



Alcoa Power and Propulsion

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Issued: 10/22/09

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Advanced Core Materials

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
AC TC		56	06/26/09
AC 1100		15	06/09/08
AC 1101		7	06/09/08
AC 1102		8	11/30/06
AC 1103		8	12/01/05
AC 1104		8	02/01/05
AC 1106		6	10/10/05
AC 1107		6	10/10/05
AC 1108		8	12/18/07
AC 1109		13	06/26/09
AC 1111		3	01/31/00
AC 1113		3	10/06/00
AC 1114		3	10/17/00
AC 1123		2	12/20/91
AC 1125		6	10/13/00
AC 1131		2	12/20/91
AC 1134		2	12/20/91
AC 1137		2	12/12/08
AC 1138		1	07/05/07
AC 1139		4	12/12/08

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.
Ø - Denotes change from previous issue.



Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CD TC		107	09/28/09
CD 1004		8	04/03/00
CD 1007		8	11/22/04
CD 1008		Original	03/28/08
CD 1009		Original	03/28/08
CD 1011		10	11/16/05
CD 1013		10	02/27/08
CD 1014		7	08/16/07
CD 1015		5	07/17/96
CD 1016		7	10/25/95
CD 1017		5	07/16/96
CD 1021		6	07/16/96
CD 1028		5	07/16/96
CD 1029		9	01/21/99
CD 1032		18	04/24/07
CD 1035		5	01/27/97
CD 1039A		Original	10/22/96
CD 1039B		1	05/20/09
CD 1039C		Original	10/22/96
CD 1042A		6	09/28/09
CD 1042B		5	07/07/97
CD 1045		12	02/29/08
CD 1046		5	07/07/97
CD 1047		5	07/07/97
CD 1048		6	12/23/96
CD 1049		6	11/27/00
CD 1052		5	08/26/96
CD 1056		3	01/27/97
CD 1057		11	10/04/04
CD 1058		12	06/30/98
CD 1059		10	07/07/97
CD 1061		6	01/20/99
CD 1062		8	01/31/07
CD 1067		5	08/26/96
CD 1068		5	01/27/97
CD 1073		8	10/15/03

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Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CD 1074		5	12/11/00
CD 1075		4	11/27/00
CD 1077		5	04/11/97
CD 1078		5	07/07/97
CD 1079		4	08/26/96
CD 1081		6	01/27/97
CD 1082		7	08/07/06
CD 1084		8	11/16/05
CD 1085		5	04/11/97
CD 1086		7	04/11/97
CD 1088		5	10/22/96
CD 1089		5	09/08/98
CD 1090		8	03/01/02
CD 1098		7	11/27/00
CD 1100A		1	01/12/96
CD 1100B		1	01/12/96
CD 1100C		1	01/12/96
CD 1102		Original	03/03/99
CD 1112		3	03/03/99
CD 1115		9	05/24/07
CD 1117		6	10/23/06
CD 1122		4	08/10/93
CD 1125		6	10/23/06
CD 1129		5	10/22/96
CD 1132		2	08/10/93
CD 1133		9	07/12/06
CD 1134		5	08/20/04
CD 1135		3	11/27/00
CD 1137		8	07/12/06
CD 1138		3	11/27/00
CD 1140		7	05/24/07
CD 1142		6	07/05/07
CD 1144		6	11/27/00
CD 1145		3	08/23/04
CD 1146		3	11/27/00
CD 1148		1	05/24/07
CD 1147		7	04/16/01

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Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CD 1149		4	08/16/99
CD 1155		2	11/27/00
CD 1158		2	11/27/00
CD 1160		6	02/22/08
CD 1161		3	10/25/95
CD 1162		3	10/25/95
CD 1163		3	10/25/95
CD 1174		1	11/27/00
CD 1175		1	11/27/00
CD 1176		1	11/27/00
CD 1177		1	08/20/96
CD 1178		1	08/22/96
CD 1180		1	07/16/96
CD 1182		2	05/23/05
CD 1184		9	05/16/06
CD 1185		2	10/25/95
CD 1186		1	11/27/00
CD 1187		3	11/02/00
CD 1188		1	09/08/95
CD 1189		1	09/08/95
CD 1191		1	09/08/95
CD 1193		3	08/16/07
CD 1194		3	05/15/99
CD 1195		1	10/04/95
CD 1196		2	12/18/08
CD 1197		2	07/25/97
CD 1198		2	11/09/01
CD 1199		7	05/08/07
CD 1200		Original	03/30/98
CD 1201		1	07/31/98
CD 1202		1	07/31/98
CD 1203		1	07/31/98
CD 1204		1	08/20/03
CD 1205		Original	04/29/98
CD 1206		Original	05/27/98
CD 1207		Original	06/30/98
CD 1208		Original	06/30/98

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Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CD 1209		2	02/27/08
CD 1210		2	03/03/08
CD 1211		Original	06/30/98
CD 1212		Original	06/30/98
CD 1213		Original	06/30/98
CD 1214		1	08/05/98
CD 1215		1	12/16/03
CD 1217		4	05/24/07
CD 1218		2	05/14/99
CD 1219		Original	06/30/98
CD 1220		4	03/11/02
CD 1221		3	02/27/08
CD 1222		Original	06/30/98
CD 1224		Original	08/03/98
CD 1225		1	01/18/08
CD 1226		Original	08/24/98
CD 1227		Original	01/11/99
CD 1228		1	04/13/99
CD 1229		1	04/13/99
CD 1230		3	08/06/09
CD 1231		3	11/02/00
CD 1232		4	11/02/00
CD 1233		4	11/09/07
CD 1234		3	09/21/99
CD 1235		1	06/23/99
CD 1236		Original	06/30/99
CD 1237		Original	06/30/99
CD 1238		1	12/12/03
CD 1239		Original	06/30/99
CD 1240		1	12/12/03
CD 1241		Original	06/30/99
CD 1242		2	11/02/00
CD 1243		Original	02/16/00
CD 1244		1	11/02/00
CD 1245		1	03/26/04
CD 1246		Original	09/08/00
CD 1247		1	08/06/09

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Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CD 1248		Original	04/26/01
CD 1249		2	11/17/04
CD 1250		1	05/06/02
CD 1251		Original	03/01/02
CD 1252		2	03/01/07
CD 1253		1	01/12/04
CD 1254		Original	03/05/04
CD 1255		Original	03/05/04
CD 1256		Original	03/05/04
CD 1257		Original	03/05/04
CD 1258		2	05/24/07
CD 1259		Original	11/07/03
CD 1260		1	02/18/04
CD 1261		Original	12/01/03
CD 1262		Original	12/01/03
CD 1263		Original	12/08/03
CD 1264		Original	12/01/03
CD 1265		Original	12/01/03
CD 1266		Original	12/01/03
CD 1267		Original	12/01/03
CD 1268		Original	12/12/03
CD 1269		Original	12/12/03
CD 1270		1	10/31/06
CD 1271		Original	12/12/03
CD 1272		Original	12/12/03
CD 1273		Original	12/16/03
CD 1274		2	08/11/05
CD 1275		Original	02/18/04
CD 1276		Original	02/18/04
CD 1277		Original	03/05/04
CD 1278		Original	03/05/04
CD 1279		Original	03/12/04
CD 1280		Original	09/28/06
CD 1281		Original	03/26/04
CD 1282		Original	04/22/04
CD 1283		1	06/14/07
CD 1284		1	06/14/07

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Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CD 1285		Original	11/15/04
CD 1286		Original	12/16/04
CD 1287		1	09/28/06
CD 1288		Original	05/11/05
CD 1289		Original	06/14/05
CD 1290		Original	06/14/05
CD 1291		Original	11/16/05
CD 1292		Original	03/16/06
CD 1293		Original	03/16/06
CD 1294		Original	03/16/06
CD 1295		1	01/31/07
CD 1296		3	08/20/09
CD 1297		Original	05/24/07
CD 1299		Original	11/08/08

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Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CM TC		39	09/02/09
CM 1011		4	03/28/03
CM 1012A		5	03/28/03
CM 1012B		5	10/31/03
CM 1012C		3	03/28/03
CM 1013		6	09/02/09
CM 1014		3	10/18/00
CM 1016		4	07/31/09
CM 1017		9	10/05/05
CM 1017R		6	10/05/05
CM 1018		7	02/06/04
CM 1018R		5	02/06/04
CM 1019		3	10/05/05
CM 1020		3	10/05/05
CM 1021		7	10/05/05
CM 1021R		5	10/05/05
CM 1022		4	10/05/05
CM 1023A		5	07/31/09
CM 1023B		6	07/31/09
CM 1023C		5	07/31/09
CM 1023D		5	07/31/09
CM 1023E		5	07/31/09
CM 1024		8	10/05/05
CM 1028		9	02/06/04
CM 1029		9	10/05/05
CM 1029R		4	10/05/05
CM 1030		6	02/06/04
CM 1031		9	10/10/05
CM 1031R		4	10/05/05
CM 1032		3	04/15/04
CM 1033		3	04/15/04
CM 1034		3	04/15/04
CM 1035		2	09/08/03
CM 1036		2	09/08/03
CM 1037		4	04/21/09

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Core Materials

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CP TC		97	08/13/09
CP 1000		3	07/25/06
CP 1001		1	01/09/04
CP 1002		2	01/09/04
CP 1003		4	04/11/08
CP 1005		5	04/11/08
CP 1006		4	07/17/06
CP 1007		1	07/16/07
CP 1008		Original	12/19/05
CP 1009		1	08/20/07
CP 1014		Original	11/09/06
CP 1015		Original	03/18/02
CP 1017		2	09/13/05
CP 1019		2	09/22/05
CP 1020		1	04/30/04
CP 1021		1	04/02/04
CP 1022		1	04/08/09
CP 1023		Original	08/30/04
CP 1024		2	08/21/07
CP 1025		Original	12/15/05
CP 1026		Original	12/19/05
CP 1027		Original	10/31/05
CP 1028		2	02/19/08
CP 1104		12	04/11/08
CP 1105		7	04/11/08
CP 1118		9	06/26/08
CP 1121		4	06/06/07
CP 1128		8	11/22/04
CP 1129		17	08/30/05
CP 1130		18	07/05/07
CP 1131		12	11/09/06
CP 1132		15	11/15/05
CP 1133		12	07/17/06
CP 1137		8	02/01/06
CP 1138		21	07/05/07
CP 1140		15	02/23/05

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Core Materials

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
CP 1141		10	10/22/04
CP 1142		8	01/09/04
CP 1143		4	04/18/07
CP 1145		2	01/31/00
CP 1147		5	06/19/07
CP 1148		3	02/20/06
CP 1150		6	08/13/07
CP 1153		4	08/12/09
CP 1154		11	01/11/07
CP 1156		14	02/19/08
CP 1157		8	10/27/05
CP 1158		8	12/09/05
CP 1159		9	06/19/07
CP 1160		4	03/18/02
CP 1162		11	08/13/07
CP 1164		7	09/13/07
CP 1165		9	09/13/07
CP 1168		17	04/18/07
CP 1171		9	06/04/07
CP 1174		4	10/20/03
CP 1176		7	02/01/06
CP 1177		5	12/15/05
CP 1182		6	12/19/05
CP 1183		8	06/09/08
CP 1184		6	04/20/98
CP 1199		2	05/23/06

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Ø - Denotes change from previous issue.



Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
DS TC		28	07/16/09
DS 1000		9	05/21/07
DS 1001		8	08/25/05
DS 1002		5	08/25/05
DS 1003A		1	08/25/05
DS 1003		6	07/16/09
DS 1004		10	01/19/09
DS 1005A		6	01/19/09
DS 1005B		6	01/19/09
DS 1006		7	11/14/08
DS 1007		4	08/25/05
DS 1008		5	08/25/05
DS 1009		4	08/25/05
DS 1010		2	08/25/05

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Raw Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
MC TC		82	10/13/09
MC 1001		17	10/13/09
MC 1002		17	10/13/09
MC 1004		21	01/26/05
MC 1005		12	03/18/02
MC 1006		10	10/15/08
MC 1012		4	12/20/02
MC 1014		10	10/13/09
MC 1015		13	10/13/09
MC 1016		11	07/09/02
MC 1017		16	10/13/09
MC 1018		3	05/10/94
MC 1021		6	02/10/00
MC 1023		13	10/13/09
MC 1024		13	10/13/09
MC 1025		14	10/13/09
MC 1030		6	10/13/09
MC 1032		2	10/13/09
MC 1033		16	10/13/09
MC 1035		1	03/11/94
MC 1040		2	09/13/07
MC 1041		2	07/28/08
MC 1042		4	11/28/06

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.
Ø - Denotes change from previous issue.



Mono-Shell Raw Materials

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
MS TC		118	10/09/09
MS 1001A		12	05/02/08
MS 1002A		14	06/11/08
MS 1002B		11	06/11/08
MS 1003		2	03/30/01
MS 1004		2	03/30/01
MS 1005		7	08/20/07
MS 1008B		6	01/29/08
MS 1010A		6	06/11/08
MS 1010B		8	06/11/08
MS 1010C		6	06/11/08
MS 1010D		8	06/11/08
MS 1010G		7	06/11/08
MS 1010H		3	06/11/08
MS 1012A		25	06/26/09
MS 1012B		17	07/03/08
MS 1012C		14	06/11/08
MS 1012D		12	06/11/08
MS 1012J		Original	10/03/08
MS 1012H		Original	10/03/08
MS 1012G		6	06/11/08
MS 1013		2	03/30/01
MS 1017		5	03/30/01
MS 1018		3	10/25/99
MS 1019		2	05/15/95
MS 1020C		3	07/07/03
MS 1021A		4	07/11/05
MS 1021B		6	07/11/05
MS 1024		2	03/30/01
MS 1028		2	03/30/01
MS 1031		2	03/30/01
MS 1032		3	03/07/00
MS 1036		4	07/19/01
MS 1037		3	11/05/01
MS 1040		8	07/24/09
MS 1041		14	01/18/06

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Mono-Shell Raw Materials

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
MS 1042		10	03/06/08
MS 1046		3	03/30/01
MS 1053		4	03/10/97
MS 1058		4	01/07/00
MS 1060		11	05/02/08
MS 1063		10	01/08/08
MS 1064		14	04/20/07
MS 1065		8	05/02/08
MS 1066		2	05/28/98
MS 1067		2	03/30/01
MS 1068		2	01/07/00
MS 1068A		Original	01/07/00
MS 1068B		Original	01/07/00
MS 1068C		1	09/15/05
MS 1069		9	08/03/07
MS 1069RFQ		Original	08/05/09
MS 1070A		9	05/02/08
MS 1070B		10	05/02/08
MS 1070C		9	05/02/08
MS 1071		5	12/19/07
MS 1072		1	05/20/94
MS 1073		1	03/01/95
MS 1075		3	04/20/07
MS 1077		Original	01/07/00
MS 1078		Original	01/07/00
MS 1079		2	10/31/02
MS 1080		1	01/09/04
MS 1081		Original	03/30/01
MS 1082		Original	03/30/01
MS 1083		Original	03/30/01
MS 1084		2	04/08/09
MS 1085		Original	12/10/04
MS 1086		Original	03/30/01
MS 1087		Original	02/21/01
MS 1088		Original	11/02/01
MS 1089		3	10/09/09
MS 1089A		2	10/09/09

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Ø - Denotes change from previous issue.



Mono-Shell Raw Materials

Spec
Number

MS 1090
MS 1091

* Description

Revision
Number

1
Original

Revision
Date

05/05/05
01/29/08

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Ø - Denotes change from previous issue.



Process Materials

Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
PM TC		108	08/20/09
PM 100		1	02/10/03
PM 100A		1	03/31/03
PM 100C		1	07/17/09
PM 101A		19	03/17/08
PM 101C		7	03/17/08
PM 102		6	07/17/09
PM 102B		2	02/10/03
PM 102C		2	03/17/08
PM 103		Original	09/05/03
PM 104		4	08/18/03
PM 104A		Original	12/05/03
PM 105		15	03/17/08
PM 105RFQ		Original	05/15/09
PM 106A		5	09/05/03
PM 106B		7	09/05/03
PM 106C		7	09/05/03
PM 106D		5	09/05/03
PM 106F		4	09/05/03
PM 106G		5	10/17/06
PM 106H		7	08/07/09
PM 106I		4	09/05/03
PM 106J		6	09/05/03
PM 106K		1	02/10/03
PM 106L		Original	03/31/08
PM 107		5	03/06/00
PM 107B		Original	07/17/09
PM 108		7	09/05/08
PM 108A		Original	05/15/09
PM 111		3	02/10/03
PM 112		3	05/01/01
PM 112A		Original	03/03/09
PM 114A		14	08/07/09
PM 114B		14	08/07/09
PM 115		4	03/17/08
PM 115A		Original	07/15/08

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Ø - Denotes change from previous issue.



Process Materials

Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
PM 116A		3	03/31/03
PM 116B		3	03/31/03
PM 116C		3	03/31/03
PM 116D		4	03/31/03
PM 116E		3	03/31/03
PM 116G		3	03/31/03
PM 116H		3	03/31/03
PM 116J		3	03/31/03
PM 116K		3	03/31/03
PM 116L		Original	10/27/04
PM 117		3	08/10/00
PM 117A		Original	07/15/08
PM 118		5	02/10/03
PM 119		9	08/07/09
PM 119A		1	03/17/08
PM 121		3	02/10/03
PM 123		3	05/18/01
PM 124		5	03/17/08
PM 124A		5	03/17/08
PM 124B		1	03/17/08
PM 124C		3	05/28/09
PM 126		2	09/05/03
PM 127A		4	03/17/08
PM 127B		4	03/17/08
PM 127C		3	03/17/08
PM 128A		6	08/17/09
PM 128B		7	08/17/09
PM 128C		1	08/17/09
PM 129		2	02/10/03
PM 130		2	04/29/03
PM 131		3	02/10/03
PM 132A		5	03/17/08
PM 132B		5	03/17/08
PM 133		2	04/29/03
PM 134		2	02/10/03
PM 135		3	08/05/03
PM 136		5	03/17/08

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.

Ø - Denotes change from previous issue.



Process Materials

Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
PM 137		2	02/10/03
PM 138		5	08/07/09
PM 139		5	08/07/09
PM 140		5	08/07/09
PM 141		3	02/10/00
PM 142		4	03/17/08
PM 142A		1	03/17/08
PM 144		3	07/17/09
PM 145		3	04/22/09
PM 146		1	03/17/08
PM 146A		Original	05/21/01
PM 147		Original	12/20/02
PM 148		1	05/19/04
PM 149		2	03/17/08
PM 201		5	02/10/03
PM 202		2	02/10/03
PM 203		2	02/10/03
PM 204		2	06/13/03
PM 205		5	02/10/03
PM 206		2	02/10/03
PM 207		4	03/17/08
PM 208		2	06/12/89
PM 209		4	08/17/09
PM 211		5	04/21/03
PM 301		4	11/07/03
PM 302		2	07/22/03
PM 303		4	06/04/07

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.
Ø - Denotes change from previous issue.



Shell Room Raw Materials

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
SR TC		20	02/17/09
SR 1001		4	04/09/08
SR 1002		1	05/16/00
SR 1003		Original	11/16/99
SR 1004		1	05/21/01
SR 1004A		Original	09/10/01
SR 1005		1	01/31/00
SR 1006		2	11/04/05
SR 1007		3	02/17/09
SR 1008		Original	11/16/99
SR 1009		1	03/19/02
SR 1010		Original	01/31/00
SR 1011		Original	01/31/00
SR 1012		2	11/13/00
SR 1013		Original	01/31/00
SR 1014		2	11/04/05
SR 1015		2	11/04/05
SR 1016		1	03/14/00
SR 1017		1	05/20/02
SR 1018		3	11/04/05
SR 1019		3	01/17/07
SR 1020		1	07/30/01
SR 1021		1	05/04/06
SR 1022		Original	12/06/02

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.
Ø - Denotes change from previous issue.



Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
TBM TC		28	01/12/09
TBM 1010		6	04/16/01
TBM 002		3	04/23/07
TBM 011		3	04/23/07
TBM 014		3	04/23/07
TBM 018		3	04/23/07
TBM 020		2	04/23/07
TBM 025		3	04/23/07
TBM 193		3	04/23/07
TBM 195		3	04/23/07
TBM 1020		17	05/15/07
TBM 1000		4	04/23/07
TBM 1106		3	04/23/07
TBM 1400		3	04/23/07
TBM 2020		3	04/23/07
TBM 2100		3	04/23/07
TBM 2120		3	04/23/07
TBM 2300		3	04/23/07
TBM 2500		2	04/23/07
TBM 3004		4	10/29/07
TBM 3030		3	04/23/07
TBM 3040		3	04/23/07
TBM 3104		3	04/23/07
TBM 3110		3	04/23/07
TBM 3120		3	04/23/07
TBM 3200		2	04/23/07
TBM 3300		3	04/23/07
TBM 3310		3	04/23/07
TBM 4000		3	04/23/07
TBM 4005		Original	01/08/09
TBM 4004		5	10/29/07
TBM 4020		2	04/23/07
TBM 4031		3	07/01/08
TBM 4030		3	04/23/07
TBM 4050		3	04/23/07
TBM 4051		2	04/23/07

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.

Ø - Denotes change from previous issue.



Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
TBM 4200		6	04/23/07
TBM 4300		3	04/23/07
TBM 5262		4	04/23/07
TBM 5270		3	04/23/07
TBM 5275		3	04/23/07
TBM 5291		4	04/23/07
TBM 6010		4	04/23/07
TBM 6050		3	04/23/07
TBM 6060		3	04/23/07
TBM 6070		3	04/23/07
TBM 6095		6	10/29/07
TBM 6115		4	04/23/07
TBM 6120		7	04/23/07
TBM 6130		2	04/23/07
TBM 7000		3	04/23/07
TBM 7001		1	04/23/07
TBM 7005		3	04/23/07
TBM 7010		3	04/23/07
TBM 7020		3	04/23/07
TBM 7030		3	04/23/07
TBM 8020		1	04/23/07
TBM A1		3	04/23/07
TBM A2		1	04/23/07
TBM A8		3	04/23/07
TBM A9		3	04/23/07
TBM A10		3	04/23/07
TBM A11		2	04/23/07

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.

Ø - Denotes change from previous issue.



Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
WM TC		84	09/03/09
WM 5004		7	07/28/05
WM 5024A		Original	11/17/06
WM 5024		2	04/01/09
WM 5027		11	03/10/09
WM 5027A		12	03/10/09
WM 5027S		10	04/20/09
WM 5028		12	10/15/08
WM 5029		1	07/15/08
WM 5028B		2	02/17/09
WM 5032		6	01/10/07
WM 5035		9	07/28/05
WM 5038		13	02/17/09
WM 5040		10	02/17/09
WM 5042		10	04/20/09
WM 5045		7	07/28/05
WM 5046		7	09/08/03
WM 5054		2	06/30/06
WM 5055		1	07/28/05
WM 5056		1	07/28/05
WM 5058		Original	07/15/08
WM 5061		8	03/03/08
WM 5062A		1	04/20/09
WM 5062B		1	04/01/09
WM 5064		8	03/17/09
WM 5065		9	02/17/09
WM 5065S		5	07/28/05
WM 5066		9	04/18/07
WM 5067		10	02/17/09
WM 5070		9	04/01/09
WM 5071		1	07/28/05
WM 5075		8	04/05/05
WM 5080		8	01/21/09
WM 5081		8	02/17/09
WM 5083		8	10/29/03
WM 5084		4	10/13/00

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.

Ø - Denotes change from previous issue.



Material Specifications

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
WM 5085		8	08/19/04
WM 5086		6	11/17/06
WM 5088		6	07/28/05
WM 5090		6	10/27/03
WM 5091		Original	08/12/09
WM 5093		4	09/17/03
WM 5094		6	06/12/09
WM 5095		8	04/30/04
WM 5096		4	04/01/09
WM 5097		6	04/01/09
WM 5100		8	03/12/04
WM 5102		2	03/26/04
WM 5105		6	01/21/09
WM 5106		5	10/29/03
WM 5107		4	09/13/07
WM 5108		5	10/15/08
WM 5114		4	04/20/09
WM 5116		6	04/20/09
WM 5122		5	04/01/09
WM 5125		3	04/01/09
WM 5153		Original	03/15/05
WM 5150		5	12/18/06
WM 5202		2	05/15/09
WM 5210		1	09/03/09
WM 5203		1	05/15/09
WM TC		80	08/28/09
WM 7001		4	07/15/08
WM 7003		3	12/10/93
WM 7004		4	07/15/08
WM 7007		Original	01/08/08
WM 7005		3	09/27/00
WM 7015		7	04/18/01
WM 7018		10	12/20/06
WM 7018A		1	07/28/05
WM 7018B		1	07/28/05
WM 7018C		1	07/28/05
WM 7018D		2	04/20/09

* Refer to the Alcoa Howmet purchase order for the DESCRIPTION of the applicable specification.

Ø - Denotes change from previous issue.



Wax

Raw Materials

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
WM 7018E		1	08/08/07
WM 7019		1	06/30/06
WM 7019A		Original	05/16/08
WM 7030		5	04/18/08
WM 7031		10	11/06/07
WM 7033		7	08/08/01
WM 7036		7	06/18/07
WM 7039		6	06/07/07
WM 7040		5	08/21/01
WM 7044		1	04/18/01
WM 7046		7	10/03/08
WM 7047		9	06/01/05
WM 7055		6	10/03/08
WM 7060		6	04/01/09
WM 7061		3	03/06/03
WM 7062		6	05/19/04
WM 7063		7	01/29/03
WM 7065		10	12/20/02
WM 7065B		1	04/01/09
WM 7067		12	08/12/07
WM 7068		2	04/18/07
WM 7069		Original	03/15/05
WM 7076		7	05/15/02
WM 7077		8	05/13/09
WM 7079		2	09/13/07
WM 7081		5	10/16/02
WM 7091		3	08/21/01
WM 7092		8	02/15/08
WM 7095		5	04/20/09
WM 7096		4	11/06/07
WM 7097		2	05/15/02
WM 7098		16	08/26/09
WM 7099		5	05/15/02
WM 7100		7	09/23/05
WM 7101		9	08/28/09
WM 7102		3	05/04/98
WM 7103A		Original	07/06/05

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Ø - Denotes change from previous issue.



Wax

Raw Materials

<u>Spec Number</u>	<u>* Description</u>	<u>Revision Number</u>	<u>Revision Date</u>
WM 7103		5	06/01/05
WM 7104		Original	05/24/04
WM 7105		6	11/06/07
WM 7111		2	05/15/02
WM 7112		4	10/03/08
WM 7114		3	09/05/03
WM 7115		5	11/06/07
WM 7116		Original	02/15/08
WM 7117		Original	02/24/09
WM 7204		Original	08/09/07
WM 7211		2	05/24/05
WM 7212		3	05/24/05
WM 7213		2	05/24/05
WM 7215		2	04/11/03
WM 7216		3	06/30/09
WM 7217		1	11/06/07
WM 7218		1	11/06/07

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Ø - Denotes change from previous issue.