



STATEMENT OF RECOGNITION OF TEST LABORATORY
No. REC016222X5/001

This is to state that the following laboratory has been found in compliance with the requirements of the RINA "RULES FOR RECOGNITION OF TEST LABORATORIES" for the performance of the tests listed in the attachment to this Statement

<i>Description Type</i>	Laboratory Recognition FERRITIC STEEL PLATES FOR LOW TEMPERATURE SERVICES HIGHER STRENGTH HULL STEEL PLATES AND SECTIONS NORMAL STRENGTH HULL STEEL PLATES
<i>Applicant</i>	NLMK Clabecq SA Rue de Clabecq 101 1460 Ittre BELGIUM
<i>Manufacturer Place of manufacture</i>	NLMK Clabecq SA Rue de Clabecq 101 1460 Ittre BELGIUM
<i>Reference standards</i>	RINA Rules for Recognition of Test Laboratories

Issued in **RINA Belgium Survey Station** on **April 22, 2022**. This Certificate is valid until **May 4, 2027**



RINA Services S.p.A.

Paul Wytock
Marine Surveyor
RINA Belgium BVBA
4958

This certificate consists of this page and 1 enclosure





**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS**

No. FAB016222X5

This is to certify that the manufacture of the product identified below is in compliance with the applicable requirements of the RINA Rules for the Approval of Manufacturers of Materials.

<i>Description</i>	Normal strength hull steel plates
<i>Type</i>	GRADES A-B-D-E
<i>Applicant</i>	NLMK Clabecq SA Rue de Clabecq 101 1460 Ittre BELGIUM
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

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Paul Wylock
Marine Surveyor
RINA Belgium BVBA
RINA Services S.p.A.

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CERTIFICATE OF APPROVAL OF MANUFACTURERS OF MATERIALS

No. FAB016222X5/001

Enclosure – Page 1 of 1

APPROVAL CONDITIONS

Steel Making: Basic Oxygen Converter

Casting Process: Continuous casting

Deoxidation practice, condition of supply and thickness:

Steel Grades	Deoxidation practice and fine grained elements	Condition of supply and max thickness
A	Killed, Al-fine grained	Any up to 90mm N up to 100 mm
B	Killed, Al-fine grained	Any up to 90mm N up to 100 mm
D	Killed, Al-fine grained	TM up to 90mm + NR N up to 100 mm
E	Killed, Al-fine grained	TM up to 25mm N up to 50 mm

Note: N Normalised conditions; TM Thermo mechanical rolling; NR Normalizing rolling.

Chemical composition and mechanical properties: in accordance with the RINA Rules with more stringent impurities limits ($S < 0,010\%$, $P < 0,025\%$) for thickness over 50mm.

Survey conditions: The plates are to be in compliance in all respects with the relevant RINA rules and are to be tested accordingly.

General conditions for the approval:

- The approval is granted on condition that the RINA rules for the approval, manufacture, testing and certification of materials are complied with in all respects.
- RINA is to be notified of any changes of materials, manufacturing process, quality control routines that may affect the validity of this certificate.





**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS**

No. FAB016222X5/002

This is to certify that the manufacture of the product identified below is in compliance with the applicable requirements of the RINA Rules for the Approval of Manufacturers of Materials.

<i>Description</i>	Higher strength hull steel plates and sections
<i>Type</i>	GRADES AH32 - DH32 - EH32 - AH36- DH36-EH36-AH40-DH40-EH40
<i>Applicant</i>	NLMK Clabecq SA Rue de Clabecq 101 1460 Ittre BELGIUM
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

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Marine Surveyor
RINA Belgium BVBA
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CERTIFICATE OF APPROVAL OF MANUFACTURERS OF MATERIALS

No. FAB016222X5/002

Enclosure – Page 1of 1

APPROVAL CONDITIONS

Steel Making: Basic Oxygen Converter

Casting Process: Continuous casting

Deoxidation practice, condition of supply and thickness:

Steel Grades	Deoxidation practice and fine grained elements	Condition of supply and max thickness
AH32-DH32-AH36-DH36	Killed, Al + Nb Fine grained	TM up to 25mm + NR N up to 100 mm
EH32-EH36	Killed, Al + Nb Fine grained	TM up to 25mm N up to 50 mm
AH40-DH40-EH40	Killed, Al + Nb Fine grained	TM or N up to 25 mm

Note: N Normalised conditions; TM Thermo mechanical rolling; NR Normalizing rolling.

Chemical composition and mechanical properties: in accordance with the RINA Rules with the following more stringent limits

- $S < 0,010\%$ and $P < 0,025\%$ for thickness over 50mm.
- $C \leq 0,10\%$ for plates rolled with the thermos mechanical rolling procedure

Survey conditions: The plates are to be in compliance in all respects with the relevant RINA rules and are to be tested accordingly.

General conditions for the approval:

- The approval is granted on condition that the RINA rules for the approval, manufacture, testing and certification of materials are complied with in all respects.
- RINA is to be notified of any changes of materials, manufacturing process, quality control routines that may affect the validity of this certificate.

