



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00002D1**  
Revision No:  
**6**

This is to certify:

That

**PRIVATE JOINT STOCK COMPANY  
«ELECTROMETALLURGICAL WORKS «DNIPROSPETSSTAL»  
NAMED AFTER A.M. KUZMIN»  
81, Pivdenne Shose Str., 69008 Zaporizhzhia, Ukraine**

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

in accordance with

**DNV rules for classification – Ships  
DNV class programme – DNV-CP-0242 Semi-finished steel products  
DNV class programme – DNV-CP-0243 Rolled steel products – non stainless steel  
DNV class programme – DNV-CP-0244 Rolled steel products - stainless steel**

and the following particulars:

<b>Products</b>	<b>Semi-finished products for rolling or forging stock Round bars for machinery application</b>
<b>Steel type</b>	<b>Carbon and carbon-manganese, Alloy, Austenitic stainless</b>
<b>Manufacturing method</b>	<b>Electric Arc Furnace, Ingot Casting</b>
<b>Deoxidation</b>	<b>Killed</b>
<b>Max. diameter</b>	<b>See page 2</b>
<b>Max. weight</b>	<b>See page 2</b>
<b>Heat treatment condition</b>	<b>See page 2</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 **2025-03-18**

This Certificate is valid until **2027-12-31**.

DNV local unit: **Odessa**

Approval Engineer: **Andrzej Otrebski**



for **DNV**

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

Christian Wildhagen

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

### Rolled round bars<sup>3) 4)</sup> intended to be machined into components (as a substitute for forged bars)

Steel type	Grade	Product	Steel making <sup>1)</sup>	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>
C and C-Mn	S235J0, S235J2, S235JR, S275J0, S275J2, S275JR, S355J0, S355J2, S355JR, S355K2 acc. to EN 10025-2	Bar	EAF, IC	280	N
	C22E, C22R, C35, C35E, C35R, C40E, C40R, C45, C45E, C45R acc. to EN 10083-2	Bar	EAF, IC	280	N, QT
Alloy	25CrMo4, 25CrMoS4, 34CrMo4, 34CrMoS4, 42CrMo4, 42CrMoS4, 30CrNiMo8 acc. to EN 10083-3	Bar	EAF, IC	280	QT
	16MnCr5, 16MnCrS5, 20MnCr5, 20MnCrS5, 20NiCrMo2-2, 20NiCrMoS2-2 acc. to EN 10084	Bar	EAF, IC	280	A, N
Austenitic stainless	1.4301, 1.4306, 1.4307, 1.4401, 1.4404, 1.4435, 1.4436, 1.4541, 1.4550, 1.4571 acc. to EN 10088-3 and EN 10272	Bar	EAF, IC	220	SHT
	304, 304L, 316, 316L, 316Ti, 321, 347 acc. to ASTM A276 and A479	Bar	EAF, IC	220	SHT

### Semi-finished products

Steel type	Product	Steel making <sup>1)</sup>	Max. weight [kg]	Heat treatment condition <sup>2)</sup>
C and C-Mn	Ingot	EAF, IC	7 400	AC
Alloy	Ingot	EAF, IC	7 400	AC
Austenitic stainless	Ingot	EAF, IC	7 400	AC

#### Remarks:

- 1) EAF: Electric Arc Furnace  
IC: Ingot Casting
- 2) N: Normalised  
A: Annealed  
QT: Quenched and tempered  
SHT: Solution heat treated (Solution Annealing)  
AC: As cast
- 3) Minimum rolling reduction ratio 6:1
- 4) Sampling, inspection and testing requirements shall be according to DNV Rules for ships Pt.2 Ch.2 Sec.6