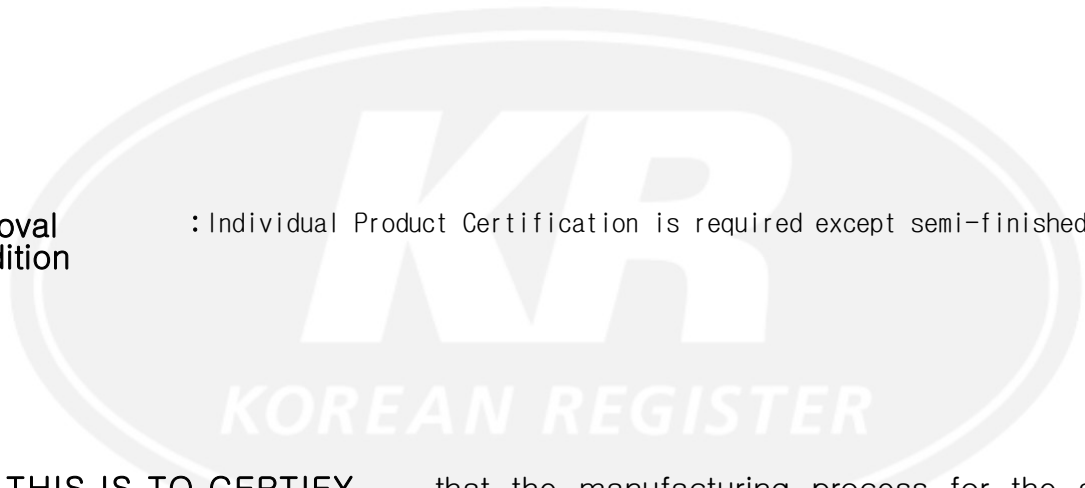




APPROVAL CERTIFICATE FOR MANUFACTURING PROCESS

Certificate No. : SAO04284-SP001 Initial Approval: 21st May, 1992
Product : Semi-Finished Products and Rolled Steels
Manufacturer : ArcelorMittal Brasil S.A.
Av. Brigadeiro Eduardo Gomes, no 526, Polo Industrial Tubarao, Serra
, ES, Brazil - CEP: 29160-904
Product Description : Semi-Finished Products
Rolled Steel Coils and De-coiled Plates for Hull Structures
* See Appendix 1

Approval Condition : Individual Product Certification is required except semi-finished products.



THIS IS TO CERTIFY that the manufacturing process for the above mentioned product has been approved in accordance with the relevant requirement of Rules and / or of the recognized standards as follows.
Pt. 2, Ch. 1, Art. 301 of the Rules for Classification of Steel Ships.

This Certificate is valid until 24th November, 2025
Issued at Busan, Korea on 14th December, 2020



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME20043638174) and certificate No.(SAO04284-SP001).



KOREAN REGISTER

General Manager of
Marine & Ocean Equipment
Team

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as

Appendi 1

Product Description and/or Approval Condition

Certificate No : SAO04284-SP001

Date of Issue : 14th December, 2020

※ Abbreviations

BOC : Basic Oxygen Converter
 CC : Continuous Casting
 AR : As Rolled

◎ Semi-Finished Products

Type	Steel making	Grades	Thickness (mm)
Slabs	BOC, CC	Carbon steel (*)	200 - 250

(*) For rolled steels for hull or welded structures, grades are limited to A, B, D, E, AH/DH/EH32, AH/DH/EH36 or equivalent.

◎ Rolled Steel Coils for Hull Structures

Grade	Z-quality	Steel making	Deoxidation	Grain Refining Element	Thickness Max. (mm)	Heat Treatment
A, B, D	-	BOC, CC	Killed	Al	19	AR
AH32, AH36	-	BOC, CC	Killed	Al+Nb	19	AR

Remark

De-coiled plates cut and processed by subcontractors, Metalser and Perfilados Rio Doce, may be accepted under ArcelorMittal Brazil's complete responsibility.

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