



Marine & Offshore
Division

Certificate number: 09870/D0 BV

File number: MAT 12109/01

Product code: 9007I

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

ILYICH IRON STEEL WORKS

Mariupol - UKRAINE

for the type of product

HIGHER STRENGTH HULL STEEL ROLLED PRODUCTS

Hot rolled plates in steel grades AH32, DH32, EH32, AH36, DH36 and EH36 .

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: 19 Jan 2022

For BUREAU VERITAS,

At BV ODESSA, on 19 Jan 2017,

Evgueni KUZNETSOV



THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Hot rolled plates.

Steel grade	Deoxydation practice & Refining	Delivery conditions
AH32-DH32-EH32 (Z35) ₁	Si-Al killed and Al+Nb+Ti+V fine grain treated	Thermomechanically Rolled (TM) up to 50mm
AH36-DH36-EH36 (Z35) ₁	Si-Al killed and Al+Nb+Ti+V fine grain treated	Thermomechanically Rolled (TM) up to 50mm

₁ Steels plates with specified through thickness properties having thickness not less than 15mm.

Steelmaking by Basic Oxygen Converter LD. Continuous casting.

2. DOCUMENTS AND DRAWINGS :

- "REPORT on manufacturing of rolled normal and high strength hull steel plates according to rules of Bureau Veritas at Ilyich Iron & Steel Works of Mariupol during the period of August 2006-August 2011" issued by ILYICH IRON & STEEL WORKS OF MARIUPOL and dated 24 November 2011.

3. TEST REPORTS :

- "REPORT on approval of shipbuilding plate production at Ilych Iron & Steel Works by Bureau Veritas (BV)" issued by ILYICH IRON & STEEL WORKS OF MARIUPOL and dated 5 May 2006.

- "REPORT Technology of Production and Testing the Plate for Shipbuilding, Grade A (AR) of thickness up to 50mm, BV DH36 (N) of thickness up to 80mm and BV D (AR, NR), BV EH36 (TM) of thickness up to 30mm" issued by ILYICH IRON & STEEL WORKS OF MARIUPOL and dated July 1999.

- "REPORT on manufacturing of rolled normal and high strength hull steel plates according to rules of Bureau Veritas at Ilyich Iron & Steel Works of Mariupol during the period of August 2006-August 2011" issued by ILYICH IRON & STEEL WORKS OF MARIUPOL and dated 24 November 2011.

4. APPLICATION / LIMITATION :

As per Bureau Veritas Rules for Classification.

5. PRODUCTION SURVEY REQUIREMENTS :

The rolled steel products are to be supplied by ILYICH IRON & STEEL WORKS in compliance with the type and the requirements described in this certificate. This type of product is within the category IBV of Bureau Veritas Rule Note NR320. BV product certificate is required.

6. MARKING OF PRODUCT :

As per Bureau Veritas Rules for Classification. In addition to the material grade designation, products are to be marked with the symbol Z35 as appropriate.

7. OTHERS :

This certificate replaces approvals from No.09870/A0 BV to No.09870/C1 BV.

*** END OF CERTIFICATE ***