



28th May 2012

Qinhuangdao Shouqin Metal Material Co Ltd
Duzhuang, Funing Country
Qinhuangdao City, Hebei Province
P.R.China

Refer to:BS/CYW

File Ref: S-6

Re: Plant Survey & Testing

Gentlemen:

A renewal approval survey of Qinhuangdao Shouqin Metal Material Co Ltd, Hebei Province, People's Republic of China, was conducted by an exclusive Surveyor to the American Bureau of Shipping on the 16th May 2012 and subsequent dates. Results of the survey indicated that the mill is capable of producing steel plates as listed on the attachment(s) in accordance with the Rules of this Bureau.

Therefore, Qinhuangdao Shouqin Metal Material Co Ltd may produce the steel plates as listed in the attachment(s) in accordance with ABS Rules, including the witnessing of prescribed tests, provided the material in production is to the satisfaction of the attending Surveyor.

Please note that our plant survey carried out is for the product and process as listed in the attachment(s). When new or special steels or production methods are proposed, data in support of mechanical properties, weldability and compliance with ABS Rules are required by 2-1-2/3, 2-1-3/3 and 2-A4/3.1.2 of ABS Rules at which time another plant survey by an exclusive Surveyor will be required.

Please note that if your company does not produce any grade of ABS hull structural steel plate for a period of one year, our surveyor has to attend your plant again for a plant survey before carrying out any further inspection.

This approval letter is valid until 27th May, 2017 and it is to be renewed on or before the expiration date. This approval letter is also used to replace or supersede all approval letter(s) previously issued.

Renewal of approval is subject to a plant audit and re-approval test as applicable as required by 2-A4/11 of ABS Rules.

Very truly yours,

By

C.Y.Wong
Principal Surveyor

cc: ABS Americas - Houston, MMPT
cc: ABS Greater China – Shanghai, Dalian, Hong Kong

Related ABS Report DL2149039-A

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GREATER CHINA DIVISION

Room A1120, North Tower Mingshi Fortune Centre No. 20 Gangwan Street Zhongshan District, Dalian 116001, P.R. China
Tel: 86-411-8276-8926/6556 Fax: 86-411-8276-8927 WEBSITE: www.eagle.org

Attachment A

Attachment to Approval Letter Dated 28th May 2012

Qinhuangdao Shouqin Metal Material Co Ltd
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Table 1

Product	: Steel Plate
ABS Grades	: A*, B
Deoxidation Practice	: Si Killed
Fine-grain Practice	: --
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: As-Rolled(AR) / Controlled Rolling (CR)
Maximum Thickness	: 16mm (AR), 32mm (CR)
Markings	: AB/A, AB/B

Table 2

Product	: Steel Plate
ABS Grades	: A*, B*, D
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: Al Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Controlled Rolling (CR)
Maximum Thickness	: 50mm
Markings	: AB/A, AB/B, AB/DN



C.Y. Wong
 C.Y. Wong
 Principal Surveyor

Attachment A

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Table 3

Product	: Steel Plate
ABS Grades	: A*, B, D*, E
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: Al Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Normalized (N)
Maximum Thickness	: 130mm (AB/A, AB/B), 50mm (AB/D, AB/E)
Markings	: AB/AN, AB/BN, AB/DN, AB/EN, AB/AN Z35, AB/BN Z35, AB/DN Z35, AB/EN Z35

Table 4

Product	: Steel Plate
ABS Grades	: AH32*, DH32*, AH36*, DH36
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: Al or (Al+Nb) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Controlled Rolling (CR)
Maximum Thickness	: 50mm
Markings	: AB/AH32, AB/DH32N, AB/AH36, AB/DH36N



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Table 5

Product	: Steel Plate
ABS Grades	: AH32*, DH32, EH32
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: Al Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Normalized (N)
Maximum Thickness	: 100mm (AH32, DH32), 50mm (EH32)
Markings	: AB/AH32N, AB/DH32N, AB/EH32N, AB/AH32N Z35, AB/DH32N Z35, AB/EH32N Z35

Table 6

Product	: Steel Plate
ABS Grades	: AH36*, DH36, EH36
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Normalized (N)
Maximum Thickness	: 80mm (AH36, DH36), 50mm (EH36)
Markings	: AB/AH36N, AB/DH36N, AB/EH36N, AB/AH36N Z35, AB/DH36N Z35, AB/EH36N Z35




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Table 7

Product	: Steel Plate
ABS Grades	: AH32*, DH32*, EH32*, AH36*, DH36*, EH36
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb+V+Ti) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Normalized (N)
Maximum Thickness	: 100mm
Markings	: AB/AH32N, AB/DH32N, AB/EH32N, AB/AH32N Z35, AB/DH32N Z35, AB/EH32N Z35 AB/AH36N, AB/DH36N, AB/EH36N, AB/AH36N Z35, AB/DH36N Z35, AB/EH36N Z35

Table 8

Product	: Steel Plate
ABS Grades	: AH32*, DH32*, EH32*, AH36*, DH36*, EH36
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb+Ti) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Thermo-mechanically Controlled Processing (TMCP)
Maximum Thickness	: 60mm
Markings	: AB/AH32, AB/DH32N, AB/EH32, AB/AH32 Z35, AB/DH32N Z35, AB/EH32 Z35, AB/AH36, AB/DH36N, AB/EH36, AB/AH36 Z35, AB/DH36N Z35, AB/EH36 Z35



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Table 9

Product	: Steel Plate
ABS Grades	: AH40*, DH40*, EH40
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb+V+Ti) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Normalized (N)
Maximum Thickness	: 80mm
Markings	: AB/AH40N, AB/DH40N, AB/EH40N, AB/AH40N Z35, AB/DH40N Z35, AB/EH40N Z35

Table 10

Product	: Steel Plate
ABS Grades	: AH40*, DH40*, EH40
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb+V+Ti) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Thermo-mechanically Controlled Processing (TMCP)
Maximum Thickness	: 40mm
Markings	: AB/AH40, AB/DH40N, AB/EH40, AB/AH40 Z35, AB/DH40N Z35, AB/EH40 Z35



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Table 11

Product	: Steel Plate
ABS Grades	: FH32*, FH36*, FH40
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb+V+Ti) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Thermo-mechanically Controlled Processing (TMCP)
Maximum Thickness	: 40mm
Markings	: AB/FH32N, AB/FH36, AB/FH40, AB/FH32 Z35, AB/FH36 Z35, AB/FH40 Z35

Table 12

Product	: Steel Plate
ABS Grades	: AQ43*, DQ43*, EQ43*, AQ47*, DQ47*, EQ47, AQ51*, DQ51*, EQ51
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb+V+Ti) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Thermo-mechanically Controlled Processing (TMCP)
Maximum Thickness	: 50mm
Markings	: AB/AQ43, AB/DQ43, AB/EQ43, AB/AQ47, AB/DQ47, AB/EQ47, AB/AQ51, AB/DQ51, AB/EQ51, AB/AQ43 Z35, AB/DQ43 Z35, AB/EQ43 Z35, AB/AQ47 Z35, AB/DQ47 Z35, AB/EQ47 Z35, AB/AQ51 Z35, AB/DQ51 Z35, AB/EQ51 Z35



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Table 13

Product	: Steel Plate
ABS Grades	: AQ43*, DQ43*, EQ43*, AQ47*, DQ47*, EQ47, AQ51*, DQ51*, EQ51*, AQ56*, DQ56*, EQ56
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb+V+Ti) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Quenched and Tempered (Q&T)
Maximum Thickness	: 80mm
Markings	: AB/AQ43, AB/DQ43, AB/EQ43, AB/AQ47, AB/DQ47, AB/EQ47, AB/AQ51, AB/DQ51, AB/EQ51, AB/AQ56, AB/DQ56, AB/EQ56, AB/AQ43 Z35, AB/DQ43 Z35, AB/EQ43 Z35, AB/AQ47 Z35, AB/DQ47 Z35, AB/EQ47 Z35, AB/AQ51 Z35, AB/DQ51 Z35, AB/EQ51 Z35, AB/AQ56 Z35, AB/DQ56 Z35, AB/EQ56 Z35



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Table 14

Product	: Steel Plate
ABS Grades	: AQ63*, DQ63*, EQ63*, AQ70*, DQ70*, EQ70
Deoxidation Practice	: (Si-Al) Killed
Fine-grain Practice	: (Al+Nb+V+Ti) Treated
Casting Practice	: Continuous Casting (CC)
Rolling/Heat Treatment Practice	: Quenched and Tempered (Q&T)
Maximum Thickness	: 50mm
Markings	: AB/AQ63, AB/DQ63, AB/EQ63, AB/AQ70, AB/DQ70, AB/EQ70, AB/AQ63 Z35, AB/DQ63 Z35, AB/EQ63 Z35, AB/AQ70 Z35, AB/DQ70 Z35, AB/EQ70 Z35

Note: * The approval of asterisk (*) superscripted grades in each one of the above tables are based on qualification test data presented on non-asterisk superscripted grade in the same table, and hence, these derivative benefit grades are to be metallurgically equivalent (in terms of chemistry and processed identically) to the respective qualifying grade, in all aspects.




C.Y. Wong
 Principal Surveyor