



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00000XW**  
Revision No:  
**7**

This is to certify:

That

**INDUSTEEL FRANCE SAS**  
118 Route des Etaings - B.P. 368, Châteauneuf 42803,  
Rive-de-Gier Cedex,  
France

is an approved manufacturer of  
**Steelmaking and Rolled Steel Products**

in accordance with

**DNV rules for classification – Ships**  
**DNV-OS-B101 – Metallic materials**  
**DNV class programme – DNV-CP-0243 Rolled steel products – non stainless steel**

and the following particulars:

<b>Product</b>	<b>Plates</b>
<b>Grade(s)</b>	<b>See page 2</b>
<b>Steelmaking</b>	<b>Electric arc furnace, Ingot casting</b>
<b>Deoxidation</b>	<b>Killed</b>
<b>Fine grain elements</b>	<b>See page 2</b>
<b>Delivery conditions</b>	<b>See page 2</b>
<b>Max. thickness/diam.</b>	<b>See page 2</b>
<b>Remarks</b>	

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 **2024-11-19**

This Certificate is valid until **2027-07-30**.

DNV local unit: **France CMC**

Approval Engineer: **Christian Wildhagen**



for **DNV**

This document has been digitally signed and will  
therefore not have handwritten signature

Stefan Röhr

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

### High strength steel

Grade	Product	Steel making <sup>1)</sup>	Fine grain elements	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>	Z- quality
NV A32, NV D32, NV E32 NV A36, NV D36, NV E36	Plate	EAF, IC	Nb+V	250	N	Z35

### Extra high strength steel

Grade	Product	Steel making <sup>1)</sup>	Fine grain elements	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>	Z- quality
NV A620, NV D620, NV F620, NV A690, NV D690, NV E690 <sup>3)</sup>	Plate	EAF, IC	Al+V	215 < t ≤ 254	QT	Z35
NV AO620, NV DO620, NV FO620, NV AO690, NV DO690, NV EO690 <sup>3)</sup>	Plate	EAF, IC	Al+V	215 < t ≤ 254	QT	Z35
NV A620, NV D620, NV F620, NV A690, NV D690, NV E690, NV F690 <sup>4)</sup>	Plate	EAF, IC	Al+V	215	QT	Z35
NV AO620, NV DO620, NV FO620, NV AO690, NV DO690, NV EO690, NV FO690 <sup>4)</sup>	Plate	EAF, IC	Al+V	215	QT	Z35

### Rolled steels for boiler and pressure vessels

Grade	Product	Steel making <sup>1)</sup>	Fine grain elements	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>	Z- quality
NV 0.3Mo, NV 1Cr0.5Mo, NV 2.25Cr1Mo	Plate	EAF, IC	-	140	N, NT, QT	-

### Steel for low temperature service

Grade	Product	Steel making <sup>1)</sup>	Fine grain elements	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>	Z- quality
NV 5Ni	Plate	EAF, IC	-	140	N, NT, QT	-

#### Remarks:

- 1) EAF: Electric arc furnace  
IC: Ingot casting
- 2) N: normalised  
NT: normalized and tempered  
QT: quenched and tempered



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- 3) Maximum heat input for weldability testing was 3 kJ/mm.  
Ceq = 0.75 %, CET = 0.41% & Pcm=0.33% during weldability testing
- 4) Maximum heat input for weldability testing was 3.5 kJ/mm.  
Ceq = 0.75 %, CET = 0.41% & Pcm=0.33% during weldability testing