

Certificate No : MD00/0775/0008/1

PJSC "ILYICH IRON AND STEEL WORKS OF MARIUPOL" 1 Levchenko Street Mariupol 87504 Ukraine

has been approved as a manufacturer in accordance with the requirements of Lloyd's Register for :-

Steelmaking, Semi-Finished Products and Plates

This approval is subject to compliance with the Rules for the Manufacture, Testing and Certification of Materials. The full details of the processes and grades to which this approval applies are given in the Appendix of this certificate.

Lloyd's Register is to be notified of any change that may affect the validity of this Certificate.

This Certificate is issued to the above manufacturer and is valid until the date given below.

Valid Until: 30 June 2022 Date of Issue: 11 July 2019

Lili Hou

Senior Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group



Certificate No : MD00/0775/0008/1

Appendix 1

PJSC "ILYICH IRON AND STEEL WORKS OF MARIUPOL"

1 Levchenko Street Mariupol 87504 Ukraine

Steelmaking	B.O.S. / Con Cast	Grades		
		As below		
Semi-Finished Products	Slabs	Grades	mm thickness Maximum	
		As below	250.0	
Plates	Normal Strength	Grades	mm thickness Maximum	
As Rolled	Fine Grain Al	A, B, D	25.0	
As Rolled	Killed	A	25.0	
Normalizing Rolled	Fine Grain Al+Ti	A, B, D	50.0	
Normalizing Rolled	Fine Grain Al	A, B, D	50.0	
Thermo Mechanical	Fine Grain Al+Ti	A, B, D, E	50.0	
Plates	Higher Strength	Grades	mm thickness Maximum	
As Rolled	Fine Grain Al	AH27S, AH32, AH36, DH27S, DH32, DH36	25.0	
Thermo Mechanical	Fine Grain Al+V	AH27S, AH32, AH36, DH27S, DH32, DH36, DH	I40, EH27S, 25.0	
		EH32, EH36, EH40		
Thermo Mechanical	Fine Grain Al+Nb+Ti	AH27S, AH32, AH36, DH27S, DH32, DH36, EH	27S, EH32, 50.0	
		EH36		
Thermo Mechanical	Fine Grain Al+V+Ti	AH27S, AH32, AH36, DH27S, DH32, DH36, EH	27S, EH32, 50.0	
		EH36		
Plates	Boiler & Pressure Vessel	Grades	mm thickness Maximum	
As Rolled	Killed	360AR, 410AR, 460AR	25.0	
Normalizing Rolled	Fine Grain Al+Ti	360FG, 410FG	50.0	
Normalizing Rolled	Fine Grain Al	360FG, 410FG	50.0	

All grades and thicknesses with specified through thickness properties. Notation Z25 or Z35 may be added.

Valid Until: 30 June 2022 Date of Issue: 11 July 2019

Lili Hou

Senior Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group

A member of the Lloyd's Register group. Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.