

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That
Alchemia S.A.
Oddział Stalownia Batory
Dyrekcyjna 6, 41-506 Chorzów, Poland

is an approved manufacturer of
Steelmaking

in accordance with
DNV GL rules for classification – Ships
Offshore Standard DNVGL-OS-B101

and the following particulars:

Product	Semi-finished product (Ingots) intended for rolling and forging or piping stock
Steel types	Hull structural steel grades, see page 2, Carbon and carbon-manganese steels, Alloy steels, Martensitic stainless steels
Steelmaking	Electric arc furnace, Ingot casting
Deoxidation	Killed
Fine grain elements	See page 2
Delivery conditions	As cast
Max. thickness/diam.	See page 2
Remarks	See particulars of the approval

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

Issued at **Høvik** on **2017-09-25**

for **DNV GL**

This Certificate is valid until **2020-09-24**.

DNV GL local station: **Katowice**

Approval Engineer: **Dechun Lou**

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Hanne Anita Hjerpetjønn
Head of Section



Job Id: **263.11-004950-4**
Certificate No: **AMMM00000U9**
Revision No: **2**

Particulars of the approval

Semi-finished products (Ingots) intended for rolling and forging/piping stock:

Steel grades/types	Steelmaking ¹⁾	Fine grain elements	Delivery conditions ³⁾	Max. thickness/diameter, (mm)	Max. weight, kg
VL A, VL B, VL D, VL E,	EAF+ LF or VAD, IC	Al	AC	1398	17300
VL A32, VL D32, VL E32	EAF+ LF or VAD, IC	Al+Nb	AC	1398	17300
VL A36, VL D36, VL E36	EAF + LF or VAD, IC	Al	AC	1398	17300
C and C-Mn Steels	EAF+ LF or VAD, IC	²⁾	AC	1398	17300
Alloy Steels	EAF+ LF or VAD, IC	²⁾	AC	1398	17300
Martenstic stainless steels	EAF+ LF or VAD, IC	-	AC	1398	17300

Remarks:

- 1) EAF: Electric arc furnace; LF: Ladle Furnace; VAD: Vacuum arc degassing; IC: Ingot casting.
- 2) Fine grain element(s) may be given in accordance with relevant standards or Rules.
- 3) AC: as cast.