



**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS**
No. **FAB001418XY**

This is to certify that the manufacture of the product identified below is in compliance with the applicable requirements of the RINA Rules for the Approval of Manufacturers of Materials.

<i>Description</i>	Normal strength and higher strength hull steel plates
<i>Type</i>	Hot rolled plates
<i>Manufacturer</i>	GRADES A - B - D - E - AH32/36/40 - DH32/36/40 - EH32/36/40
<i>Place of manufacture</i>	PJSC "ILYICH IRON AND STEEL WORKS OF MARIUPOL" 1, LEVCHENKO STREET, MARIUPOL DONETSK REGION, 87504 UKRAINE
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

Issued in **RINA Ukraine Survey Station** on **September 5, 2018**. This Certificate is valid until **July 31, 2023**



RINA Services S.p.A.
Marius Fugaru

This certificate consists of this page and 1 enclosure

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Enclosure - Page 1 of 1

Hot rolled plates

APPROVAL CONDITIONS

Deoxidation practice, condition of supply and thickness:

Normal Strength steels:						
Grade or type:	Steelmaking¹:	Fine grain treatment:	Deoxidation practice:	Delivery condition²:	Max. thickness (mm):	Z-quality:
A	BOC, CC	Al, Al-Ti	Si-Al	AR NR	50 50	- Z35
B	BOC, CC	Al, Al-Ti	Si-Al	AR NR	50 50	- Z35
D	BOC, CC	Al, Al-Ti	Si-Al	AR NR	50 50	- Z35
E	BOC, CC	Al-Ti	Si-Al	TM	50	Z35
High Strength steels:						
Grade or type:	Steelmaking¹:	Fine grain treatment:	Deoxidation practice:	Delivery condition²:	Max. thickness (mm):	Z-quality:
AH32/36/40 DH32/36/40 EH32/36/40	BOC, CC	Al-Nb-V-Ti, Al-Nb-Ti, Al-V-Ti	Si-Al	TM	50	Z35

Remarks:

¹ **BOC:** Basic Oxygen Converter; **CC:** Continuous Casting.

² **AR:** As Rolled; **NR:** Normalizing Rolling; **TM:** Thermo-Mechanical Rolling.

Survey conditions:

The plates are to be in compliance in all respects with the relevant RINA Rules and are to be tested accordingly.

General conditions for the approval:

- The approval is granted on condition that the RINA Rules for the approval, manufacture, testing and certification of materials are complied with in all respects.
- RINA is to be notified of any change of materials, manufacturing process, quality control routines that may affect the validity of this certificate.

RINA Ukraine Survey Station

September 5, 2018