



MARINE DIVISION

Certificate number: 16951/B0 BV

File number: MAT 28125

Product code: 90061

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

APPROVAL CERTIFICATE for MATERIALS

This certificate is issued to

4300 Heavy Plate Mill of Angang Steel Company Ltd.
Anshan - CHINA

for the type of product

NORMAL STRENGTH HULL STEEL ROLLED PRODUCTS

Hot rolled plates in steel grades A, B, D and E including Z25-Z35 grades

Requirements:

Bureau Veritas Rules on Materials and Welding for the Classification of Marine Units

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 20 Sep 2016

For BUREAU VERITAS,

At BV SHANGHAI, on 20 Sep 2011,

Jennifer Zhang



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Hot rolled steel plates.

Steel Grade	Deoxydation practice & Refining elements	Delivery conditions
A including Z25 and Z35	Fully Killed and Al fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 100mm
B including Z25 and Z35	Fully Killed and Al fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 100mm
D including Z25 and Z35	Fully Killed and Al fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 100mm
E including Z25 and Z35	Fully Killed and Al fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 100mm

Steelmaking by Torpedo Car Desulphurization (TDS), LD converters and Ladle Furnace.
Plates made by hot rolling using Thermo-Mechanically Controlled Process.
Continuous Casting

2. DOCUMENTS AND DRAWINGS :

Nil.

3. TEST REPORTS :

"Approval Test Reports Parts 1-E, 6-CTOD, 7-S-Print, 8-Original Records, 9-Appendix" issued by Angang New Steel Company Limited and dated February 2006

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification.

5. PRODUCTION SURVEY REQUIREMENTS :

The hot rolled steel plates are to be manufactured, examined and tested by 4300 Heavy Plate Mill of Angang Steel Company Ltd. in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

Arrangements shall be made for a Society's Surveyor to attend the relevant tests and examinations at manufacturer's works or to perform the relevant audits when an alternative survey scheme (BV Mode I) has been agreed. Relevant Bureau Veritas certificate will be issued after satisfactory completion of the procedure.

6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for Classification.

7. OTHERS :

This certificate cancels and replaces approval number 16951/A0 BV issued by the Society.



*** END OF CERTIFICATE ***



MARINE DIVISION

Certificate number: 16952/B0 BV

File number: MAT 28125

Product code: 90071

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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APPROVAL CERTIFICATE for MATERIALS

This certificate is issued to

4300 Heavy Plate Mill of Angang Steel Company Ltd.

Anshan - CHINA

for the type of product

HIGHER STRENGTH HULL STEEL ROLLED PRODUCTS

Hot Rolled plates in steel grades AH32, AH36, AH40, DH32, DH36, DH40, EH32, EH36, EH40, FH32, FH36 and FH40 including Z25-Z35 grades.

Requirements:

Bureau Veritas Rules on Materials and Welding for the Classification of Marine Units

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 20 Sep 2016

For BUREAU VERITAS,

At BV SHANGHAI, on 20 Sep 2011,

Jennifer Zhang



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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Hot rolled steel plates.

Steel Grade	Deoxydation practice & Refining elements	Delivery conditions
AH32, AH36, AH40 including Z25 and Z35	Fully killed and Al + V + Nb fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 100mm
DH32, DH36, DH40 including Z25 and Z35	Fully killed and Al + V + Nb fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 100mm
EH32, EH36, EH40 including Z25 and Z35	Fully killed and Al + V + Nb fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 100mm
FH32, FH36, FH40 including Z25 and Z35	Fully killed and Al + V + Nb fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 100mm

Steelmaking by Torpedo Car Desulphurization (TDS), LD converters and Ladle Furnace.

Continuous Casting

Plates made by hot rolling using Thermo-Mechanically Controlled Process.

2. DOCUMENTS AND DRAWINGS :

Nil.

3. TEST REPORTS :

"Approval Test Reports Parts 2-FH32, 3-FH40, 6-CTOD, 7-S-Print, 8-Original Records, 9-Appendix" issued by Angang New Steel Company Limited and dated February 2006.

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification.

5. PRODUCTION SURVEY REQUIREMENTS :

The hot rolled steel plates are to be manufactured, examined and tested by 4300 Heavy Plate Mill of Angang Steel Company Ltd. in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

Arrangements shall be made for a Society's Surveyor to attend the relevant tests and examinations at manufacturer's works or to perform the relevant audits when an alternative survey scheme (BV Mode I) has been agreed. Relevant Bureau Veritas certificate will be issued after satisfactory completion of the procedure.

6. MARKING OF PRODUCT:

As per Bureau Veritas Rules for Classification.

7. OTHERS :

This certificate cancels and replaces approval number 16952/A0 BV issued by the Society.

*** END OF CERTIFICATE ***





MARINE DIVISION

Certificate number: 17291/B0 BV

File number: MAT 28125

Product code: 9009I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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APPROVAL CERTIFICATE for MATERIALS

This certificate is issued to

4300 Heavy Plate Mill of Angang Steel Company Ltd.

Anshan - CHINA

for the type of product

EXTRA HIGH STRENGTH STEEL ROLLED PRODUCTS

Hot rolled plates in steel grades AH420, AH460, AH500, AH550, DH420, DH460, DH500, DH550, EH420, EH460, EH500, EH550, FH420, FH460, FH500 and FH550,

Requirements:

Bureau Veritas Rules on Materials and Welding for the Classification of Marine Units

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 20 Sep 2016

For BUREAU VERITAS,

At BV SHANGHAI, on 20 Sep 2011,

Jennifer Zhang



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Hot rolled steel plates.

Steel Grade	Deoxydation practice & Refining elements	Delivery conditions
AH420, AH460, AH500, AH550 including Z25 and Z35	Fully killed and Al + Nb fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 80mm
DH420, DH460, DH500, DH550 including Z25 and Z35	Fully killed and Al + Nb fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 80mm
EH420, EH460, EH500, EH550 including Z25 and Z35	Fully killed and Al + Nb fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 80mm
FH420, FH460, FH500, FH550 including Z25 and Z35	Fully killed and Al + Nb fine grain treated	Thermo-mechanical rolling (TM) with maximum thickness 80mm

Steelmaking by Torpedo Car Desulphurization (TDS), LD converters and Ladle Furnace.
Plates made by hot rolling using Thermo-Mechanically Controlled Process.
Continuous Casting.

2. DOCUMENTS AND DRAWINGS :

Nil.

3. TEST REPORTS :

"Approval Test Reports Parts 4-FH460, 5-FH550, 6-CTOD, 7-S-Print, 8-Original Records, 9-Appendix" issued by Angang New Steel Company Limited and dated February 2006.

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification.

5. PRODUCTION SURVEY REQUIREMENTS :

The hot rolled steel plates are to be manufactured, examined and tested by 4300 Heavy Plate Mill of Angang Steel Company Ltd. in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

Arrangements shall be made for a Society's Surveyor to attend the relevant tests and examinations at manufacturer's works or to perform the relevant audits when an alternative survey scheme (BV Mode I) has been agreed. Relevant Bureau Veritas certificate will be issued after satisfactory completion of the procedure.

6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for Classification.

7. OTHERS :

This certificate cancels and replaces approval number 17291/A0 BV issued by the Society.



*** END OF CERTIFICATE ***