

21st December 2009

Medium Plate Mill of
Medium & Heavy Plate Plant of
Angang Steel Co Ltd
Tiexi District, Anshan, Liaoning Province

File Ref: S-6

Refer to: SLC/KCH

P. R. China

Re: Plant Survey & Testing

Gentlemen:

A survey of **Medium Plate Mill of Medium & Heavy Plate Plant of Angang Steel Co Ltd**, Anshan, Liaoning Province, People's Republic of China, was conducted by an exclusive Surveyor to the American Bureau of Shipping on the 30th November, 2009 and subsequent dates. Results of the survey indicated that the mill is capable of producing steel plates/shapes as listed on the attachment(s) in accordance with the Rules of this Bureau.

Therefore, **Medium Plate Plant of Medium & Heavy Plate Plant of Angang Steel Co Ltd** may produce the steel plates/shapes 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.

This approval letter is valid until 1st December, 2014, and is to be renewed on or before the expiration date.

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

This Approval letter is to replace or supersede all the approval letters issued before.

By C.C.Ho
Principal Surveyor

cc: ABS Americas - Houston, MMPT cc: ABS Pacific - Shanghai, Dalian

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Attachment A

Attachment to Approval letter Dated 21st December, 2009

21st December 2009

Medium Plate Mill of Medium & Heavy Plate Plant of Angang Steel Co Ltd

Tiexi District, Anshan, Liaoning Province

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Structural Steel Plate

TABLE 1

Product : Ordinary-Strength Hull Structural Steel Plate

Grades : ABS Grade A and B

Slab Source : Angang No 1, No 2 and No3 Mill

Deoxidation Practice: Si-Al Killed

Fine-Grain Practice: Al Treated

Casting Practice:

Continuous Casting

Rolling/Heat Treatment Practice : As Rolled (AR)

Maximum Thickness : 40mm

Markings : AB/A, AB/B

TABLE 2

Product : Ordinary-Strength Hull Structural Steel Plate

Grades : ABS Grade D

Slab Source : Angang No 1, No 2 and No3 Mill

Deoxidation Practice: Si-Al Killed

Fine-Grain Practice: Al Treated

Casting Practice: Continuous Casting

Rolling/Heat Treatment Practice : Controlled Rolled (CR)

Maximum Thickness : 40mm

Markings : AB/D

K.C.Ho Principal Surveyor



Attachment A

Attachment to Approval letter Dated 21st December, 2009

21st December 2009

Medium Plate Mill of Medium & Heavy Plate Plant of Angang Steel Co Ltd Tiexi District, Anshan, Liaoning Province Refer to: SLC/KCH

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TABLE 3

Product : Higher-Strength Hull Structural Steel Plate

Grades: ABS Grade AH32*, DH32*, AH36 and DH36

Slab Source : Angang No 1, No 2 and No3 Mill

Deoxidation Practice: Si-Al Killed

Fine-Grain Practice: (AI +Nb)Treated

Casting Practice: Conti

Continuous Casting

Rolling/Heat Treatment Practice : Controlled Rolled (CR)

Maximum Thickness : 30mm

Markings: AB/AH32, AB/DH32, AB/AH36, AB/DH36

TABLE 4

Product : Higher-Strength Hull Structural Steel Plate

Grades : ABS Grade AH32*, DH32*, AH36 and DH36

Slab Source : Angang No 1, No 2 and No3 Mill

Deoxidation Practice: Si-Al Killed

Fine-Grain Practice: (AI + Nb + V)Treated

Casting Practice: Continuous Casting

Rolling/Heat Treatment Practice : Controlled Rolled (CR)

Maximum Thickness : 40mm

Markings: AB/AH32, AB/DH32, AB/AH36, AB/DH36

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

See also approval letter dated 21 Dec 2009 for term and condition and also for the expiry date

K.C.Ho Principal Surveyor