

# APPROVAL OF MANUFACTURER CERTIFICATE

## This is to certify:

That  
**PINAR DOKUM SAN. VE TIC. AS**  
**Kemalpasa Cad. No:326 - 35060**  
**Pınarbasi/Bornova, Izmir,**  
**Turkey**

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</b>
<b>Steel type</b>	<b>Castings 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>5 000 kg</b>
<b>Additional approval conditions</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 **2018-07-02**

for **DNV GL**

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

DNV GL local station: **Istanbul**

Approval Engineer: **Christian Wildhagen**

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



Job Id: **263.11-004632-2**  
Certificate No: **AMMM000024F**

## 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]	Delivery condition <sup>2)</sup>
C and C-Mn	VL C400UW, VL C440UW, VL C480UW	SC	5 000	N, NT, QT

### Castings for machinery

Steel type	Grade <sup>3)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	SC	5 000	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) Incl. equivalent grades in acc. to other standards