



Certificate No : MD00/0779/0010/1

PJSC "AZOVSTAL IRON & STEEL WORKS"
1, Leporsky St.
Mariupol 87500
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 : 13 February 2021
Date of Issue : 23 March 2018

A handwritten signature in blue ink, appearing to read 'Clive Arnold', is written over a horizontal line.

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



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Appendix 1

PJSC "AZOVSTAL IRON & STEEL WORKS"
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Steelmaking	B.O.S. / Con Cast	Grades	
		As below	
Semi-Finished Products	Slabs	Grades	mm thickness Maximum
		Normal strength, Higher Strength	270.0
Plates	Normal Strength	Grades	mm thickness Maximum
Normalized	Fine Grain Al	D, E	50.0
Normalized	Fine Grain Al	A, B	100.0
Normalized	Killed	A	50.0
Normalizing Rolled	Fine Grain Al	A, B, D	50.0
Plates	Higher Strength	Grades	mm thickness Maximum
Normalized	Fine Grain Al+Nb	AH27S, AH32, AH36, DH27S, DH32, DH36, EH27S, EH32, EH36	50.0
Normalized	Fine Grain Al+Nb+V	AH27S, AH32, AH36, DH27S, DH32, DH36, EH27S, EH32, EH36	50.0
Normalized	Fine Grain Al+V	AH27S, AH32, AH36, AH40, DH27S, DH32, DH36, DH40, EH27S, EH32, EH36, EH40	50.0
Normalized	Fine Grain Al	AH27S, AH32, AH36, DH27S, DH32, DH36, EH27S, EH32, EH36	50.0
Normalizing Rolled	Fine Grain Al+Nb	AH27S, AH32, AH36, DH27S, DH32, DH36	20.0
Normalizing Rolled	Fine Grain Al+Nb+V	AH27S, AH32, AH36, DH27S, DH32, DH36	50.0
Quenched and Tempered	Fine Grain Al+Nb	AH36, DH36, EH36	50.0
Quenched and Tempered	Fine Grain Al+V	AH40, DH40, EH40	50.0

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Appendix 2

PJSC "AZOVSTAL IRON & STEEL WORKS"

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Plates	Boiler & Pressure Vessel	Grades	mm thickness Maximum
Normalized	Fine Grain Al+Nb	360FG, 410FG, 460FG, 490FG, 510FG	50.0
Normalized	Fine Grain Al+Nb+V	360FG, 410FG, 460FG, 490FG, 510FG	50.0
Normalized	Fine Grain Al+V	360FG, 410FG, 460FG, 490FG, 510FG	50.0
Normalized	Fine Grain Al	360FG, 410FG, 460FG, 490FG, 510FG	50.0
Normalized	Killed	360, 410	50.0
Normalizing Rolled	Fine Grain Al+Nb	360FG, 410FG, 460FG, 490FG, 510FG	20.0
Normalizing Rolled	Fine Grain Al+Nb+V	360FG, 410FG, 460FG, 490FG, 510FG	50.0
Normalizing Rolled	Fine Grain Al	360FG, 410FG	50.0

Including plates with specified through thickness properties. Z35 may be applied to all grades and thicknesses.

Slabs as semi finished products to the maximum thickness shown above are approved for further processing into rolled products

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