



**TYPE APPROVAL CERTIFICATE**  
No. **MAC017720XG/001**

**This is to certify that the product identified below is in compliance with the regulations herewith specified.**

<i>Description</i>	<b>Sterntube bearings</b>
<i>Type</i>	<b>LAGERSMIT MARINE BEARINGS LAGERSMIT MARINE STERNTUBE BEARINGS</b>
<i>Applicant</i>	<b>LAGERSMIT SEALING SOLUTIONS B.V. NIEUWLAND PARC 306 2952 DD ALBLASSERDAM NETHERLANDS</b>
<i>Manufacturer</i>	<b>LAGERSMIT SEALING SOLUTIONS B.V.</b>
<i>Place of manufacture</i>	<b>NIEUWLAND PARC 306 2952 DD ALBLASSERDAM NETHERLANDS</b>
<i>Reference standards</i>	<b>Part C, Chapter 1 Section 7 of RINA Rules</b>

*Issued in* **Hamburg** on **August 14, 2020**. *This Certificate is valid until* **January 13, 2025**

  
RINA Services S.p.A.  
**Giuseppe Russo**

This certificate consists of this page and 1 enclosure



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No. MAC017720XG/001  
Enclosure - Page 1 of 1  
**LAGERSMIT MARINE BEARINGS**

**Description of the products**

**LAGERSMIT Marine sterntube bearings**

White metal, oil lubricated system sleeve bush bearings up to 800 mm O.D.

**Reference documents**

Approved Drawings HMMC-17675

Letter HMMC/2020/00844/AVE01

**Fields of application**

**LAGERSMIT Marine stern tube bearings.**  
Length/diameter ratio not less than 2, for aft sterntube bearing.  
Nominal bearing pressure up to 0,55 N/mm<sup>2</sup>.

**Acceptance conditions**

- For each application the relevant constructional drawings are to be sent to RINA .
- The installation on board is to be made in accordance with the manufacturer's recommendations in compliance with all applicable RINA Rules.
- This type approval is valid on the assumption that the manufacturer of the aforementioned bearings assures, under his own responsibility, that the product characteristics are in accordance with the ones specified on the documentation submitted.
- The acceptance of the a.m. products on board ship and other units classed with RINA is subject to the satisfactory outcome of testing as per the RINA rules.
- The approval may be withdrawn by RINA in the case of changes in the design not brought to the knowledge of RINA or in the case of changes in the RINA rules.
- This Certificate is issued for uses allowed by the laws and acts of Government in force.

**Hamburg Aug 14, 2020**







**TYPE APPROVAL CERTIFICATE**  
**No. MAC017720XG**

**This is to certify that the product identified below is in compliance with the regulations herewith specified.**

<i>Description</i>	<b>Sterntube seals</b>
<i>Type</i>	<b>SUPREME Series : LDA LDF SAA SG SGA SGV STA STF SVA TS3 TS4 TS4-2 TSV4</b>
<i>Applicant</i>	<b>LAGERSMIT SEALING SOLUTIONS B.V. NIEUWLAND PARC 306 2952 DD ALBLASSERDAM NETHERLANDS</b>
<i>Manufacturer</i>	<b>LAGERSMIT SEALING SOLUTIONS B.V.</b>
<i>Place of manufacture</i>	<b>NIEUWLAND PARC 306 2952 DD ALBLASSERDAM NETHERLANDS</b>
<i>Reference standards</i>	<b>Part C, Chapter 1, Section 7 of RINA Rules for the Classification of Ships</b>

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**TYPE APPROVAL CERTIFICATE**

No. MAC017720XG

Enclosure - Page 1 of 2

**SUPREME Series : LDA LDF SAA SG SGA SGV STA STF  
SVA TS3 TS4 TS4-2 TSV4****Osservazioni Reference Documents**

Lagersmit drawings approved with no. HMMC-17676. and dispatched with etter HMMC/2020/00844/AVE01

**Fields of application**

Seals for oil and grase lubricated propeller shaft stern tubes, for shaft diameter from 70mm to 820mm.

**Materials / Components**

See Material Specification of approved drawings.

**Technical Characteristics**

DRAWING	MODEL & TYPE	RANGE of SIZES	PID	ADDITIONAL NOTES
TA-SUP-30	SUPREME LDA After Seal	as per Data Sheet 04-30-100	PID-LD PID-LD-G	N/A
TA-SUP-X31	SUPREME LDF Forward Seal	as per Data Sheet 04-35-100	PID-LD PID-LD-G	N/A
TA-SUP-X60	SUPREME SAA After Seal	as per Data Sheet 04-60-100	PID-SAA MK2017	COMPLIES WITH I.W.S. Rules
TA-SUP-X10	SUPREME SG After Seal	as per Data Sheet 04-20-100	PID-SG	COMPLIES WITH I.W.S. Rules
TA-SUP-X65	SUPREME SGA After Seal	as per Data Sheet 04-65-100	PID-SGA MK2017	COMPLIES WITH I.W.S. Rules
TA-SUP-X15	SUPREME SGV After Seal	as per Data Sheet 04-25-100	PID-SGV MK2017	COMPLIES WITH I.W.S. Rules
TA-SUP-01	SUPREME STA After Seal	as per Data Sheet 04-10-100	PID-ST	COMPLIES WITH I.W.S. Rules
TA-SUP-X20	SUPREME STF Forward Seal	as per Data Sheet 04-15-100	PID-ST	N/A
TA-SUP-X05	SUPREME SVA After Seal	as per Data Sheet 04-12-100	PID-SVA MK2017	COMPLIES WITH I.W.S. Rules
TA-SUP-X40	SUPREME TS3 Thruster Seal	N/A	PID-TS3	N/A
TA-SUP-X41	SUPREME TS4 Thruster Seal	N/A	PID-TS4	N/A
TA-SUP-X42	SUPREME TS4-2 Thruster Seal	N/A	PID-TS4	N/A
TA-SUP-X43	SUPREME TSV4 Thruster Seal	N/A	PID-TSV-AZIM	N/A





**TYPE APPROVAL CERTIFICATE**

No. **MAC017720XG**

Enclosure - Page 2 of 2

**SUPREME Series : LDA LDF SAA SG SGA SGV STA STF  
SVA TS3 TS4 TSA-2 TSV4**

The file TA-SUP-OPT (in the booklet HMMC-17676) shows the Optional Extras that can be applied to all the seals above mentioned.

The file TA-FWD-OT (in the booklet HMMC-17676) shows the Oil Tank that can be used in combination with all the seals above mentioned.

**Field of Application**

Seals for oil and grease lubricated propeller shaft Stern tubes and Thrusters

**Acceptance conditions**

The acceptance of the above mentioned products on board ships and other units classed with RINA is subject to the satisfactory outcome of testing as per RINA Rules.

The installation on board is to be made in accordance with the manufacturer's recommendations in compliance with all applicable RINA Rules.

**Remarks:**

**HAMBURG August 14, 2020**

