Electronically published by ABS Houston.
Reference T2195954, dated 16-FEB-2022.

Task – T2195954
Steel Mill Approval – Extension
Certificate No. STML-T2183883-2

Attention: Mr. John Young, JSW Steel (USA) Inc. (WCN: 503385)

The documents shown in the attached list are reviewed or filed for reference in accordance with the applicable requirements of the following and the facility is considered approved to manufacture products for hull application as outlined in the process/product approval.

1. ABS Rules for Materials and Welding, Part 2, 2022

Please note it is the responsibility of the facility to inform ABS of any changes to the manufacturing parameters and request renewal of approval prior to the five-year expiry date.

For any clarifications, contact James Oehrle at +1 281 877 6148, joehrle@eagle.org.

Very truly yours,

Wei-Biao (Bill) Shi
Vice President

Electronically Signed by: Satya Meruva

Documents List

Drawing No.	Rev. No.	Title	Status
20-001 1171590 All Results	-	20-001 Trial Results	Reviewed
20-002 1171591 All Results	-	20-002 Trial Results	Reviewed
20-003 1171592 All Results	-	20-003 Trial Results	Reviewed
20-004 1171593 All Results	-	20-004 Trial Results	Reviewed
20-005 1171594 All Results	-	20-006 Trial Results	Reviewed
20-006 1171595 All Results	-	20-006 Trial Results	Reviewed
20-001 to 20-006 abs chem results	-	Chemistry	Reviewed
20-002 WELD CVN Results	-	20-002 WELD CVN Results	Reviewed
Correspondence	-	Request for Reduced Qualification Test Plan	Reviewed

An electronic copy of the documents appropriately stamped will be returned by FTP/e-mail.

Process/Product Approval

Product	Grade	Thickness	Fine Grain Practice	Casting Practice[1]	Delivery condition[1]
New Approvals					
Plate	ABS - AH32*/36	85 mm (3.343")	Nb	CC	CR
Plate	ABS - AH*/DH*/EH32*/36 Z35	85 mm (3.343")	Nb	CC	N
Slab Source: Ternium Brasil S.A. **Heat Treatment Facility:** In-House					
Plate	ABS - AH*/DH32*/36	83.3 mm (3.28")	Nb	CC	CR

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Product	Grade	Thickness	Fine Grain Practice	Casting Practice[1]	Delivery condition[1]
Plate	ABS - AH*/DH*/EH32*/36 Z35	83.3 mm (3.28")	Nb	CC	N
Slab Source: Companhia Siderurgica do Pecem (WCN: 430924) **Heat Treatment Facility:** In-House					
Existing Approvals					
Plate	ABS – A*/B	75 mm (3.0")	Al	CC	AR
Plate	ABS – A*/B*/D	35 mm (1.38")	Al	CC	AR
Plate	ABS - AH*/DH32*/36	13 mm (0.5")	Al+V	CC	AR
Plate	ABS – AH40	13 mm (0.5")	Al+V	CC	AR
Slab Source: PJSC Azovstal Iron and Steel Works (249129)					
Plate	ABS – A*/B*/D*/E	50.8 mm (2.0")	Al	CC	N
Plate	ABS - AH*/DH*/EH32*/36	63 mm (2.5")	Al+Nb+V	CC	N
Slab Source: PJSC Azovstal Iron and Steel Works (249129) **Heat Treatment Facility:** In-House					
Plate	ABS - A*/B	101.6 mm (4.0")	Al	CC/IC	AR
Plate	ABS – A*/B*/D	35 mm (1.375")	Al	CC	AR
Plate	ABS - AH*/DH32*/36	13 mm (0.5")	Al+V / Al+Nb	CC	AR
Slab Source: JSW Steel Limited (WCN: 840282)					
Plate	ABS - A*/B*D	101.6 mm (4.0")	Al	CC/IC	CR
Plate	ABS - A*/B*D	101.6 mm (4.0")	Al	CC/IC	N
Plate	ABS – A*/B*/D*/E	50.8 mm (2.0")	Al	CC	N
Plate	ABS - AH*/DH32*/36	86.4 mm (3.4")	Al+V / Al+Nb+Ti	CC	CR

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Product	Grade	Thickness	Fine Grain Practice	Casting Practice[1]	Delivery condition[1]
Plate	ABS - AH*/DH*EH32*/36	86.4 mm (3.4")	Al+Nb+Ti	CC	N
Slab Source: JSW Steel Limited (WCN: 840282) **Heat Treatment Facility:** In-House					
Plate	ABS - A*/B*D	83.3 mm (3.28")	Al	CC	CR
Plate	ABS - A*/B*D	83.3 mm (3.28")	Al	CC	N
Plate	ABS - AH*/DH32*/36	83.3 mm (3.28")	Al+V	CC	CR
Slab Source: ArcelorMittal Brasil S.A. (861957) **Heat Treatment Facility:** In-House					
Plate	ABS – A*/B	82.3 mm (3.25")	Al	CC	AR
Plate	ABS – A*/B*/D	35 mm (1.375")	Al	CC	AR
Plate	ABS - AH*/DH32*/36	13 mm (0.5")	Al+V / Al+Nb	CC	AR
Slab Source: ArcelorMittal Mexico S.A. de C.V. (763351)					
Plate	ABS - A*/B*/D	83.3 mm (3.28")	Al	CC	N
Plate	ABS – A*/B*/D	65.5 mm (2.58")	Al	CC/IC	CR
Plate	ABS – A*/B*/D	65.5 mm (2.58")	Al	CC/IC	N
Plate	ABS – A*/B*/D	83 mm (3.25")	Al	CC	CR
Plate	ABS – A*/B*/D	83 mm (3.25")	Al	CC	N
Plate	ABS – A*/B*/D*/E	50.8 mm (2.0")	Al	CC	N
Plate	ABS - AH*/DH32*/36	82.3 mm (3.25)	Al+V	CC	CR

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Product	Grade	Thickness	Fine Grain Practice	Casting Practice[1]	Delivery condition[1]
Plate	ABS - AH*/DH*EH32*/36 Z35	83.3 mm (3.28")	Al+Nb	CC	CR
Plate	ABS - AH*/DH*EH32*/36 Z35	83.3 mm (3.28")	Al+Nb	CC	N
Slab Source: ArcelorMittal Mexico S.A. de C.V. (763351) **Heat Treatment Facility:** In-House					
Plate	ABS - A*/B*D	75 mm (3.0")	Al	CC	CR
Slab Source: JSC Evraz Nizhny Tagil Metallugical Plant (161175) **Heat Treatment Facility:** In-House					
Plate	ABS - AH*/DH32*/36	50 mm (2.0")	Al+V	CC	CR
Slab Source: PJSC Ilyich Iron & Steel Works of Mariupol (367179) **Heat Treatment Facility:** In-House					
Plate	ABS - A*/B	82.3 mm (3.25")	Al	CC	AR
Plate	ABS – A*/B*/D	35 mm (1.375")	Al	CC	AR
Slab Source: Companhia Siderurgica do Pecem (WCN: 430924)					
Plate	ABS – A*/B*/D	83.3 mm (3.28")	Al	CC	CR, N
Plate	ABS – A*/B*/D*/E	50.8 mm (2.0")	Al	CC	CR, N
Plate	ABS - AH*/DH32*/36	83.3 mm (3.28")	Al+V	CC	CR
Slab Source: Companhia Siderurgica do Pecem (WCN: 430924) **Heat Treatment Facility:** In-House					
Plate	ABS – A*/B	44.5 mm (1.75")	Al	CC	AR
Plate	ABS – A*/B*/D	35 mm (1.375")	Al	CC	AR
Plate	ABS - AH*/DH32*/36	13 mm (0.5")	Al+V	CC	AR
Slab Source: Ternium Brasil S.A.					

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Product	Grade	Thickness	Fine Grain Practice	Casting Practice[1]	Delivery condition[1]
Plate	ABS – A*/B*/D	44.5 mm (1.75")	Al	CC	CR
Plate	ABS – A*/B*/D	44.5 mm (1.75")	Al	CC	N
Plate	ABS - AH*/DH32*/36	83.3 mm (3.28")	Al+V	CC	CR
Slab Source: Ternium Brasil S.A. **Heat Treatment Facility:** In-House					
Plate	ABS – A*/B*/D	35 mm (1.375")	Al	CC	AR
Plate	ABS – A*/B	75 mm (3.0")	Al	CC	AR
Slab Source: JSW Steel USA Ohio Inc. (460699)					
Plate	ABS – A*/B*/D	75 mm (3.0")	Al	CC	CR
Slab Source: JSW Steel USA Ohio Inc. (460699) **Heat Treatment Facility:** In-House					

*Approval of these grades is based on qualification tests carried out on the higher grade.

Note 1:

a. CC: Continuous Casting
b. IC: Ingot Cast
c. AR: As Rolled
d. N: Normalized
e. CR: Controlled Rolling

Include: Certificate (STML-T2183883-2)