

Specification: B-1-A Revision Date: 08/30/2016

Revision Level: CR

### GENERAL WROUGHT STEEL STANDARD (PRE-QUALIFIED STEEL SOURCES)

#### 1.0 SCOPE:

- 1.1. To be considered a Meritor pre-qualified steel source, supplier must show capability for chemistry and inclusion control per the B-1 specification by providing histograms and appropriate SPC information. An SQA self survey form should be filled out and sent to Meritor Troy Materials Engineering. Plant survey will be conducted at the discretion of Meritor Troy Materials Engineering. When a steel mill changes a process, manufacturing method, equipment, raw material and other factors which affect product quality, the steel mill will inform Troy Materials Engineering and may be subject to re-qualification (PPAP and validation testing).
- 1.2. Warehouse steel can be used only if the steel is from prequalified sources listed below and complies with the B-1 specification.

#### 2.0 RESPONSIBILITIES:

2.1. All Meritor plants, suppliers and sub-suppliers, will use Pre-qualified Steel Mills per this spec. If supplier / manufacturer changes from one pre-qualified source to another pre-qualified source after the parts have been PPAP approved, they must notify the Meritor SQA person at the using plant. The SQA person will communicate the need for component testing and/or manufacturing trial.

Supplier (See end of table for subscript definitions)	Ingot	${ t Billet}_1$	${ t Bloom}_2$	$\mathtt{Slab}_3$
Aarti Steel Ltd (India)		X	X	
Acciaierie Bertoli Safau S.p.A ABS (Italy)	Х	Х	Х	
Acciaierie Falk (Italy)	X	X		
Acciaierie Riva Spa (Italy)	X			
Acciaierie Venete (Italy)			X	
Adhunik Metaliks Limited (India)			X VAD <sub>4</sub>	
Ahmsa		_	_	X
Aichi (Japan)			X	·



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Cumplion				
Supplier (See end of table for subscript	Ingot	$Billet_1$	${\tt Bloom}_2$	${\tt Slab}_3$
definitions)	ingot	DIIIec <sub>1</sub>	BIOOM2	STAD3
AK Steel (West Chester,				X
Ohio)				Λ
Arcelor-Mittal Inox (Brazil)	X			
(former Acesita)	21			
Arcelor-Mittal Steel				X
(Illinois)				21
(former ACME/ISG Steel-				
International Steel Group)				
Arcelor-Mittal Steel				
(Conshohocken - Coatesville,	X			X
PA) (former Bethlehem -	21			21
Lukens/ISG - International				
Steel Group)				
Arcelor-Mittal Steel (Burns				
Harbor, IN)				X
(former ISG - International				21
Steel Group)				
Arcelor-Mittal Steel				
(Indiana Harbor, IN and				X
Cleveland, OH) (former ISG -				21
International Steel				
Group(former LTV plants)				
Arcelor-Mittal Steel	X	X	X	
(Indiana)				
(former Ispat - Inland)				
Arcelor-Mittal Steel			X	
(India) (former Ispat				
Profile)				
Arcelor-Mittal Steel				
(Mexico) (former Ispat)				X
Arcelor-Mittal Steel				
(Duisburg, Germany) (former	X	X	X	
Ispat Stahlwerk Ruhrort)				
Arcelor-Mittal Steel				
(Contrecoeur, Canada)		X		
METACON Process				
(former Ispat - Sidbec)				
Arcelor-Mittal Steel (former	X			X
Dofasco - Canada)				
zozasoo oanaaa,		1		



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Supplier (See end of table for subscript definitions)	Ingot	$\mathtt{Billet}_1$	${\tt Bloom}_2$	${f Slab}_3$
Arcelor-Mittal Steel (West				
Virginia) (former Weirton				X
Steel)				
Arcelor-Mittal Tubarao				Х
(Brazil) (former Arcelor-				
Mittal Brasil)				
Ascometal Agondange			Х	
(France)				
ASFOR-Dunes (France)	Х			
Asil Celik A.S. (Istanbul)		Х	X	
Atlas - Specialty Steel	Х			
(Canada)				
Baoshan Iron & Steel Co. Ltd	X			
(Special Steel Branch)				
(Formerly Shanghai #5)				
Charter Steel (Cleveland, OH)		Х6		
Charter Steel (Saukville, WI)		Х6		
China Steel			X	
Cosipa (Brazil)	X			
CSN (Brazil)	X			
Daido (Japan)	X		X	
DAM - 2004 Ltd. (Formally	X	Х		
Steelworks Dio'sgyor Ltd)				
Daye Special Steel Co, Ltd		X	Х	
(Hubei, China)				
Essar Steel Algoma Inc.			X	Х
(Canada) formerly Algoma				
Essar Steel Ltd. (India)				Х
Eregli Iron & Steel				Х
(Turkey)				
Fushun Specialty Steel			X	
Gerdau Aceros ESP. Europa,		X		
S.L. Basauri(Former Sidenor				
- Basauri, Spain)				
Gerdau Aceros ESP. Europa,	X			
S.L. Reisnosa(Former Sidenor				
- Reisnosa, Spain)				
Gerdau - Fort Smith, AR			X	
Gerdau - Jackson, MI			Х	



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Supplier		1		
(See end of table for subscript	Ingot	$\mathtt{Billet}_1$	${\tt Bloom}_2$	${\tt Slab_3}$
definitions)				5_555
Gerdau - Monroe, MI			X	
Gerdau Acominas (Brazil)	X			Х
(former Aco Minas)				
Gerdau Charqueadas (Brazil)	X			
(former Piratini)				
Gerdau Mogi (Brazil)	X		X	
(former Acos)				
Gerdau Pinda (Brazil)	Χ			
(former Villares - Pinda)				
Gerdau Steel India Ltd		X		
(Andra Pradesh, India)				
Gloria Heavy Industrial	X			
CorpEvergreen Steel				
(Taiwan)				
Green River Steel	X			
GSB Acero, S.A.	X	X		
(Azkoitia, Spain)				
GSB Acero, S.A.	X		X	
(Legazpi, Spain)				
Huta Batary (Poland)	$X$ $VAD_4$			
Imatra Kilsta AB			X	
(Karlskoga, Sweden)				
ISMT Limited (Pune, India)		X		
formerly ISSAL (India)				
Ivaco Rolling Mills		X		
(Canada)				
Ispat-(Raigarh, Maharashtra, India)				X
Inexa Lulea (Sweden)			X	
Jiangyin Xing Cheng Steel			X	
Works Co. LTD (China)				
JSW Salem Steel			X VAD <sub>4</sub>	
Kalyani (India)-Carpenter	X VAD <sub>4</sub>		X	
Kalyani-Hospet (India)		X	X	
Kobe (Japan)	X		X	
Koppel Steel	<del></del>	X	X	
Korea Iron And Steel Co.,	X	_		
Ltd., Changwon, S. Korea				
	ary and Confid	-la-sti-al		



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definitions)				5_5_5
Lake Erie Steel Co. Ltd.				X
(US Steel) formerly Lake				
Erie Steel				
Lucchini Steel (Italy)	Х	X	Х	
Mitsubishi (Japan)	X		X	
Mahindra Sanyo Special Steel	X	Х		
(India) formerly M.U.S.C.O.	$VAD_4$	VAD <sub>4</sub>		
Nippon - Muroran Wks	X		X	
NISCO (Nanjing Iron and		X		
Steel Company) (China)				
NMH Stahlwerke GmbH			X	
(Germany)				
OAO Novolipetsk Steel(NMLK)				X
(Russia)				
Nucor - Berkley (Mt.				X
Pleasant, SC)				
				X
				Only
Nucor (Crawfordsville)				1384
				mm x
				50mm
Nucor - (Memphis, TN)			X	
Nucor, (Norfolk, NE)		X		
Nucor (Tuscaloosa, AL)				X
Nucor - Gallatin Steel				X
OEMK (Oskol Electric Steel			X	
Works) - Russia				
Ori Martin, Italy		X		
Ovako Steel AB	X			
(Hofors, Sweeden)				
POSCO (Pohang Iron and Steel			X	
Co. Ltd., Pohang, Korea)				
Rastriya Ispat Nigam Ltd		X	X	
(Vizag Steel Plant, India))				
REMI Metals Gujarat Ltd.		X	X	
(Mumbain, India)		VAD <sub>4</sub>	VAD <sub>4</sub>	
Republic Technologies	X		X	
International, Canton, OH			Cast-	
		_	Roll™	
Republic Technologies		X		
International, Johnstown, PA	ary and Confi	<u> </u>		



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Commit on				
Supplier (See end of table for subscript	Ingot	$Billet_1$	${\tt Bloom}_2$	$\mathtt{Slab}_3$
definitions)	ingot	DIIIeC1	B100m <sub>2</sub>	STAD3
Republic Technologies		X	X	
International, Lorain, OH				
(formerly USS/Kobe)				
Saarstahl (Germany)		X		
SAIL (Steel Authority of				X
India Ltd. Bhilai Steel				
Plant)				
Sanyo Special Steel		X		
(Japan)				
SeAH Besteel (Korea)		X	X	
(Formerly KIA)				
Severstal				
(former Rouge Steel)	X			X
Severstal (Sparrows Point,				
MD) formerly Arcelor-Mittal				37
Steel (former ISG -				X
International Steel Group)				
Severstal (Stuebenville)				V
formerly Wheeling Pittsburgh				X
Severstal, formerly Warren	X			X
Consolidated	Λ			Λ
Shanghai #5 (China)	SEE B	aoshan Iro	n & Steel	Co. Ltd
Shijiazhuang Iron & Steel			X	
CO., Ltd. (China)				
Sidor (Venezuela)				X
Sochorovna Valcovna (Kladno,			X	
Czech Republic)				
SKF (Sweden)	X			
SSAB (Iowa)				X
Steel Dynamics Inc -				X
(SDI) (Butler, Indiana)				
Steel Dynamics Inc -			X	
(SDI) Pittsboro, Indiana			Λ	
Stomana Industry - Bulgaria				X
Sunflag Iron & Steel Co.,		X	X	
LTD (India)				
Tata Steel UK Ltd.	X	X	X	X
(Rotherham, UK; Formerly				
Corus)				



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(See end of table for subscript definitions)	Ingot	$\mathtt{Billet}_1$	${\tt Bloom}_2$	${\tt Slab}_3$
<pre>Tata Steel IJmuiden BV  (IJmuiden, Netherlands; Formerly Corus)</pre>		X		X
T.I.S.C.O. (India)	X VAD <sub>4</sub>			
Thyssen Krupp Steel AG Siegen/Hagen, (Germany)	Х		Х	
Tianjin Pipe Corporation (Tianjin, China)			X <sub>5</sub> VAD <sub>4</sub>	
Timken Steel-Faircrest	X			
Timken Steel-Harrison	X	X	X	
Usha Martin Ltd. Jharkand, India			${\sf X}$ ${\sf VAD}_4$	
US Steel-Gary Works				X
US Steel (Mi)				
(former National Steel - Great Lakes Div)				X
US Steel (Canada) (former Hamilton Steel (Stelco), Hamilton ON)			Х	
Usiminas Ipatinga (Brazil) (former Usiminas)				Х
V&M do Brasil Usina Barreiro (Brazil) (former Mannesmann)	X			
Vardhman Special Steels (India)		X VAD <sub>4</sub>	${f X}$ VAD $_4$	
V.I.S.L. (India)	X VAD <sub>4</sub>			
Voestalpine Stahl Donawitz GmbH & Co KG (Austria)			Х	
Wuhan Steel (China)				X
Zelezarna Ravne Yugoslavia	Х			



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Subscript definitions:

1 - Billet Cast: Continuous cast product having maximum mold size

of 49 sq. in. area.

2 - Bloom Cast: Continuous cast product having mold size exceeding

49 sq. in. area.

3 - Slab Cast: Continuous cast product having oblong shape

approximately 4 to 9 inches thick, approximately

24 to 60 inches wide.

4 - Vacuum Degassing Required.

5 - Seamless tube manufacturing only.

6 - Fastener Products only.

#### 3.0 REFERENCE SPECIFICATIONS:

Industry Affiliation	Standard Number and revision Date	Title of Standard
Meritor	RA-4901-8-797-E Rev 5a	Meritor Supplier Quality System Requirements (SQSR) Manual

Date	Change
08/30/2016 Level CR PR-04820	Renamed Gallatin Steel to Nucor - Gallatin Steel. Changed Gerdau Ft Smith, Gerdau Jackson, and Gerdau Monroe to Bloom cast.
07/26/2016 Level CQ PR-04043	Added NISCO (Nanjiang Iron and Steel Co)
03/15/2016 Level CP PR-03563	Added Gerdau Steel India
02/09/2016 Level CN PR-03449, PR-03426	Added Daye Special Steel (Hubei, China) Added OAO Novolipetsk Steel (Russia)
11/05/2014 Level CM Request 30932-41	Added Charter Steel (Cleveland, OH) and Charter Steel (Saukville, WI) for Fastener Products only. Renamed M.U.S.C.O. to Mahindra Sanyo Special Steel.
06/05/2014 Level CL Request 30272-180	Re-formatted. Added titles to Scope and Responsibilities sections. Added Reference Specifications section. Moved Reference Document to Reference Specifications section and updated with the most recent revision date. Removed CSC (Copperweld) which no longer produces material. Added JSW Salem Steel for bloom cast (VAD4).



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Date	Change
12/05/2012 Level CK	Revised mill names in Brazil, Canada, and
Request 32391-5	Spain.
	1) Renamed Acesita (Brazil) to Arcelor-
	Mittal Inox (Brazil).
	2) Renamed Aco Minas (Brazil) to Gerdau
	Acominas (Brazil).
	3) Renamed Acos (Anhanguera Brasil) and
	Mogi (Brazil) to Gerdau Mogi (Brazil).
	4) Renamed Arcelor-Mittal (Brazil) to
	Arcelor-Mittal Tubarao (Brazil).
	5) Renamed Mannesmann (Brazil) to V&M do
	Brasil Usina Barreiro (Brazil).
	6) Renamed Piratini (Brazil) to Gerdau
	Charqueadas (Brazil).
	7) Renamed Usiminas (Brazil) to Usiminas Ipatinga (Brazil).
	8) Renamed Villares - Pinda, Brazil to
	Gerdau Pinda (Brazil).
	9) Renamed Arcelor-Mittal Steel (Canada) to
	Arcelor-Mittal Steel (Contrecoeur,
	Canada).
	10) Changed ABS to Acciaierie Bertoli Safau
	S.p.A ABS (Italy).
	11) Renamed Sidenor - Basauri (Spain) to
	Gerdau Aceros ESP. Europa, S.L. Basauri
	(Basauri, Spain).
	12)Renamed Sidenor (Spain to Gerdau Aceros
	ESP. Europa, S.L. Reisnosa (Reisnosa,
	Spain).
	13) Reformatted Specification number from
	B1-A and added Revision Level in Header.
09/06/2012 Level CJ	Added Slab for Tata Steel IJmuiden
Request 30272-161	
04/05/2012 Level CH	Added Aco Minas (Brazil) for slab cast.
Request 32446-6	
2/3/2012 Level CG	Added Adhunik Metaliks Limited (India) for
Request 32391-3	bloom cast (VAD)
11/4/2011 Level CF	Added Usha Martin Ltd., Jharkhand, India for
Request 32391-2	blooms (VAD). Added Ori Martin, Italy (Billet
C/2/2011 T1 CD	only).
6/3/2011 Level CE	Changed Gerdau MacSteel (Fort Smith, AR,
Request 32391-1	Jackson, MI and Monroe, MI) to Gerdau.



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Date	Change
2/5/2011 Level CD	Added - Voestalpine Stahl Donawitz GmbH & Co
Request 31584-16	KG (Austria)
1/14/2011 Level CC Request 31432-2	"Corus (Formerly British Steel)" was updated to: "Tata Steel UK Ltd. (Rotherham, UK; Formerly Corus)"  "Corus (Formerly Hoogovens)" was updated to: "Tata Steel IJmuiden BV (IJmuiden, Netherlands; Formerly Corus)"
6/5/2010 Level CB	Added approved supplier Nucor - Memphis, TN
Request 31759-1	for bloom cast.
3/5/2010 Level CA Request 30932-12	Removed Chaparral Steel (billet cast).
1/5/2010 Level BZ Request 31212-10 Request 30349-78	Added Arcelor-Mittal Brasil S/A and SSAB, Iowa
11/5/2009 Level BY Request 31467-1	Added AK Steel - West Chester, Ohio
10/5/2009 Level BX Request 31432-1	Changed Gerdau Ameristeel - Ft. Smith, Jackson and Monroe to "Gerdau MacSteel." Changed Steel Dynamics Inc - (SDI) Fort Wayne, Indiana to Butler, Indiana.
6/5/2009 Level BW Request 30349-62	Added approved supplier Nucor (Tuscaloosa, AL) for slab cast. Removed Hamilton Specialty Bar(HSB) formally Slater Steel from the approved supplier list.
5/05/2009 Level BV Request 31211-1	"ISMT Limited (Pune, India)" was formerly "ISSAL (India)." Removed ICH (Industrias Campos Hermanos) - Agustin Melgar #23, Estado de Mexico, Mexico; ICH mill no longer in operation.
4/05/2009 Level BU	Added Tianjin Pipe Corporation (Tianjin,
Request 30091-21	China) for bloom cast seamless tubing only.
11/05/2008 Level BT Request 30779-3	Changed "Lake Erie Steel Co. Ltd. (Stelco)" to "Lake Erie Steel Co. Ltd. (US Steel) formerly Lake Erie Steel"; changed "Algoma (Canada) to Essar Steel Algoma, Inc. (Canada)"; changed "Arcelor-Mittal (Sparrows Point, MD), Wheeling Pittsburgh (Stuebenville), and Warren Consolidated to Severstal";
10/05/2008 Level BS	Changed "Acciaierie del Tanaro" to "Acciaierie
Request 30779-2	Riva Spa"



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Date	Change
06/05/2008 Level BR Request 30195-4	Changed "Dofasco (Canada)" to "Arcelor-Mittal Steel (former Dofasco - Canada)" and "Hamilton Steel (Stelco), Hamilton ON" to "US Steel (Canada) (former Hamilton Steel (Stelco), Hamilton, ON)"; Changed all "approved" related to steel sources to "pre-qualified"; Deleted "Approved" title in steel source listing chart
03/05/2008 Level BQ Request 30272-15	Changed all "Mittal" mills to Arcelor-Mittal
12/5/2007 Level BP Request 30195-3 Request 30305-1	-Gerdau Ameristeel was MacSteel -Added Sidenor - Basauri,Spain approved for bil
11/5/2007 Level BN Request 30195-2	Removed "Zlatoust Steel (EAF only)"
9/5/2007 Level BM Request 25807-13	Changed "Industrias Campos Hermanos - Mexico" to "ICH (Industrias Campos Hermanos) - Agustin Melgar #23, Estado de Mexico, Mexico"
6/5/2007 Level BL Request 26941-5	Added Stomana Industry-Bulgaria; approved for s.
4/5/2007 Level BK Request 26042-3, 25807-8, 26779-4	Added "POSCO (Pohang Iron and Steel Co. Ltd., Pohang, Korea)", "Ovako Steel AB(Hofors, Sweeden) (Grandfathered as part of 1998 aquisition of the Volvo Lindesberg plant)", "Shijiazhuang & Steel CO., Ltd. (China)"
2/5/2007 Level BJ Request 25807-6	Added "Jiangyin Xing Cheng Steel Works Co. LTD (China)"
1/08/2007 level BH Request 26158-6	Added Gallatin Steel
12/05/2006 Level BG Request 25783-19, 25807-5	Added Wuhan China Mill slab cast. Changed "Shanghai #5 (China)" to "Baoshan Iron & Steel Co. Ltd (Special Steel Branch)" Same mill, new ownership.
10/05/2006 Level BF Request 25812-6	-Added Ispat-Raigarh, Maharashtra, India, approfor Slab.
09/05/2006 Level BE Request 25812-5	- Changed "Mittal Steel (Conchahawkin - Coatsvi. PA) (former Bethlehem - Lukens/ISG - Internation Steel Group) "to "Mittal Steel (Conshohocken - Coatesville, PA) (former Bethlehem - Lukens/ISG International Steel Group)" - Changed "C.H. Industrias (CH S.A. Mexico)" to "Industrias Campos Hermanos, Mexico"



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07/05/2006 Level BD Request 25812-4	-Added "Steel Dynamics Inc. Pittsboro IN", approved for bloomChanged "Steel Co. of Canada (Stelco) Hamilton" to "Hamilton Steel (Stelco), Hamilton ON"
06/05/2006 Level BC Request 25812-3	Changed "Steelworks Dio'sgyor Ltd formerly DNM (Hungary)" to "DAM 2004- Ltd." Same mill, new ownership.
05/05/2006 Level BB Request 26034-1	Added Steel Dynamics Inc. (SDI) for slab cast.
03/05/2006 Level BA Request 25812-2	Removed GKN Brymbo Works (England); the mill no longer exists
2/05/2006 Level AZ Request 25812-1	-MacSteel Fort Smith and Jackson listed as two separate mills -Added Villares, Pinda approved for ingot -Added Villares, Mogi approved for bloom -Added OEMK, Russia approved for bloom
11/5/2005 Level AY Request 25671-1	Added Zlatoust Steel that is EAF, ingot cast with vacuum degassing.
7/5/2005 Level AX Request 25332-1	Changed ACME, Bethlehem-Lukens, ISG (all mills), Ispat (all mills), and Weirton Steel to Mittal Steel. Deleted Mclouth (closed). Changed National Steel to US Steel and Rouge Steel to Severstal. Added billet approval for SeAH (Korea).
5/5/2005 Level AW Request 24220-1	Changed North Star Steel to MacSteel - Monroe
3/5/2005 Level AV Request 24702-14	Changed Slater Steel to Hamilton Specialty Bar (HSB)
12/5/2004 Level AU Request 24755-2	SeAH Besteel was Kia
7/5/2004 Level AT Request 22452-8	Added REMI Metals Gujarat LTD.
4/5/2004 Level AS Request 22542-18	Added Aarti Steel Ltd-India.
12/15/2003 Level AR Request 18744-3	Added Imatra Kilsta for Bloom cast.



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Date	Change
9/15/2003 Level AQ	Deleted LTV and added ISG (International Steel
Request 22542-13	Group)-in Indiana Harbor, IN and Cleveland, OH
	(Former LTV plants).
	Added Cochemon Valence (Vledes Coch
	Added Sochorovna Valcovna (Kladno, Czech Republic)
8/15/2003 Level AP	Changed Bethlehem-Lukens (Burns Harbor) to ISG
Request 22542-12	(International Steel Group) - (Burns Harbor, IN)
	and Bethlehem-Lukens (Sparrows Point) to ISG
	(International Steel Group) - (Sparrows Point,
	MD).
6/15/2003 Level AN	Added Sunflag Iron & Steel Co., LTD-India for
Request 22542-11	bloom and billet.
2/15/2003 Level AM	Added Aco Minas (Brazil) for ingot. Removed
Request 22452-7	Villares-Brazil from approved list due to its
9/15/2002 Level AL	failure to meet steel mill survey.
Request 20940-3	Removed UMI from approved list due to closure.
6/15/2002 Level AK	Eliminated DNM (Hungary) due to duplicate
Request 22291-1	listing.
5/15/2002 Level AJ	Added NMH Stahlwerke GmbH for bloom cast.
Request 22205-1	
12/15/2001 Level AH	Added Vardhman Special Steels (India) for
Request 20940-2	bloom and billet cast. Added Nucor-Berkley
	(Mt. Pleasant, SC) for slab cast.
11/15/2001 Level AG	Ilva Deltasider (Italy) changed name to
Request 21540-1	Lucchini Steel (Italy)
9/15/2001 Level AF	Added ACME Steel for slab cast.
Request 20574-4 7/15/2001 Level AE	Removed approval for Ingot cast steel from
Request 21282-2	Republic Technologies (Lorain, OH). Added
Request 21202 2	Bloom cast to Republic Technologies (Lorain,
	OH).
5/15/2001 Level AD	Added Korea Iron And Steel Company, Ltd.,
Request 20574-3	Changwon, S. Korea, for ingot cast
4/15/2001 Level AC	New name for Acenor-Sidenor is Sidenor
Request 20562-3	
3/15/2001 Level AB	Added Kalyani-Hospet (India) for bloom and
Request 19858-4	billet cast steel.
9/15/2000 Level AA	Moved USS/Kobe (Lorain, OH) under Republic
Request 19955-3	Technologies to reflect their 1999 merger.
	Replaced British Steel and Hoogovens with
	Corus to reflect their 1999 merger.  Proprietary and Confidential



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Date	Change
8/15/2000 Level Z	Changed the name of Krupp Stahl AG to Thyssen
Request 19955-2	Krupp Steel AG to reflect merger of two
	companies in 1998. Changed Thyssen (Germany)
	to Ispat Stahlwerk Ruhrort because Ispat Intl.
	purchased this bar-producing division from
	Thyssen on October 1 <sup>st</sup> , 1997.
5/15/2000 Level Y	Changed name of Kaylani (India) to Kalyani-
Request 19955-1	Carpenter (India) for ingot and bloom cast
	steel.
3/15/2000 Level X	Added Sidor (Venezuela) for slab cast steel.
Request 19685-1	
12/15/99 Level W	Usiminas mill change from Ingot to Slab cast
Request 19252-1	approval. Acciaierie Venete should have been
	approved for bloom instead of billet. The
	mill does not have billet caster capability.
11/15/99 Level V	ABS(Italy) has been added for Billet and Bloom
Request 18749-4	cast steel. Asil Celik (Istanbul) has been
	added for Billet and Bloom cast steel.
8/16/99 Level U	Added Essar Steel Ltd. (India) for Slab Cast
Request 18718-1	Steel and Issal (India) for Billet cast steel.
	Republic Engineered and Bartech consolidated
	as Republic Technologies International -
	Franklin Canton, OH to replace the previous
	Republic Engineered Steels, and Republic
	Technologies International Johnstown, PA
	location to replace Bar Technologies, Inc.
	Renamed Lukens as Bethlehem-Lukens-
	Conchahawkin, Coatesville. Renamed Inland as
	Ispat- Inland and Sidbec-Dosco as Ispat- Sidbec.
1/15/99	Deleted Afora-GSB(Spain) and updated with new
Level T	names GSB Acero, S.A. (Azkoitia, Spain) and
20101	GSB Acero, S.A. (Legazpi, Spain)
11/16/98	Added Sanyo Special Steel
Level S	
10/15/98	Added Fushun Specialty Steel Co., deleted
Level R	Bethlehem Johnstown Lakawana, and added
	Bethlehem Burns Harbor and Sparrows Point.
2/4/98	Added Rastriya Ispat Nigam Ltd
Level Q	
01/17/98	Added Gloria Heavy Industrial Corp
Level P	Evergreen Steel (Taiwan)



Specification: B-1-A Revision Date: 08/30/2016

Revision Level: CR

Date	Change
10/27/97	Changed name of Copperweld to CSC
Level N	
9/15/97	Added Saarstahl, Kalyani Bloom
Level M	
8/1/97	Changed Name of United Engineered Steels Ltd.
Level L	to British Steel Engineering Steels and Bihar steel to UMI Special steel.
5/1/97	Added Chaparral Steel, Lake Erie Steel Company
Level K	Limited (name change for the Stelco-Hamilton slab mill)
	Added Bar Technologies, Inc. (Bartech).
2/1/97	Added Eregli Iron & Steel (Turkey)
Level J	_
11/15/96	Added Huta Batary (Poland)
Level I	
9/15/96	Added Republic (cast roll) & Wheeling
Level H	Pittsburgh
11/15/95	Added Ahmsa, Bihar Steel, Ispat (Mexicana &
Level G	India) National Steel, Shanghai #5, Sidbec- Dosco. Deleted Charter Steel, Eaton Warehouse, Empire Steel, Sharon Steel. Added restriction on Nucor slab caster. Added "Reference Documents". Deleted "A final approval will be given after a trial run at the plant."
7/15/95	Added Algoma (bloom), Charter Steel, Hoogovens
Level F 6/15/94	(Holland).
Level E	Added second paragraph, "All secondary
7/15/93	suppliers".  Added China Steel & DNM
Level D	TIGACA CITTIA OCCCT & DIVI
4/15/93	Added first paragraph & Timken Steel strand
Level C	cast.
12/15/92	Added suppliers from India & Yugoslavia -
Level B	Kalyani, Zelzarina Ravne-
8/15/92	Added suppliers from India
Level A	
4/15/92	Correction in Weirton Steel
12/15/91	Issued

Approved By: S. Doyle

<u>Director</u> - Product Validation and Materials Engineering