



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM0000242**  
Revision No:  
**2**

This is to certify:

That

**ROUCKA SLÉVÁRNA, a.s.**  
Jana Sigmunda 79, 783 50 Lutin,  
Czech Republic

is an approved manufacturer of  
**Steel Castings**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Application area</b>	<b>Castings for hull structures and equipment Castings for machinery Castings for boilers, pressure vessels and piping systems Ferritic steel castings for low temperature service Stainless steel castings</b>
<b>Steel type</b>	<b>Carbon and carbon-manganese, Alloy, Austenitic stainless, Austenitic-ferritic (Duplex) stainless, See page 2</b>
<b>Casting method</b>	<b>Sand casting</b>
<b>Max. weight</b>	<b>8 000 kg</b>
<b>Max. wall thickness</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 **2021-06-14**

for **DNV**

This Certificate is valid until **2024-08-31**.

DNV local station: **Prague 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.



Form code: AM 311

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## Particulars of the approval

### Castings for hull structure and equipment

Steel type	Grade <sup>3)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition <sup>2)</sup>
C and C-Mn	VL C400UW, VL C440UW, VL C480UW	SC	8 000	370	N, NT, QT
Alloy	VL C550AW, VL C620AW	SC	8 000	370	QT

### Castings for machinery

Steel type	Grade <sup>3)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition <sup>2)</sup>
C and C-Mn	VL C400U, VL C440U, VL C480U, VL C520U	SC	8 000	370	N, NT, QT
Alloy	VL C550A, VL C600A, VL C690A	SC	8 000	370	QT

### Stainless steel castings

Steel type	Grade <sup>3)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition <sup>2)</sup>
Austenitic	GX 2 CrNi 18 10 (304L) GX 5 CrNi 19 9 (304) GX 6 CrNiNb 19 10 (347) GX 2 CrNiMo 19 11 2 (316L) GX 5 CrNiMo 19 11 2 (316) GX 5 CrNiMo 19 11 3 (317)	SC	8 000	370	SHT
22 Cr Duplex	GX 2 CrNiMoN 22 5 3	SC	8 000	370	SHT

### Castings for boilers, pressure vessels and piping systems

Steel type	Grade <sup>3)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition <sup>2)</sup>
C and C-Mn	C450H, C490H	SC	8 000	370	N, NT, QT
Alloy	VL C1Cr0.5Mo	SC	8 000	370	N
	C2.25Cr1Mo	SC	8 000	370	N

### Ferritic steel castings for low temperature service

Steel type	Grade <sup>3)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition <sup>2)</sup>
C and C-Mn	C450L, C490L	SC	8 000	370	N, NT, QT

#### Remarks:

- 1) SC: Sand Casting
- 2) SHT: Solution Heat Treated (Solution Annealing)  
N: Normalised  
QT: Quenched and tempered  
NT: Normalised and tempered
- 3) Incl. equivalent grades in acc. to other standards