

MARINE DIVISION

17 bis Place des Reflets - La Défense 2
92400 Courbevoie - France

Tel. 33 1 42 91 52 91
Fax. 33 1 42 91 28 94
www.veristar.com



Certificate number: 09787/A1 BV

File number : MAT 2838

Product code : 8999I

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

APPROVAL CERTIFICATE for MATERIALS

as per Bureau Veritas Classification Rules

This certificate is issued to

COMPANHIA SIDERURGICA DE TUBARÃO

Serra - ES - BRAZIL

for the product

SEMI-FINISHED PRODUCTS

Continuous cast slabs for rolling in steel grade A, B, D, E, AH32, DH32, EH32, AH36, DH36, EH36

Regulations and standards :

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 of the Regulations and standards mentioned above.

This certificate is valid until : 26 Sep 2010

At Paris la Défense, on : 26 Sep 2005

For BUREAU VERITAS,
By order of the Secretary

Approval office

Local office : BV RIO DE JANEIRO
Surveyor : F. Assis

J. BENOIT



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. 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 :

Continuous cast slabs to be rolled in stel grade A, B, D, E, AH32, DH32, EH32, AH36, DH36, EH36.
Steelmaking by Basic Oxygen process;

Typical dimensions : Thickness 250mm - Width 1880mm

Steel type	Deoxydation & Refining	Delivery condition
A, B, D	Killed and Al treated	As cast.
E	Killed and Al+Nb+Ti treated	As cast.
AH32, DH32, AH36, DH36	Killed and Al treated	As cast.
EH32, EH36	Killed and Al+Nb+Ti treated	As cast.

2. DOCUMENTS AND DRAWINGS :

Nil.

3. TEST REPORTS :

- "Continuous casting test approval plan - AH36/DH36 - July 1999" issued by Companhia Siderurgica de Tubarao and dated July 1999.
- "Test report" issued by Dongkuk Steel Mill Co., Pohang Works and dated October 1999.
- "Test report" issued by Dongkuk Steel Mill Co., Pohang Works and dated 18 August 2005.
- "CST databook - slabs production May 14-15th, 2005" issued by Companhia Siderurgica de Tubarao.

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification.

The specification of each steel grade is to be agreed between Companhia Siderurgica de Tubarao (CST) and the rolling mill according to the type of steel and rolling process approved by Bureau Veritas at the rolling mill.

5. PRODUCTION SURVEY REQUIREMENTS :

The products are to be manufactured, inspected and tested according to the requirements of Bureau Veritas Rules for Classification. Arrangements shall be made for a Society's Surveyor to carry out surveys at manufacturer's works or relevant audits when an alternative survey scheme, BV Mode I, has been arranged.

6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for the Classification of Steel Ships.

7. OTHERS :

This certificate cancels and replaces approvals number AC/BR-03-01-234, AC/BR-03-02-264, AR/BR-03-01-248, AR/BR-03-02-274 , 09787/A0 BV issued on 01 March 2000.

*** END OF CERTIFICATE ***

