



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00002W1
Revision No:
1

This is to certify:

That

Alleima Tube AB
Storgatan 2, 811 81 Sandviken,
Sweden

is an approved manufacturer of
Steelmaking

in accordance with
DNV rules for classification – Ships

and the following particulars:

Application area	Steelmaking
Products	Semi-finished products for rolling or forging stock (round and square billets)
Material type	Austenitic stainless, Austenitic-ferritic (Duplex) stainless, Nickel Alloys
Manufacturing method	EAF (VAR), AOD, LF, IC or CC
Deoxidation	Killed
Max weight [kg]	See page 2
Max. thickness / diameter	See page 2
Heat treatment condition	See page 2

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.
Materials to be applied to DNV classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2022-11-02**

for **DNV**

This Certificate is valid until **2024-06-14**.

DNV local unit: **Sweden CMC**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Particulars of the approval

Semi-finished products

Steel type	Product	Steel making ^{1) 3)}	Dimension range (round form)	Dimension range (square form)	Heat treatment condition ²⁾
Austenitic stainless steel	Billets	EAF, AOD, LF, CC or IC,	80 – 450 mm	80 – 450 mm	AR, AF
Austenitic-ferritic (Duplex) stainless steel	Billets	EAF, AOD, LF, CC or IC	80 – 350 mm	80 – 350 mm	AR, AF
Austenitic stainless steel grade 904L (1.4539)	Billets	EAF, AOD, LF, CC or IC	80 – 350 mm	80 – 350 mm	AR, AF
Austenitic stainless steel grade 254SMO	Billets	EAF, AOD, LF, CC or IC	80 – 350 mm	80 – 350 mm	AR, AF
Nickel Alloy grade AISI A20 / A825	Billets	EAF, AOD, LF, CC or IC	80 – 350 mm	80 – 350 mm	AR, AF

Remarks:

- 1) EAF: Electric Arc Furnace
 AOD: Argon Oxygen Decarburization
 CC: Continuous Casting
 IC: Ingot Casting
- 2) AR: As rolled; AF: As forged
- 3) Optional VAR (Vacuum Arc Remelting) furnace to produce a steel with a low content of non-metallic inclusions