



Certificate No : MD00/0403/0010/1

NLMK DANSTEEL A/S
Havnevej 33
DK-3300 Frederiksværk
Denmark

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

Steel 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 : 03 January 2021
Date of Issue : 04 September 2018

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



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Appendix 1

NLMK DANSTEEL A/S

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Plates	Normal Strength	Grades	mm thickness Maximum
As Rolled	Fine Grain Al	A, B	100.0
Normalized	Fine Grain Al	E	60.0
Normalized	Fine Grain Al	A, B, D	100.0
Plates	Higher Strength	Grades	mm thickness Maximum
As Rolled	Fine Grain Al+V+Ti	AH32, AH36	13.0
Normalized	Fine Grain Al+Nb	EH32, EH36, EH36S	60.0
Normalized	Fine Grain Al+Nb	AH32, AH36, DH27S, DH32, DH36	100.0
Normalized	Fine Grain Al+Nb+V	EH32, EH36, EH36S	80.0
Normalized	Fine Grain Al+Nb+V	AH32, AH36, DH27S, DH32, DH36	100.0
Normalized	Fine Grain Al+V	EH32, EH36, EH36S	60.0
Normalized	Fine Grain Al+V	AH27S, AH32, AH36, DH27S, DH32, DH36	100.0
Normalized	Fine Grain Al	EH32, EH36, EH36S	60.0
Normalized	Fine Grain Al	AH32, AH36, DH32, DH36	100.0
Thermo Mechanical	Fine Grain Al+Nb	AH27S, AH32, AH36, AH40, DH27S, DH32, DH36, DH40, EH27S, EH32, EH36, EH40	60.0
Thermo Mechanical	Fine Grain Al+Nb+V+Ti	AH27S, AH32, AH36, DH27S, DH32, DH36, EH27S, EH32, EH36, FH27S, FH32, FH36	60.0
Plates	Boiler & Pressure Vessel	Grades	mm thickness Maximum
As Rolled	Fine Grain Al	360AR, 410AR	40.0
Normalized	Fine Grain Al+Nb	360FG, 410FG, 460FG, 490FG, 510FG	100.0
Normalized	Fine Grain Al+Nb+V	360FG, 410FG, 460FG, 490FG, 510FG	100.0
Normalized	Fine Grain Al+V	360FG, 410FG, 460FG, 490FG, 510FG	100.0
Normalized	Fine Grain Al	360FG, 410FG, 460FG, 490FG, 510FG	100.0

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Appendix 2

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All grades and thicknesses accepted with specified through thickness properties, Z25 and Z35 designations.

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

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