



Marine & Offshore  
Division

Certificate number: 11205/B0 BV

File number: MAT 3115-2010

Product code: 8999H

*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*

**GERDAU ACOMINAS S/A - ON GERDAU ACOMINAS**  
Minas Gerais - BRAZIL

*for the type of product*

### SEMI-FINISHED PRODUCTS

Slabs, blooms, billets and ingots for rolled products in steel grades A to DH36

Rolled slabs, blooms, billets in carbon-manganese steel for forgings

#### 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: 27 Feb 2020**

For BUREAU VERITAS,

At BV RIO DE JANEIRO, on 27 Feb 2015,

Francisco Assis



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 & Offshore 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 :

Semi-finished products for rolled products such as shapes, plates.

Type of products	Type of Casting	Deoxydation practice and Refining	Delivery conditions
Slabs	Continuous Casting	Al-Killed and fine grain treated	As Cast with maximum thickness 250mm
Blooms	Continuous Casting	Al-Killed and fine grain treated	As Cast with maximum size 300x460mm
Billets	Continuous Casting	Al-Killed and fine grain treated	As Cast with maximum size 180x180mm
Ingot	Ingot Casting	Al-Killed and fine grain treated	As Cast with maximum weight 21tons.

Semi-finished products in C-Mn steel for forgings.

Type of products	Type of Casting	Deoxydation practice and Refining	Delivery conditions
Slabs	Ingot Casting	Al-Killed and fine grain treated	As Rolled with maximum thickness 450mm
Blooms	Ingot Casting	Al-Killed and fine grain treated	As Rolled with maximum size 900x900mm
Billets	Ingot Casting	Al-Killed and fine grain treated	As Rolled with maximum size 180x180mm

Steelmaking in BOF and LD converter.

### 2. DOCUMENTS AND DRAWINGS :

- "Qualification process for forging and hot rolling products" issued by Gerdau Acominas and dated November 2009.
- "Qualification process for hot rolled structural shapes" issued by Gerdau Acominas and dated November 2009 2009.
- "Qualification process for forging products" issued by Gerdau Acominas and dated June 2009.
- "Qualification process for forging and hot rolling products" issued by Gerdau Acominas and dated June 2009.

### 3. TEST REPORTS :

- "Qualification process for forging and hot rolling products" issued by Gerdau Acominas and dated November 2009.
- "Qualification process for hot rolled structural shapes" issued by Gerdau Acominas and dated November 2009.

### 4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification. Tests on shapes made at Gerdau Acominas S/A. Chemical composition, tensile properties and Charpy-V notch test requirements are to be as per Bureau Veritas Materials Rules NR 216.

### 5. PRODUCTION SURVEY REQUIREMENTS :

The steel semi-finished products are to be supplied by Gerdau Acominas in compliance with the type described in this certificate. This type of product is within the category HBV of Bureau Veritas Rule Note NR320. Gerdau Acominas has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products :

**Gerdau Acominas S/A - on Gerdau Acominas**  
Rodovia M.G.443 - km 5  
35406-000 Ouro Branco - Minas Gerai - Brazil

### 6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for Classification.

### 7. OTHERS :

This certificate replaces approvals No.11205/A0 BV and No.11205/A1 BV.

\*\*\* END OF CERTIFICATE \*\*\*