

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM000011H**  
Revision No:  
**1**

**This is to certify:**

That  
**SIDENOR FORGINGS & CASTINGS S.L.U.**  
**Reinosa, Spain**

is an approved manufacturer of  
**Steel Castings**

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

and the following particulars:

<b>Application area</b>	<b>Castings for hull structures and equipment</b>
<b>Steel type(s)</b>	<b>Casting for machinery</b>
<b>Casting method</b>	<b>Carbon and Carbon-Manganese</b>
<b>Max. weight</b>	<b>Sand casting</b>
<b>Heat treatment condition</b>	<b>See page 2</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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2018-01-31**

for **DNV GL**

This Certificate is valid until **2021-06-30**.

DNV GL local station: **Bilbao**

Approval Engineer: **Stefan Röhr**

**Thorsten Lohmann**  
**Head of Section**



Job Id: **263.11-004566-3**  
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## Particulars of the approval

### Castings for hull structure and equipment

Steel type	Grade <sup>3)</sup> <sup>4)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Delivery condition <sup>2)</sup>
C and C-Mn	VL C400UW, VL C440UW, VL C480UW, VL C520UW, VL C560UW, VL C600UW	SC	110 000	N, NT, QT

### Castings for machinery

Steel type	Grade <sup>3)</sup> <sup>4)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Delivery condition <sup>2)</sup>
C and C-Mn	VL C400U, VL C440U, VL C480U, VL C520U, VL C560U, VL C600U	SC	110 000	N, NT, QT

#### Remarks:

- 1) SC: Sand Casting
- 2) N: Normalised; QT: Quenched and tempered; NT: Normalised and tempered
- 3) Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules
- 4) Including equivalent grades to other standards