



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:  
**AMMM000010R**  
Revision No:  
**3**

## This is to certify:

that

**Ube Steel Co., Ltd.**  
**Ube-city, Yamaguchi Pref., Japan**

is an approved manufacturer of  
**Steel Castings**

in accordance with

**DNV rules for classification – Ships**  
**DNV class programme – DNV-CP-0246 Steel castings**

and the following particulars:

<b>Application area</b>	<b>Castings for hull structures and equipment</b> <b>Castings for machinery</b>
<b>Steel type</b>	<b>Carbon and carbon-manganese,</b> <b>Alloy</b>
<b>Casting method</b>	<b>Sand casting</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 **2025-11-13**

This Certificate is valid until **2028-11-30**.

DNV local unit: **Kobe**

Approval Engineer: **Stefan Röhr**



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 USD 300 000.

## Particulars of the approval

### Castings for hull structure and equipment

Steel type	Grade <sup>3) 4)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Heat treatment condition <sup>2)</sup>
C and C-Mn	NV C400UW, NV C440UW, NV C480UW, NV C520UW, NV C560UW, NV C600UW	SC	140 000	N, NT, QT
Alloy	NV C550AW, NV C620AW	SC	140 000	NT, QT

### Castings for machinery

Steel type	Grade <sup>3)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Heat treatment condition <sup>2)</sup>
C and C-Mn	NV C400U, NV C440U, NV C480U, NV C520U, NV C560U, NV C600U	SC	140 000	N, NT, QT
Alloy	NV C550A, NV C600A, NV C690A	SC	140 000	NT, QT

#### Remarks:

- 1) SC: Sand Casting
- 2) N: Normalized; QT: Quenched and tempered; NT: Normalized and tempered
- 3) Incl. equivalent grades in acc. to other standards
- 4) Including grades SCW 410 acc. to JIS G 5102 and G17CrMoV5-10 acc. to EN 10213-2