

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That
LA FONTE ARDENNAISE
Plant 1

Vivier aus Court, France

is an approved manufacturer of
Iron Castings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Iron type(s)	Grey
Casting method	Sand casting
Max. weight	See page 2
Heat treatment condition	See page 2

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 **2019-03-29**

This Certificate is valid until **2022-03-28**.

DNV GL local station: **Le Havre**

Approval Engineer: **Stefan Röhr**



for **DNV GL**

Digitally Signed By: Wildhagen, Christian

Location: DNV GL Hamburg, Germany

Signing Date: 2019-04-01, on behalf of

Thorsten Lohmann
Head of Section



Job Id: **263.11-004389-3**
Certificate No: **AMMM00002GR**

Particulars of the approval

Cast iron

Iron type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Grey	200	SC	40	AC
	250			AC
	300			AC
	350			AC

Remarks:

- 1) SC: Sand casting (DISAMATIC vertical moulding lines)
- 2) AC: As cast
- 3) Incl. equivalent grades in acc. to other standards

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

LA FONTE ARDENNAISE

Plant Haybes

Vivier au Court, France

is an approved manufacturer of
Iron Castings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Iron type	Nodular cast iron
Casting method	Sand casting
Max. weight	See page 2
Heat treatment conditions	See page 2

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 **2019-03-29**

This Certificate is valid until **2022-03-28**.

DNV GL local station: **Le Havre**

Approval Engineer: **Stefan Röhr**



for **DNV GL**

Digitally Signed By: Wildhagen, Christian

Location: DNV GL Hamburg, Germany

Signing Date: 2019-04-01, on behalf of

Thorsten Lohmann
Head of Section



Particulars of the approval

Cast iron

Iron type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Nodular	VL NCI-1	SC	20	AC, F
	VL NCI-2			AC, F
	VL NCI 370			AC
	VL NCI 400			AC
	VL NCI 500			AC
	VL NCI 600			AC
	VL NCI 700			AC
	VL NCI 800			AC

Remarks:

- 1) SC: Sand casting (DISAMATIC vertical moulding lines)
- 2) AC: As cast; F: Ferritizing
- 3) Incl. equivalent grades in acc. to other standards

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

LA FONTE ARDENNAISE
Plant Vivier au Court
Vivier au Court, France

is an approved manufacturer of
Iron Castings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Iron type	Nodular cast iron
Casting method	Grey cast iron
Max. weight	Sand casting
Heat treatment conditions	See page 2
	See page 2

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 **2019-03-29**

This Certificate is valid until **2022-03-28**.

DNV GL local station: **Le Havre**

Approval Engineer: **Stefan Röhr**



for **DNV GL**

Digitally Signed By: Wildhagen, Christian

Location: DNV GL Hamburg, Germany

Signing Date: 2019-05-06, on behalf of

Thorsten Lohmann
Head of Section



Particulars of the approval

Cast iron

Iron type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Grey	200	SC	40	AC
	250			AC
	300			AC
	350			AC

Iron type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Nodular	VL NCI-1	SC	40	AC, F
	VL NCI-2			AC, F
	VL NCI 370			AC
	VL NCI 400			AC
	VL NCI 500			AC
	VL NCI 600			AC
	VL NCI 700			AC
	VL NCI 800			AC

Remarks:

- 1) SC: Sand casting (DISAMATIC vertical moulding lines)
- 2) AC: As cast; F: Ferritizing
- 3) Incl. equivalent grades in acc. to other standards