NIPPON KAIJI KYOKAI

CERTIFICATE OF APPROVAL FOR FIRMS ENGAGED IN MAINTENANCE, THOROUGH EXAMINATION, OPERATIONAL TESTING, OVERHAUL AND REPAIR OF LIFEBOATS, RESCUE BOATS, FAST RESCUE BOATS, LAUNCHING APPLIANCES AND RELEASE GEAR

Certificate No. : **23TZ439**
Approval No. : **23LA016**

THIS IS TO CERTIFY that

SOLAS MARINE SERVICES FOREIGN BRANCH

10738 Diplomatic Manama BAHRAIN

is approved as a firm engaged in the servicing and maintenance of lifeboats, launching appliances, on-load release gear and automatic release hooks under the Society's Rules for Approval of Manufacturers and Service Suppliers incorporating IACS UR Z17, as amended.
This certificate is valid until **10 September 2028** subject to periodical assessment.

Issued at Tokyo on 11 September 2023.

See the conditions on the reverse.

NIPPON KAIJI KYOKAI

(M. Inoue)
General Manager of Survey Department

ClassNK

This is to certify that the firm has been periodically or occasionally assessed in accordance with the regulations of Chapter 2, Part 1 of the Rules for Approval of Manufacturers and Service Suppliers.

Due Range of Periodical Assessment: *between 11 September 2025 and 10 September 2026*

Periodical Assessment	*Date*	_____
	Signature	_____
		Surveyor to NIPPON KAIJI KYOKAI
Occasional Assessment	*Date*	_____
	Signature	_____
		Surveyor to NIPPON KAIJI KYOKAI

Conditions for Approval:

1. This Certificate is valid subject to validity of certificate for personnel issued for each make and type of the equipment listed in the attachment.
2. This service supplier has been approved to service the equipment listed in the attachment in accordance with MSC. 402(96).
3. The service has been properly conducted and reported in accordance with the requirements of the Rules and the relevant Regulations.
4. Where there is any alteration to the service approved by this certificate, the Firm should notify immediately to the Society.

Attachment to
Certificate Number 23TZ439

Make	Type
ACEBI	**Combi Crane** - R3–RRP-Raft Crane: RRP/RAD-Rescue Crane: RB/RRP **Davit** - GRB – RTP – HF- MN – GT- ROR – GRA - SPG **Winches** - THH/TEP/TH/TE/TBP/TBE/TBH/TA/TAB/TBM/TR/ TR3/TRB/TRE LIFEBOAT/AC-QFP-5,00/6,50/7,00/ 7,50-FRB AC-GJ6,10
Qingdao Beihai Boatbuilding Co., Ltd. (Ex. Boatbuilding Branch Qingdao Beihai Shipbuilding Heavy Industry Co., Ltd)	**Totally Enclosed Lifeboat** - BH-5, 5A, 5S, 5SA, E500, E585, 6, 6A, 6S, E670, 7A, 7B, 8 **Freefall Lifeboat** - BH-F6.0, F7.0A, F7.8, F8.1, F5.8, F6.8, F660, F670, F750, F900/A **Rescue Boat** - BH-R4, R4S, R4SA, R5S **Gravity Pivot Davit** - BD-PV50, PV60, PV60S, PV85, PV125 **Freefall Launching Davit** - BD-FF55, 55A, 55R, FF80, 80A, 80R, 80B, FF65/66/67, FF85 **Single Arm Davit** - BD-SA14, 14A, 14B, SA21, 21A, SA23, SA30, 30A, SA33, SH23 **Winch** - BW-H(L/R)31S, 50, 63, 75, L(L/R)75, 125, SC14, 21, 30 **Gravity Lifeboat Release Mechanism** - BG-3, 3L, BG-7, BH-HOOK3, HOOK5, FS5, FS7 **Freefall Lifeboat Release Mechanism** - BG-3F, 3.5F, 4F, 4.5F, 4.5FL, 5F, 6F **Rescue Boat Release Mechanism** - BG-2R, 15KNXS, 25KNXS, 35KNXS
Fassmer-Marland Ltd.	**Davit Launched Totally Enclosed Lifeboat** - DRAGON 26C, 26T, 32C, 32T, 38C, 38T - GMR 6.5, -T6.5, 7.4, -T7.4 - HH57C, 57T, 65C, 65T, 70C, 70T - CLR-C5.9, T5.9 **Freefall Lifeboat** - GAR 6.7, -T6.7, 7.4, -T7.4 - CFL-C49(E), T49(E), C66(E), T66(E), C72(E), T72(E), C77(E), T77(E), C83(E), T83(E) **Rigid Rescue Boat** - RR4.2/RR4.2-M, RRH4.2, RR4.2 ID **Fast Rigid Rescue Boat** - FRR6.1ID, 6.2ID

	Onload Release Gear - Duplex 2.5, 2.5E, 25E2, 5.0, 5.0E, 50E2 - HH43 (Hai Hong type) **Pivot Davit** - FPD-D60, D68, DH68 - SRH70 **Freefall Davit** - FFH49, 49D, 66, 66D, 72, 77, 83 **Freefall Ramp** - FLR49, 66, 72 **Rescue Boat Crane** - FSAR 14/3.5HS, 4.0/3.5HS, 21/4.0HS, 25 - FSARR 14/3.5HS, 21/4.0HS, 22/4.0HS - FMAH 22KN **Winch for Pivot Davit** - DEW 15-24, 15-35, 15-44 - D52L/D52R - DW34S/DW34Z - MW50/MW50C for Davit FPD-D60 **Winch for Freefall Davit** - FW35 **Winch for Rescue Boat Crane** - DEW 150, 450 - RZ25
Hai Hong Boat Making Co., Ltd. (Guangzhou)	**Davit Launched Totally Enclosed Lifeboat** - HH57C/57T/65C/65T/70C/70T (Hai Hong type) **On Load Release Gear** - HH43 (Hai Hong type)
Fassmer Service GmbH & Co. KG.	**Davit Launched Totally Enclosed Lifeboat** - GMR 5.9/6.5/7.4/8.3 - TGMR 5.9/6.5/7.4/8.3 - CLR-C 5.9/6.4/6.8/7.2/7.6/8.1/8.5 - CLR-T 5.9/6.4/6.8/7.2/7.6/8.1/8.5 - CL-C 8.9/9.4/9.8/10.2/10.7/11.1/11.5/11.9/12.4/12.8/13.2 - CL-T 8.9/9.4/9.8/10.2/10.7/11.1/11.5/11.9/12.4/12.8/13.2 - CLX (R)8.5/10.0/11.7/12.8 **Freefall Lifeboat** - CFL 4.9 - CFL-T 4.9/66/72/77/83 - CFL-C 66/72/77/83 - GAR 6.0/6.8/6.7/7.4/8.1/7.7/8.5 - GAR-T 6.0/6.8/6.7/7.4/8.1/7.7/8.5 **Partially Enclosed Lifeboats** - CL-P 5.9/6.4/6.8/7.2/7.6/8.1/8.5/8.9/9.4/9.8/10.2/10.7/ 11.1/11.5/11.9/12.4/12.8/13.2 - SEL 8.15/8.8/9.6/10.5/10.55/11.80/12.5/-R 8.15/15.75/ -T 10.75

	Partially Enclosed Lifeboats – Tenderboats - TL Limo 1100 - SEL-T 11.0/11.7/12.3/14.0/14.7/15.75 - PLL 1099 - PLT-EVO 170 **Partially Enclosed Lifeboat, Tenderboat and Rescueboat** - SEL-RT 7.7/7.5/8.5 **Partially Enclosed Life- and Crew Tenderboats** - SEL 11.0(-T) **Partially Enclosed Life-/Rescue-/Work-/Tenderboats** - SEL-R 7.4/8.5 **Rigid Rescue Boat** - RR 4.2/4.2-M/4.5ID **Rescue Boat** - RIR 625ID **Fast Rigid Rescue Boat** - FR (I)R 6.1/6.1ID - FRR 6.2ID/6.5 ID-SF/6.6 ID/7.0 ID-SF/7.0 - FRIR 6.25 **NAVY RHIB** - SFB 10.1 **Freefall Lifeboat Release Mechanism** - FFRU 6.6 **Offload Rescue Boat Hook** - FOH 27/30/70 **Onload Release Gear** - Duplex 25E2/2.5E/50E2/5.0E/60E2/6.6E/10E/140E2/14E/17E/180E2/230E2/23E - 2.5T/5.0T/10T/14T/17T/23T **Fassmer Hydraulic Davit** - FHD 80/100/120/130/150/170/172/280/450 **Hinged Davit** - FHDY 100 **Freefall Davit** - FFH 45/65 **Pivot Davit** - FPD 55/60/100/80/120/150/170 - FFD D60 **Freefall Davit** - FFH 49/50/60/66/70/72/75/77/80/83/85/90 **Freefall Ramp** - FLR 49/66/8005/8006/8007 **Multi Pivot Davit** - FMPD 100/130/150/160 **Outrigger Davit** - FOD 100/120/130/150/170/190/40R/50/55/80/LBC 300/SAR40/TC 450 - FOD-R 22/23/25/40

	Rescue Boat Davit - FOSV 71, FSAH22 **Rescue Boat Crane** - FSAH 28/32 - FSAR 12/3.5, 14/2.9, 14/3.5, 21/4.0, 21/4.5, 22/4.5, 28, 40 **Rescue Boat/Liferaft Crane** - FSARR 14/3.5, 21/3.8, 21/4.0, 21/4.3, 22/4.0 **FRC Crane** - PRHE 30 **Fassmer Winch** - DEW 40/85/2000 **Fassmer Winch/Rescue Boat Crane** - DEW 8/150 - FWD 40 RB **Fassmer Freefall Winch** - FFWH
HLB (ex, Hyundai Lifeboats) Co., Ltd.	**Lifeboat & Rescue Boat** - Series of HD, HT, HDL, HLB, HDF, HDFL, HDFN, HDR, HDFR **Release Mechanism** - Series of THP, Talon, Talon II
BADA Heavy Industries (ex, D.R.M) Co., Ltd.	**Davit** - Series of DRM, BDH, BDTD, BDHP, BDTW, BDRW, BDM, BFOD, FF, HDFL, HDF, BDF, BDFD, BDR, BDH, BDA, BDFA, BDL, BDR, BLR, BHI **Winch** - Series of DRM, DRBW, HLDF, BAW, BDF, BHI, BLR, BLW, BMW, BRW, BWL/R, FHW **Release Mechanism** - Series of BDR, BHA, BHR
Hoei Senpaku Co., Ltd.	**Lifeboats/Rescue Boats** - HS650, HS650F, HS520, HS520F, SO, SM, FO, FM
Japan Marine United Corporation Yokohama Shipyard, Craft Group	**Gravity & Free Fall Life Boat** - Series of GF, GT, GTR, GTC, S, G, MU-FN, MU-FF **Gravity & Free Fall Davit** - Series of MUL, MUF **Winch** - Series of MUW **Rescue Boat** - Series of MU-GJ **Rescue Davit** - Series of MUR **Others** - JY series of Jiangsu Jiaoyan with JMU nameplate with JG shop inspection approval certificate

Jiangsu Jiaoyan Marine Equipment Co., Ltd. (ex. Jiangyin Xinjiang F.R.P. Co., Ltd.)	**Free Fall Lifeboat** - JY-FN-4.9, JY-FF-4.9, JY-FN-5.8, JY-FF-5.8, JYM-FN-6.65, JYM-FF-6.65, JY-FN-6.8, JY-FF-6.8, JY-FN-7.5, JY-FF-7.5, JY-FN-8.5, JY-FF-8.5, JY-FN, FF-9.5 **Rescue Boat** - GJ4.2, GJ4.25, GJ4.5, GJ5.0, GJ5.25, GJ6.0B-1, GJ6.10, GJ7.50, GJ8.0Q-2, GJ8.5Q-2 **Totally Enclosed Lifeboat** - JY-QFP/N-5.0, JY-QFP/N-5.25, JY-QFP/N-5.6, JY-QFP/N-6.0A, JY-QFP/N-6.50, JY-QFP/N-7.0, JY-QFP/N-7.5, JY-QFP/N-7.50A, JY-QFP/N-8.00, JY-QFP/N-8.50, JY-QFP/N-8.50X, JY-QFP/N-9.35, JY-QFP/N-10.90A **Hook** - JX and JXN Series **Gravity Luffing Arm Type Davit** - JYL52, JYL55, JYL65, JYL68, JYL85, JYL105, JYL135 **Launching Appliance** - JYF55, JYF75, JYF75-A, JYF75-B, JYF90 **Platform Davit** - JYP65, JYP85, JYP105, JYP135 **Single Arm Davit** - JYR21, JYR21S-A, JYRC21, JYR14, JYRH14, JYRH21, JYR26, JYR30, JYR23 **Electric Boat Winch** - FW45, JYW42, JYW50, JYW70, JYW100, JYWP70, JYWP100, JYWP135, JYW35, JYRZ21
NISHI-F Co., Ltd. (Ex. Nishi Nippon F.R.P. Shipbuilding Co., Ltd.)	**Lifeboat/Rescue Boat** - G series, ML series, F series
Ishihara Dockyard Co., Ltd.	
Shigi Shipbuilding Co., Ltd.	**Lifeboats/Rescueboats and Release Gear** - SZ series, FEL series, VOX series, GARS series, OPEN type
T-ISS B.V.	**Hooks** - T-ISS PX-01, PX-02, PX-03
NARWHAL BOATS SL	**Rescue Boat** - SV-400, SV-420, SV-480, SV-750 **Fast Rescue Boat** - FRB-700
Zhejiang Hengxin Ship Equipment Co., Ltd.	**Lifeboat** - BCC, BCF, BCFC, BCFF **Rescue Boat** - GJ, FRH, RH

	Release Mechanism - HK **Davit** - FH, SA, HDC, LFR, LR, HE, PD, SRH, LB, KN
Zodiac Milpro	**Rescue Boats** - Zodiac Milpro
Mansei Inc.	**Davits** - Series of EBD-, EM-, ABD-, AH-, AT-, AV-, EH-, ET-, EV-, M-, CM-, D-FH., DE-FH., MFE-, MFH-, SR-, SRE-, R-, S-, RD-, EHR- **Winches** - Series of EBW-, ABW-, AW-, EW-, MW-, CMW-, 06., FW-, SW-, RMW-, MLW-, ERW- **Release Hook** - Series of RH-
Wuxi Xingsheng Gear Case Factory	**Rescue Boat Release Hook** - 15kN **Liferaft Automatic Release Hook** - 21/25kN **Automatic Release Hook for Davit Launched Liferaft & Rescue Boat** - 35kN
Miura Machine Co., Ltd.	**Davits** - Series of SP, MVD, GRA, SAR **Winches** - Series of BH, BE, BA
Dong Woo Machinery & Engineering Co., ltd.	**Hinged Gravity Boat Davit and Freefall Davit Rescuedavit and Life Raft Davit** - DWS series, LRDS series, RBDS series
IKNOW Machinery Co., Ltd. (ex. Tsuji Heavy Ind.)	**Davit** - Series of H, T, TC **Winch** - Series of EB, TC, OAP
Oriental Precision & Engineering Co., Ltd.	**Hinged Gravity Type Davit & Winch** - Davit: HGD series, HGK series, SHS series, RTD series, DHA series, DMA series - Winch: BWE series, SWE series, WL series **Free Fall Davit & Winch** - FD series, WL series **Rescue/Liferaft Davit & Winch** - RD series, RDW series
SEKIGAHARA SEISAKUSHO LTD.	**Gravity Type Davit** - SH, SFB, SHS, STS, SSS **Free-fall Lifeboat Davit** - SFS, SFA, SFB, SFC, SFD **Rescue Boat Davit** - SJS, SJR

	Winch - SNW, SWE
West Marine Equipment Pte Ltd / Zhenjiang West Marine Equipment Co., Ltd	**Single Arm Davit** - WME-SAD14/23/30 **A-frame Davit Semi Hydraulic System** - WME-LR30 **A-frame Davit Fully Hydraulic System** - WME-LRH35/75 **Conventional Davit** - WME-MGD185 **Boat Raft Davit** - WME-HTD30

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