



# Type Approval Certificate

[ Stern Tube & Thruster Sealing Device ]

**Initial Approval** 30 July 1997  
**Manufacturer** Lagersmit Sealing Solutions BV  
 Nieuwland Parc 306, 2952 DD Alblasterdam, The Netherlands

**Product Description** Model : SUPREME Series  
 Type : STA, SVA, SG, SGV, STF, LDA, LDF,  
 TS3, TS4, TSV4, SAA, SGA  
 Intended for : Oil and/or Grease Lubricated Shafts

" See Appendix 1 "

**Approval Condition** " See Appendix 1 "

**THIS IS TO CERTIFY** that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt 5, Ch 3, Art 206 of the Rules for the Classification of Steel Ships

This Certificate is valid until 7 December 2029

Issued at Busan, Korea on 31 January 2025



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME25004227060) and certificate No.(RTD03789-SE001).



**KOREAN REGISTER**

*General Manager of  
Marine & Ocean Equipment Team*

**Note :** 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.  
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.  
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.  
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

## Product Description and/or Approval Condition

Date of Issue : 31 January 2025

### A. Product Description

#### 1. Product Specification

Type	Size (mm)	Approved Drawing No.	P&ID	Datasheet (Spec. No.)	Remark
STA*	110 ~1250	TA-SUP-X01_C	PID-STA_STF_E	04-10-100 (05/10/20)	Aft seal ass'y
SVA*	110 ~1250	TA-SUP-X05_E	PID-SVA-MK0217_J	04-12-100 (05/10/20)	Aft seal ass'y
SG*	110 ~1250	TA-SUP-X10_C	PID-SG_H PID-SG-R-B	04-20-100 (08/10/20)	Aft seal ass'y
SGV*	110 ~1250	TA-SUP-X15_C	PID-SGV-MK2017_K	04-25-100 (08/10/20)	Aft seal ass'y
STF*	110 ~1250	TA-SUP-X20_C	PID-STA-STF_E	04-15-100 (05/10/20)	Fwd seal ass'y
LDA*	110 ~ 260	TA-SUP-B30_D	PID-LD_C PID-LD-G_A	04-30-100 (26/10/23)	Aft seal ass'y
LDF*	110 ~ 240	TA-SUP-B31_D	PID-LD_C PID-LD-G_A	04-35-100 (26/10/23)	Fwd seal ass'y
TS3*	155 ~ 850	TA-SUP-X40_C	PID-TS3_B	-	Thruster seal
TS4*	155 ~ 850	TA-SUP-X41_D	PID-TS4_B	-	Thruster seal
TSV4*	155 ~ 850	TA-SUP-X43_D	PID-TSV4_D	-	Thruster seal
SAA*	110 ~ 380	TA-SUP-X60_B	PID-SAA-2017_C	04-60-100 (05/10/20)	Aft seal ass'y
SGA*	110 ~ 380	TA-SUP-X65_B	PID-SGA-2017_C	04-65-100 (05/10/20)	Aft seal ass'y

\* Lip Seal Options : FKM(Viton)and FKM-EAL

#### 2. Approved Drawings and Documents

As above.

#### 3. Test Reports, etc.

- 1) Type test report intended for SUPREME seals dated from 5 Nov. to 18 Dec. 2015 at Lagersmit manufacturing facility.

### B. Approval Condition

#### 1. Application & Limitation

- 1) The onboard installation test and survey are to be carried out in accordance with the Rules of the Society and to be satisfied by the attending Surveyor.
- 2) Environmentally Acceptable Lubricants (EALs) may only be used according to manufacturer's standard lubricant list.

#### 2. Individual Product Cert. and Drawing Approval Requirement

- 1) Individual product certification is not required.

#### 3. Marking

- 1) The product or packing is to be marked with manufacturer's name or trademark and type number designation on a suitable position.

#### 4. Others

- 1) The manufacturer takes the responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

&lt; End of Certificate &gt;