

APPROVAL OF SERVICE SUPPLIERS

Certificate No:
AOSS0000FZC
Revision No:
2

This is to certify that

CRALOG A/S

Frederikshavn, Denmark

is granted acceptance for

Maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear , in accordance with Class Programme DNVGL-CP-0484.

This service supplier certificate will be accepted for use with all rule sets published by DNV.
See the following page(s) for details regarding application.

This Certificate is valid from **2022-08-30** to (inclusive) **2025-08-29**.

This Certificate is issued on **2022-09-05**.



for **DNV**

This document has been digitally signed and will
therefore not have handwritten signatures

Hansen, Lars
Surveyor

This Certificate may be withdrawn if:

1. The service provided has been improperly carried out or the results improperly reported.
2. The surveyor has found any deficiencies in the accepted operating systems of the service supplier.
3. The firm has failed to inform of any major changes having effect on the quality of the service rendered.
4. The conditions listed in the certificate are changed and/or are not fulfilled.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Application:

This Service Supplier is approved for maintenance, thorough examination, operational testing, overhaul and repair of the following equipment:

Lifeboats (incl. freefall lifeboats), Rescue boats (incl. fast rescue boats)

Make	Model / Series
Acebi	TELB, PELB series
Avon	RB, SR series
Balden	BDFF-T, BDFF-C, BD-R BD-LB series
CASTOLDI S.r.l.	JET TENDER 18 RB
Dafer / Narwhal	SV series
DSB Deutsche Schlauchboote	IRB series
DSB Engineering Co Ltd	DSBC, DSBF, DSBP, DSBR, DSBFA, DSBFC, DSBFF series
Fassmer / Marland	CFL-C, CFL-T, CL, CL-P, CLR, CLX, DRAGON, FRIR, FRR, GAR, GAR-T, GMR, T-GMR, HH, SEL, PLL, PLT, RR series
Gepa	G-FFF, G-FK, G-FYK, G-RB series
Greben	FFL, RB, TEL series
Harding (UMO Schat Harding) (Palfinger)	FF, MCM, MCF, MCB-T, MCB-C, MOB, TECB series
Harding (Palfinger)	MCB, CTYL, ML, PEL, Mk 1,2,3,4, 5, 4.9 RB, series
Hatecke (Ernst Hatecke)	GFF, GSL, PL, PEL, RB series
Hoei Senpaku	HS, HSF series
HLB (Hyundai Lifeboats)	HDL, HDR, HDFL, HDFN, HDFR, HLB, HT series
IHI Marine United Inc	G, GTC, GTR-F, GTC-C, GTC-F, GT-F, series
Japan Marine United Corp	GF, GTR series
Jiangyinshi Beihai	JYB-F, JYB-C, JYB-FF, JYB-FC, JYB-B, SC-K, SC-KR, JYB-R, JYB-BG series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JY, GJ, GZ, JYN-F, JYN-C, JYQ- FP, JYQ- FN, JY-FF, JY-FN, JYM-FF series
Jiangyin Neptune Marine Appliance Co., Ltd.	NPT-F, NPT-SC, NPT-C, NPT-FF, NPT-FA, NPT-FC, NPT-FCA, NPT-P, NPT-PT NPT-R, NPT-RB, NPT-RFA, NPT-RFB
Jiangyin Wolong F.R.P. Boat Co. Ltd	JYKR, JYDR, JYFA, JYFF, JYC, JYF, JYCA, JYCF, JYP series
KANG NAM. corporation	GTB series
Mare Safety	RB series
Maritime Partners (Alusafe), (Weedo), (Sea Bear)	Alusafe 700,770, 17 SOLAS, 1200DC, Weedo, 600,660,700, Springer 660, Sea Bear series
Mulder & Ryke	TELB, PELB, PELBT series
Narwal	SV, series
Ned-Deck Marine (Palfinger)	NPT, PN, NMD 4.40 Rescue series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	BJ, YZ, YZC/ F, YZFF/ FC, YZRA, YZRB series
Ningbo New Marine Lifesaving Equipment Co. Ltd	NM series
Nishi-F Co., Ltd., (Ex. Ishihara Dockyard, Nishi-Nippon)	G-DR, G-TR, G-FR, FF, CML, EML, NF, NFA, PML, SM, FRP series
Normar	FRC series
Noreq (Palfinger)	LBF, LBP, LBT, RRB series
OY Fiskars AB	TELB series

Make	Model / Series
Palfinger	CTL, FF, KISS, MPC, NPT-C, NPT-F, NPT-FC, NPT-FF, NPT-P, RSQ FRSQ,series
Pesbo S.A	BSC, BSL series
Qingdao Beihai Shipbuilding Heavy Industry CO. LTD.	BH-C, BH-T, BH-F, BH-R, BH-HR, BH-HR7B,, BH-10, Dolphin, FRB
Shigi Shipbuilding Co Ltd	FEL, FRP, SZBR / BRS, SZGO,SZGM, SZRS, SZTR / TRS, SZP, SZPR, VOX46 series
Stocznia Utska SP. Z.O.O	Z, FFB , R, RIB series
Survitec	FF, SC series
Survival Systems Int	CA series
Tsuneishi	TL-TE, KL-TE, KL-FP,TE,FP series
Vanguard	VG-C, VG-F, VG-HLB, VG-KR, VG-DRS, VG-FRK, FRW- series
Verhoef	DR, FL- 50 series
Viking (Norsafe) (Jiangyin)	GES, JYN-T, JYN-C, Maud, Maggie, Maxima, Minima, Miram, Matilda, Matrix, Midget series
Viking Neuvisa	RR-40
Watercraft (Harding) (Palfinger)	Mk 1,2,3,4, 5, WFF, PERB, PELB, MOB, MOBRC, Series
Watercraft (Water Craft Hellas) (Palfinger)	4.9m RB
Waterman OY (Palfinger)	351, 361, 363, 365,366, 366HRL, 367,368, ,369, 371, 371 HR, 375, 374,377,378, 379,391, ,372, 391, 393 series
Wuxi Haihong	BH, BJ, BG, HH-C, HH-T, HH-TS, HH-CS, HH-FC , HH-FF, JG series
Wuxi Wenjiao	WJ, BH, BJ, WJBF WJBC, WJFF, WJFFC, WJ, BH, BJ, WJ, WJRA, WJRB
Zhenjiang Marine Auxiliary Machinery Works	YH, YH-FRA, YH-FRB, YH-DR, YH-QFP, YH-R series
Zhenjiang Hengxin Ship Equipment Co. Ltd.	BCC, BCF, BCFC, BCFF, FL-C, FL-F, GJ series

Release gear (for lifeboats (incl. freefall), rescue boats, fast rescue boats and davit launched liferafts)

Make	Model / Series
Bada Heavy Industries	BHA, BHR series
Balden	BD-LBH,BDHR series
Bianchi & Cecchi	U Hook
Chang Sheng	35kN
Crantson Eagle	APR-356-CB/CBH series
DAE JIN Co. LTD	THP-1B
Davit International	OLH, RH series
Fassmer	Duplex > 6t, Duplex - < 6.6,="" ffh45,="" f="">
Global Davit	HR,HRN, HRL, series
Greben	NLH series
Hatecke	Duplex - > 6t, Duplex - <6t ,="" gff,="" simplex,="" simplex="" offload,="" simplex="" 1,85="">
Harding (Palfinger)	ARH , FFH, KISS, LHR, LHR M2, RRH series
Henriksen	HMK; HCH series
Hoei Senpaku	HS series

Make	Model / Series
HLB (Hyundai Lifeboats)	Talon Mk 1, Talon Mk 2 series
IHI Marine United Inc.	JX1 series
Jiangyinshi Beihai	JYB-HK,JYB- HKF
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JX, JX 1, JXN-1B,JXN-1C, JXN3, series
Jiangyin Neptune	NPT-HK, NPT-50, NPT-HAN, PN-HKC, NPT-HCK , NPT-HK25F, NPT-70HKF , NPT-HK 25R series
Jiangyin Wolong	FHK, HK series
Mansei (Muria) (Muria Vider)	RH series
Madrock	RocLoc series
Neddeck / Palfinger	CAR 35
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd HK	HK series
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon)	ML, F, NS, IHM/ 12 /13 SR-3 series
Norsafe / Viking	HRS, NFFH, K4,,Tor Mk1, TOR Mk 2 series
Optimun Marine	31-37KN
Palfinger	ARH ,CAR 35, CAR35F, FFH, KISS, LHR, LHR M2 NPT, RRH series
Pesbo S.A	BSL series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd.	BG, BG-F, BG2R, series
Sezamor	HLR18, HS, series
Servo Ship S.L	200 series
Shigi Shipbuilding Co. Ltd	SRS SZK5, SZK30, series
Survitec (Mad Rock)	SafeLaunch, SLA 3.5 RocLoc) series
SSI	SureSafe, Triple 5, Triple 5 LX
T-ISS BV	PX01, 02, 03 series
Tsuneishi	43GS-1 series
Vanguard	SH, C-safe series
Viking / Norsafe	HRS, NFFH, K4,,Tor Mk1, Mk 2,Nadiro DIB series
Verhoef	Twistlock series
William Mills / Harding	Titan series
Wuxi Mingzi Machinery Manufacturing Co., Ltd	15kN, 25kN, 31-37kN series
Wuxi Wenjiao	HK series
Wuxi Xingsheng	XS series

Launching appliances (for lifeboats (incl. freefall), rescue boats, fast rescue boats and davit launched liferafts)

Make	Model / Series
Abas	MDE. KDE series
Acebi	A, AF, GRA, PF, PFR, RRP, SPG, TPC, TPF, TPU series
Acoin	R18700
Acta	DC, DR; HSC; MOB series

Alexander Ryan	AREH, BH series
Arim	AHA, ARPV, series
A Tech	AT-LRD
Bada Heavy industries	BDA, BDFA, BDF, BDH, BDMS, BDL, BDR, BDTD, BDTW, BFRD,BLR, HDFL, ORFP, Hinged Gravity series
Bianchi & Cecchi	(BC) PE, PET series
Coastal Marine Equipment, Inc.	D
Daesung	Combi series
Davit Company	SRR series
Davit International	D.AC.s, D-BR, D-BC.R, D-CRm, D-CRH.R, D-FH, D-FO, D-FOS, D-NP, D-NP.MP, D-NP.SP, D-NPS.MP, D-NPS.SP, D-RB, D,RC,D-RC.T D-RT, D-TF, D-TT, D-TT.SP, D-SR04 series
Denizsan	DSFDD, DSFRB, DSRBD series
Dongnam Marine Crane Co Ltd	DHGD, DNRD, DRBD, DRBLRD, series
Dongwoo Machinery & Engineering Co., Ltd.	DWS series
DSB Engineering Co Ltd	DSBARH, DSBDF, DSB DL, DSB DP, DSBDR, DSB DTL, DSB DYL, DSB23DR series
EO Lifesaving	CH-52 R-LR
Fassmer / Marland	FFH, FMPD, FPD, FSARR series
Gibert & Schmalriede Gmbh & Co. KG	PJ series
Global Davit	Gsp.O, Rsp.O, Gsp.RT, Glp.RT, Gsp.FP, Gsp.MP, Glp.FP, Glp.MP, Gsp.FLh, Gsp.FPh, Glp.FLh, Glp.FPh, Lms, Lms.s, Lmes.S,R Rms, Rmes.S, Rms.L, Rmes.L.S, Rms.S, Rms.L.S, Rhs, Rhs.L, Rhs.S, Rhs.L.S, Lml,RMI,Rhl, Rhp, Fhs,Fhs.S, Fhs.L, Fhs.R, Fhs.R.S.Fhs.R.L., Fhs.R.L.S, Rhs, Rhs.L, Rhs.L.S, Rhp, Rhp.HC series
Greben	FOD, GR-RTD, HD, HFF, GD-PD , RLC,r SAR ,SPG series
Gurdesan	GD-FFD, GD-KHK, GD-RRS series
Haeon Machinery Ind. Co. Ltd.	HED-PC
Harding (Umo Schat Harding) (Schat Davit Company) (Palfinger)	ORD,HD-FL, GRA,HD-RT, HD-SPG, HD-VIP , MOB, NT, SPG(L),SPG(VL), SPD, LA, LAR,SAR,SPR, SRR, SA, FF
Hatecke	GspFP, GSP.O, DFR, DR, FFA, FFB, series
Hanyoung Enterprise	RBD series
Hydralift/ TTS	HL, HL9D series
Hydramarine	HMC, HMD, TTS T series
Iknoh Machinery (TSUJI)	HD series
IHI Marine United Inc	MUL
IMT.CO, LTD	ILR series
Jiangyinshi Beihai	PD , RB-H, HB-H, BH-G, LB-H, LA, BHGH, SA, SMR, SAC, FRH, EHRD, FRH, SRH, FA, series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JYA,JYF, JYGR, JYL, JYH, JYHG, JYP, JYR, JYRCAseries
Jiangyin Neptune	NPT-BE, NPT-DR, NPT-DP, NPT-DL, NPT-DF,series
Jiangyin Wolong	JY-FH, JYHE, JYLFR, JYPL, JYSA, LRHE, PLR series
Jung-A-Marine Co., Ltd	PCRLC series
KGW Schweriner Maschinenbau Gmbh	RB series
Macgregor (TTS) (Hydramarine)	A-Type, G-type, T-type HMD series

Mansei (Muria) (Muria Vada)	ABD, AH, AV, D-FH, EH, EHR, EM, FE, FH, GRA, M, MVD, R, RD, SAR, SPG(VL), SPG(VD) series
Navim Group	FDRB , SGHD- L, SPHD- T, SPDT L, SPDT T, SPDT R Series
Navigations	1.1 series
Ned Deck Marine	FPG, PFH, PLG, PRH, PRHE, SCH, SCM, SCT, SEC, series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	L, YZ, YZF, ZFDZ series
Ningbo New Marine Lifesaving Equipment Co. Ltd	NMPL,NMN, NMAR series
NMF	BPK, KD.2 series
Nor Davit	PL, SDP series
Noreq (Palfinger)	NPD, NPDS, NRD, SCH, SCHD, SCM-L, SCH-R, SCM-R series
Oriental Precision	DHA, DMA, FD, HGD, HGK, SHS, RTD, RD, series
Oriental Precision - Sekigahara	SHS series
Palfinger	FF, FPG, NPD, NPT, NPT-DF, NTD, PFH, SCM-L, SCH-R, SCM -R, VIP, series
Pelegriini Marine Equipment	CHCD 2,507+ RLC 2,1/4,5,RLC, GRA , series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd	BD-AR, BD-PL, BD-PV, BD-FF, BD-FF, BD-SA, BD-SH, series
Redrock	RDA, RDT series
SEC (Ships Equipment Centre)	HP2, MS series
Sekigahara	AT, SF, SFA, SFB, SFP, SHS, STS, SSS series
Servo Ship S.L	FFR, PR4M1100HR series
Sezamor	ZZ-Zł J, ZZ-ZłJ2, ZZ-ZOL, ZZ-ZOT series
Shanghai Hengyuan Marine Equipment Corporation	FH, SAF, series
Shin Myung Tech	SMRBD-SD, SMRBD&LRD, SMRBD&PV, SMRB&LRD-FT series
Stocznia Utska SP. Z.O.O	PZ, HZ series
Survival Systems Int	PI series
Taizhou Haihao Marine Equipment Co.,Ltd	21KN Boat/Raft Davit, 55kn series
Tsuji Heavy Industries	H, RP, TC, T83 series
Ulstein Fama (Fama Gniew)	ZO, ZT series
Vanguard	DH, HS, LE, MS, PFH, PL, PR, PRH, SRH, VL, VS series
Verhoef	FL series
Vest Davit	L, P, PL,PLP, PLR, PLAR PLD, PAP, PAPH, Pli, TBDseries
Viking / Norsafe (Jiangyin)	A, C, D, E, H, HD, LH, NDA, NDC, NRC-R, NDSC-R, NRB, SW series
Watercraft	WRG series
Welin Lambie	LRW, SARBE series
Wuxi Dongwu	Free-fall Lifeboat Davit (F55-F70), Gravity - Luffing Arm (18kN-110Kn), Gravity Rescue Boat / Raft Davit (21kN-35kN), Gravity Rolling Type Davit (25kN-30kN), Rescue Boat (A30/ H35 DCW210 NPT100, series
Wuxi Huahai	HMB, HMD, HMDA, PD series
Wuxi Shengou	SMC, SMD, SHMDL, HMDA, SMDF, SMDP
Zhenjiang Marine Auxiliary Machinery Works	PL,L, FH,SAFC,SRH, ZF SAW30 series
Zhejiang Taizhou Wantong Marine Machinery CO Ltd	YSJ series

Zhenjiang West Marine Equipment Co. Ltd	WME-LRH series
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Winch of Launching appliances (for lifeboats (incl. freefall), rescue boats, fast rescue boats and davit launched liferafts)

Make	Model / Series
Acebi	TBE, TR series
Acoin	BE-2
ACTA	KNT
Alexander Welin	AIW series
A Tech	AT10-LRD series
BADA HEAVY IND. CO., LTD (EX. DAERYUCK MACHINERY)	BA, BDF BLW, BM, BMW, BW, BRW, BWR, Elec. Motor Driven, HDF, PWD series
Davit Company	16 EV, SRR
Davit International	0.1., 02. 03., 04., 06., 07., 12. ;40; series
Dongnam Marine Crane Co.,Ltd.	DSAD series
Dongwoo Machinery & Engineering Co., Ltd.	DWS series
Fassmer / Marland	DEW , FFWH series
EO Lifesaving	W series
Global davit	01, 02 ,04 ,08,10, 14, 20, 26 W05HC, W08HC, WS; series
Gurdesan	GD-FLW, GD-HC-A series
Greben	EW,HW series
Haeen Machinery Ind. Co. Ltd.	HHD-PC series
Hatecke	FFA series
Harding (Umo Schat Harding) (Schat Davit Company) (Palfinger)	BE, EW-02-PL, FME, CW, HD, LN, MW, W series
Hydralift	SP series
IHI Marine United Inc	MUW
Iknow Machinery (TSUJI)	EB series
Japan Marine United Corp	MU series
Jiangyinshi Beihai	DS, DZ, DW, YZ, PF, JYBW series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	FW, JYW, JYWP, JYRZ series
Jiangyin Neptune	DW, DS NPT-DW series
Jiangyin Wolong	JYD series
Mansei (Muria) (Muria Vider)	ABW, AW, CMW, EW, EBW, ERW FW MLW, MW, SW, RMW, RBH, LBH, 06, series
Ned deck	04, HWCT, 15 series;
Nor Davit	NW, SP series
Oriental Precision	BWE, SWE, RDW, WL series
Palfinger	04, 15, BE, FME, CW, HD, HWCT, LN, MW, W series
Pelegriani Marine Equipment	VAS 45 E, RLC Series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd.	BW-LL, BW-HL, BW-HR,BW-SC series

Make	Model / Series
SEC	WL
Sekigahara	SNW, SWE series
Servo Ship S.L	FFRW series
SSI	W series
TMA Winches	TN, MW series
Taizhou Haihao Marine Equipment Co.,Ltd.	21kn
Tsuji Heavy Industries	EB, TC series
Ulstein Fama (Fama Gnieuw)	ERM, ER10B series
Viking (Norsafe) (Jiangyin)	DW, HYD-FF series
Verhoef	FL 50 series
Watercraft	NW; MW series
Welin Lambie	55; 5619, 53 ; 9502, 97 , RBW series
Wuxi Huahai	HMW,series
Wuxi Dongwu	DS/Z, D/Z Series
Wuxi Shengou	SMW
Zhenjiang Marine Auxiliary Machinery Works	D,DP, JYRZ, SAW30,series
Zhenjiang West Marine Equipment Co. Ltd	WME-LRH series
Zollern	ZR , A2FM45-61A, ZHP series

Remarks:

Accepted according to:

Lifesaving equipment types under MSC.402(96)/Corr.1 (Annex, Section 7) & IACS UR Z17 1997/rev.16, 2021, Annex 1, Section 13.