are stored with 4 decimal places of accuracy.*
^^^ *Fields indicated are stored with 5 decimal places of accuracy.*

MIX TEMPORARY FILE LAYOUTS

There are two temporary ASCII text files created by the MIX program: 1) MIX.RPT, and 2) MTHEO.TMP. These files are created in the user's working directory/folder *(i.e., \ABS\USER1)* and are overwritten each time a MIX calculation is performed. The MIX.RPT file contains the following data:

	POSITION	***DESCRIPTION***	***LENGTH***	***TYPE***
First Line:	1	*(blank)*	1	
	2-11	Heat/Charge Number	10	A/N*
	12-21	Grade/Alloy Code	10	A/N
	22-24	Number of Materials Selected	3	I**
	25-26	Number of Heels	2	I
	27	Solve Type [Valid Types are: M=MIX, B=Holder, A=Melter, C=Melter/Holder]	1	A/N
	28-29	Furnace Id	2	A/N
	30-31	Melter Id	2	A/N
	32-33	Holder Id	2	A/N
	34	*(reserved)*	1	
	35	Recall [T-rue or F-alse]	1	A/N
Middle Line (Multiple):	1	*(blank)*	1	
	2-11	Material Name	10	A/N
	12-21	Lot/Bin Number	10	A/N
	22-26	Account Number	5	A/N
	27-36	Reserved Amount	^^10.2	R***
	37-47	Actual Cost/Lb. (Kg.)	#11.5	R
	48-57	Actual Cost x Weight	^^10.2	R
	58-63	Class Code	6	A/N
	64-71	Unit Name	8	A/N
	72-76	Print Accuracy	^5.1	R
	77-82	Unit Weight	6	I
	83	Reorder Flag [* or blank]	1	A/N
	84-88	Record Number	5	I
	89-96	Location	8	A/N
	97-98	Print Order	2	A/N
	99-104	File Name	6	A/N
	105-119	Material Description	15	A/N
Last Line:	1	*(blank)*	1	
	2-11	Heat/Charge Number	10	A/N
	12-21	Grade/Alloy Code	10	A/N
	22-36	Grade/Alloy Name	15	A/N
	37-45	*(blank)*	9	
	46-57	Melt Loss	^^12.2	R
	59-70	Total Charge Weight	^^12.2	R
	71-82	Total Net Weight	^^12.2	R
	83	Unit Weight Material in Solution [Y-es or N-o]	1	A/N
	84-95	Total Lbs. (Kgs.) Added	^^12.2	R
	96-97	Index to Furnace Table	2	I
	98-99	Furnace Id	2	A/N
	100-104	Grade Account Number	5	A/N
	105-134	30 Character Grade Name (Custom)	30	A/N
	135-144	Furnace Type	10	A/N
	145-153	Price Index (Custom)	#9.5	R

(continued on the next page)

MIX TEMPORARY FILE LAYOUTS *(cont'd)*

The MTHEO.TMP file contains the following data:

	POSITION	DESCRIPTION	LENGTH	TYPE
First Line:	1	*(blank)*	1	
	2-11	Heat/Charge Number	10	A/N
	12-21	Grade/Alloy Code	10	A/N
Remaining Lines:	1	*(blank)*	1	
	2-6	Element Symbol	5	A/N
	7-17	Lbs. (Kgs.) Added	^^11.2	R
	18-25	Theoretical Analysis	^^^8.4	R
	26-33	Heel Analysis	^^^8.4	R
	34-41	Aim Minimum	^^^8.4	R
	42-49	Aim Maximum	^^^8.4	R
	50-60	Heel Lbs. (Kgs.)	^^11.2	R
	61	Non-Metallic Flag [* or blank]	1	A/N
	62-70	Company Spec. Minimum	#9.5	R
	71-79	Company Spec. Maximum	#9.5	R
	80-88	Company Spec. Aim	#9.5	R

* *Denotes alphanumeric character.*
** *Denotes integer value.*
*** *Denotes real value.*

^ *Fields indicated are stored with 1 decimal place of accuracy.*
^^ *Fields indicated are stored with 2 decimal places of accuracy.*
^^^ *Fields indicated are stored with 4 decimal places of accuracy.*

\# *Fields indicated are stored with 5 decimal places of accuracy.*

TAP TEMPORARY FILE LAYOUTS

There are two temporary ASCII text files created by the TAP program: 1) TAP.RPT, and 2) THEO*x*.TMP *(where x=I or F for Intermediate or Final).* These files are created in the user's working directory/folder *(i.e., \ABS\USER1)* and are overwritten each time a TAP calculation is performed. The TAP.RPT file contains the following data:

	POSITION	***DESCRIPTION***	***LENGTH***	***TYPE***
First Line:	1	*(blank)*	1	
	2-11	Heat/Charge Number	10	A/N*
	12-21	Grade/Alloy Code	10	A/N
	22-24	Number of Materials Selected	3	I**
	25-26	Number of Charge Materials	2	I
	27	*(blank)*	1	
	28-29	Furnace Id	2	A/N
Middle Line (Multiple):	1	*(blank)*	1	
	2-11	Material Name	10	A/N
	12-21	Lot/Bin Number	10	A/N
	22-26	Account Number	5	A/N
	27-36	Reserved Amount	^^10.2	R***
	37-47	Actual Cost/Lb. (Kg.)	#11.5	R
	48-57	Actual Cost x Weight	^^10.2	R
	58-63	Class Code	6	A/N
	64-71	Unit Name	8	A/N
	72-76	Print Accuracy	^5.1	R
	77-82	Unit Weight	6	I
	83	Reorder Flag [* or blank]	1	A/N
	84-88	Record Number	5	I
	89-96	Location	8	A/N
	97-98	Print Order	2	A/N
	99-104	File Name	6	A/N
	105-119	Material Description	15	A/N
Last Line:	1	*(blank)*	1	
	2-11	Heat/Charge Number	10	A/N
	12-21	Grade/Alloy Code	10	A/N
	22-36	Grade/Alloy Name	15	A/N
	37-45	*(blank)*	9	
	46-57	Bath Weight	^^12.2	R
	58	Melt Stage [I-ntermediate or F-inal]	1	A/N
	59-70	Total Charge Weight	^^12.2	R
	71-82	Total Net Weight	^^12.2	R
	83	Unit Wgt. Material in Solution [Y-es or N-o]	1	A/N
	84-95	Total Lbs. (Kgs.) Added	^^12.2	R
	96-97	Index to Furnace Table	2	I
	98-99	Furnace Id	2	A/N
	100-104	Grade Account Number	5	A/N
	105-134	30-Character Grade Name (custom)	30	A/N

(continued on the next page)

TAP TEMPORARY FILE LAYOUTS *(cont'd)*

The THEO*x*.TMP file contains the following data:

	POSITION	***DESCRIPTION***	***LENGTH***	***TYPE***
First Line:	1	*(blank)*	1	
	2-11	Heat/Charge Number	10	A/N
	12-21	Grade/Alloy Code	10	A/N
Remaining Lines:	1	*(blank)*	1	
	2-6	Element Symbol	5	A/N
	7-17	Lbs. (Kgs.) Added	^^11.2	R
	18-25	Theoretical Analysis	^^^8.4	R
	26-33	Prelim Analysis	^^^8.4	R
	34-41	Aim Minimum	^^^8.4	R
	42-49	Aim Maximum	^^^8.4	R
	50-60	Prelim Lbs. (Kgs.)	^^11.2	R
	61	Non-Metallic Flag [* or blank]	1	A/N
	62-70	Company Spec. Minimum	#9.5	R
	71-79	Company Spec. Maximum	#9.5	R
	80-88	Company Spec. Aim	#9.5	R

* *Denotes alphanumeric character.*
** *Denotes integer value.*
*** *Denotes real value.*
^ *Fields indicated are stored with 1 decimal place of accuracy.*
^^ *Fields indicated are stored with 2 decimal places of accuracy.*
^^^ *Fields indicated are stored with 4 decimal places of accuracy.*
# *Fields indicated are stored with 5 decimal places of accuracy.*

CHEMISTRY BURN FILE LAYOUT

The Burn File is a fixed format ASCII text file named “BURN.KSI”. This file is created by either the “Spectro” program or the appropriate instrument driver program, and will be located in the ABS user’s working directory *(i.e., \ABS\USER1).* The Burn File contains the following data:

RECORD	*POSITION*	*DESCRIPTION*	*LENGTH*	*TYPE*
1	1	*(blank)*	1	
	2-11	Heat Number	10	A/N*
	12-21	Grade Code	10	A/N
	22-23	Furnace ID	2	A/N
	24-25	Test Type - Valid Test Types are: **HM**=Hot Metal Analysis **FA**=Final Analysis **SA**=Scrap Analysis **P1**=Intermediate (P1) Analysis **P2**=Preliminary (P2) Analysis **SF**=Scrap & Final Analyses **AF**=Hot Metal/Scrap/Final Analyses **CA**=Calibration (Standards) Analysis	2	A/N
	26-31	Vendor Code	6	A/N
	32-39	Date of Analysis (yyyymmdd)	8	A/N
	40-47	Time of Analysis (hh:mm:ss)	8	A/N
	48-49	Operator’s Initials	2	A/N
	50-59	Sample Number	10	A/N
	60-63	Burn Number	4	A/N
	64-65	Drop Number	2	A/N
	66-67	Number of Burns	2	I**
	68-69	*(reserved)*	2	
	70-77	Tally Number	8	A/N
	78-84	Weight - Received/Bath/Heel	7	R***
n^	1	*(blank)*	1	
	2-6	*n*th Element Symbol	5	A/N
	7-15	*n*th Element Analysis	9	R

* *Denotes alphanumeric character.*
** *Denotes integer value.*
*** *Denotes real value.*
^ *A maximum of 28 elements may be included in the Burn File.*

FURNACE CHEMISTRY FILE LAYOUT

The Furnace Chemistry file is a fixed format ASCII text file named “CHEM*zz*.KSI” (where *zz* is the furnace id, right justified) which contains the current furnace condition. This file is created by various ABS programs, and will be located in \ABS\DATA. The Furnace Chemistry file contains the following data:

RECORD	*POSITION*	*DESCRIPTION*	*LENGTH*	*TYPE*
1	1	*(blank)*	1	
	2-11	Heat Number (Batch Number)	10	A/N*
	12	*(blank)*	1	
	13-22	Grade/Alloy Code	10	A/N
	23	*(blank)*	1	
	24-32	Weight	9.0	R**
	33	*(blank)*	1	
	34-42	Heel Weight	9.0	R
	43	*(blank)*	1	
	44-51	Date last updated (mm/dd/yy)	8	A/N
	52-58	*(blank)*	7	
	59-66	Time last updated (hh:mm:ss)	8	A/N
	67-70	Temperature	4	I***
	71-73	Updated by: LAB, ABS	3	A/N
	74-75	ABS User Number	2	I
	76-77	Test Type	2	A/N
	78-87	Heel Grade/Alloy Code	10	A/N
n^	1	*(blank)*	1	
	2-6	*n*th Element Symbol	5	A/N
	7	Furnace Source (L, U)	1	A/N
	8-16	*n*th Element Analysis	9.5	R

* *Denotes alphanumeric character.*
** *Denotes real value.*
*** *Denotes integer value.*
^ *A maximum of 60 elements may be included in the Furnace Chemistry file.*