

RINA Services S.p.A. Via Corsica, 12 - 16128 Genova Tel. +39 010 53851 Fax +39 010 5351000

CERTIFICATE OF APPROVAL OF SERVICE SUPPLIER

CERTIFICATE NO. SSU027623XD

This is to certify that

CRALOG A/S

Knoten 7, DK9900 Frederikshavn DENMARK

Has been approved in compliance with the RINA "RULES FOR THE CERTIFICATION OF SERVICE SUPPLIERS" for the supply of the following services to ships and other units classed by RINA:

N - Maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear
 Z - Surveys, servicing and testing of lifting appliances

Date of the audit: 26 Apr 2023 Issued in STOCKHOLM on 08 Aug 2023 This Certificate is valid from the date of the audit until 11 May 2026

This certificate consists of this sheet plus an attachment.



This is an electronically signed document and does not require a handwritten signature.

Vincenzo Dario BARBARO

RINA Services S.p.A.



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ATTACHMENT TO CERTIFICATE NO. SSU027623XD

VALIDITY CONDITIONS

This service supplier is certified according to the 'RINA Rules for the Certification of Service Suppliers' to carry out maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear in accordance with SOLAS Regulation III/20 for the list of makes and models/series of equipment in the attached Annex N.

Note 1: For the purpose of application of IMO Resolution MSC.402(96), including Corr.1, the service supplier is to be authorized by the Flag Administration under which the ship is registered.

For Flag Administrations which have authorized RINA as their Recognized Organization and accept RINA 'Certificate of Approval of Service Supplier' as equivalent to their authorization document to the Service Provider, according to the IMO Resolution MSC.402(96), including Corr.1, this Certificate may be accepted also for statutory purpose, in lieu of the Flag's authorization document to the Service Provider, allowing the firm to provide their services on the makes and models/series of equipment listed in the Annex N to this Certificate.

Note 2: This certificate of approval is also issued on behalf of Italian Administration according to the Italian 'Executive Decree n. 321' dated 21st April 2020 and Circular NDS n. 22/2021.

Therefore, this Service Provider is authorized to provide their services on board ships flying Italian flag for the makes and types of equipment defined according to ISO/PAS 23678, listed in the table of Annex N to this Certificate, without prejudice to the particular requirements in the aforementioned Italian official documents.

Note 3: CRALOG is authorized to perform services using also non-exclusive operators qualified by CRALOG, provided that the following conditions are satisfied for each service:

1. The operator holds a valid certificate of competence issued by CRALOG with a QR code including the make and type of equipment for which the service is to be carried out. The

updated list of qualified operators can be verified at nhttps://verify.cralog.com/ via the instruction on the CRALOG website (www.cralog.com)

2. An employment order is issued by CRALOG to the qualified operator for each service.

3. This Certificate of Approval of Service Supplier issued to CRALOG by RINA is attached to each service job.

4. The service reports and the statements of fitness for purpose are issued under CRALOG's liability, via their software, each statement shall contain a QRD code for verification of

authenticity.

General conditions for the approval



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- a) The initial conditions verified by RINA at the time of the approval are to be maintained
 b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant

assessments c) RINA personnel are to be allowed to witness during the performance of activities, upon their request

- d) The activities are to be carried out in compliance with the RINA Rules and or other applicable rules
- e) RINA may revoke the approval at any moment in the case of modifications to requirements or conditions for the approval

This is an electronically signed document and does not require a handwritten signature. RIR

Vincenzo Dario BARBARO

RINA Services S.p.A.

NOTA / NOTE:

La seguente frase deve essere indicata nel campo "validity conditions" del certificato di approvazione, aggiungendo la lista dei fabbricanti e dei modelli degli equipaggiamenti per i quali il Fornitore di Servizi è approvato:

The following sentence is to be indicated in the "validity conditions" field of approval certificate, adding the list of makers and types of equipment for which the Service Supplier is approved:

**** QUOTED ****

This service supplier is certified according to the 'RINA Rules for the Certification of Service Suppliers' to carry out maintenance, thorough examination, operational testing, overhaul and repair of lifeboats and rescue boats, launching appliances and release gear in accordance with SOLAS Regulation III/20 for the list of makes and models/series of equipment in the attached Annex N.

SURVIVAL CRAFT	
Type Twin Fall Totally enclosed lifeboats tanker / dry version	
MAKE	MODEL/SERIES
Acebi	TELB, PELB, series
Balden	BD-LB BD-R, series
Beiyang Boatbulding Co.Ltd	TECB series
DSB Engineering Co Ltd	DSBF, DSBC, series
Fassmer / Marland	CL; CLX, CLR; GMR, TGMR, HH, Dragon series
Gepa	G-FK •FP, GFK series
Greben	TEL series
Harding (Umo Schat Harding) (Palfinger)	LBT, MCM, MCF, MCB, TECB series
Hatecke (Ernst Hatecke)	GSL series
Hoei Senpaku	HS , HS-Fseries
HLB (Hyundai Lifeboats)	HDL, HDL-CF, HLB, HT series
IHI Marine United Inc	GTC, GTR-F, GTC-C, GTC-F, GT-F,
Japan Marine United Corp	GF, GTR Series
Jiangyinshi Beihai	JYB-F, JYB-C series
Jiangsu Jiaoyan (Jiangyin Xingjiang) F.R.P. Co., Ltd	JYQ- FP, JYQ- FN series
Jiangyin Neptune Marine Appliance Co., Ltd.	NPT-C, NPT-F, SC, series
Jiangyin Wolong F.R.P. Boat Co. Ltd	JYCA, JYFA, JYC, JYF series
KANG NAM. corporation	GTB series
Mulder En Rijke (Palfinger)	TELB series
Ned-Deck Marine (Palfinger)	NPT , PN series
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon)	CML, EML ,G-TR, G-FR series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	YZC/ F series
Ningbo New Marine Lifesaving Equipment Co. Ltd	NM series
Noreq (Palfinger)	LBT series
OY Fiskars AB	TELB series
Palfinger	KISS-C. KISS-T, NPT-C, NPT-F, series
Pesbo S.A	BSL, BSC series
Qingdao Beihai Shipbuilding Heavy Industry CO. LTD.	BH-C BH-T, Dolphin series
Shigi Shipbuilding Co Ltd	SZBR/ BRS SZTR /TRS , series
Stocznia Utska SP. Z.O.O	Z series
Survitec	SC series

Tsuneishi	TL-TE, KL-TE, KL-FP, TE, FP series
Vanguarde	VG-C, VG-F, VG-HLB series
Viking / Norsafe	JYN-T, JYN-C, JYN-MKI, Miram, Maud, Maggie, Maxima, Matilda series
Waterman (Palfinger)	368, 377,351,366,371,379, 366JHRL,371HRL series
Watercraft (Schat Harding) (Palfinger)	Mk 1,2,3,4, 5 series
Wuxi Haihong	HH-C, HH-T, HH-TS, HH-CS, series
Wuxi Wenjiao	WJBF, WJBC, series
Vanguarde	VG-C, VG-F, VG-HLB
Verhoef	DR series
Zhenjiang Marine Auxilary Macinary Works	YH-DR, YH-QFP Series
Zhenjiang Hengxin Ship Equipment Co. Ltd. Type Single Fall Totally Enclosed lifeboats	BCC, BCF series conventional / tanker / dry version
Survival Systems Int	CA series
Type Totally Enclosed Lifeboat free fall tan	
MAKE	MODEL/SERIES
Balden	BD-FFT, BDFFC series
DSB Engineering Co Ltd	DSBFF, DSBFC series
Fassmer	CFL,GAR, GAR-T series
Fassmer / Marland	CFL-C,CFL-T
Gepa	G-FFF series
Greben	FFL series
Harding (UMO Schat Harding) (Palfinger)	FF, LBF series
Hatecke (Ernst Hatecke)	GFF series
Hyundai	HDFN-T, HDFN-F, HDFL series
Jiangyinshi Beihai	JYB-FF, JYB-FC series
Jiangyin Neptune Marine Appliance Co., Ltd.	NPT-FF, NPT-FA NPT FC, NPT-FCA series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JY-FF, JY-FN, JYM-FF series
Jiangyin Wolong F.R.P. Boat Co. Ltd.	JYCF, JYFF series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	
Ningbo New Marine Lifesaving Equipment CO. LTD	YZFF/ FC series
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon)	FF series
Noreq	LBF series
Palfinger	FF, NPT-FF, NPT-FC series
Pesbo S.A	BSL series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd.	BH-F series
Shigi Shipbuilding Co Ltd	FEL series
Stocznia Utska SP. Z.O.O	FEB series
Survitec	FF series
Viking / Norsafe	JYN-F, GES, series
Watercraft (Schat Harding) (Palfinger)	WFF series
Wuxi Haihong Boat Making Co., Ltd	HH-FC / FF
Wuxi Wenjiao Verhoef	WJFF ,WJFFC series FL 50 series
Zhenjiang Just Marine Equipment Co., Ltd	ZJM-FF, ZJM-4.0
Zhenjiang Marine Auxilary Macinary Works	YH.
Type Open Lifeboat twin Fall	10,
MAKE	MODEL/SERIES
IHI Marine United Inc	G series
Shigi	SZGO, SZGM, series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	BJ SERIES
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon)	NF, NFA series
Jiangyinshi Beihai	JYB series
Jiangyin Wolong F.R.P. Boat Co. Ltd Wuxi Haihong Boat Making Co., Ltd	JYK,series
	BH, BJ series
Wuxi Wenjiao	WJ,, BH,, BJ series

MAKE	MODEL/SERIES	
Acebi	PELB, series	
DSB Engineering Co Ltd	DSBP series	
Fassmer	CL-P, SEL, PLL, PLT, series	
Gepa	G-FYK series	
Greben	PL, PEL series	
Harding (Umo Schat Harding) (Palfinger)	MPC,CTL, ML series	
Hatecke (Ernst Hatecke)	PEL series	
Jiangyinshi Beihai	JYB-B; series	
Jiangyin Neptune Marine Appliance Co., Ltd.	NPT-P,NPT-PT	
Jiangyin Wolong F.R.P. Boat Co. Ltd	JYP series	
Mulder En Rijke (Palfinger)	PELB, PELBT, series	
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon	PML series	
Noreq (Palfinger)	LBP series	
Palfinger	CTL, NPT-P, MPC series	
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd.	BH10	
Shigi Shipbuilding Co Ltd	SZP, SZPR, series	
Viking / Norsafe	Minima, series	
Watercraft (Harding) (Palfinger)	PERB, PELB, MOB, MOBRC, series	
Waterman (Palfinger)	367, 365, 391,393 series	

MAKE	MODEL/SERIES	
Ambar Marine	AM-420	
Avon	RB, SR series	
Balden	BD-R series	
CASTOLDI S.r.I.	JET TENDER 18 RB	
Dafer / Narwhal	SV series	
DSB Engineering Co Ltd	DSBR, DSBRFA series	
DSB Deutsche Schlauchboote	IRB series	_
Fassmer	RR series	
Fassmer Marland	RR series	
Gepa	G-RB series	
Greben	RB series	
Harding (Umo Schat Harding) (Palfinger)	MOB series	
Hatecke (Ernst Hatecke)	RB series	
HLB (Hyundai Lifeboats)	HDR series	
Jiangyinshi Beihai	JYB-R, JYB-KR, SC-KR, SC-K series	
Jiangyin Neptune	NPT-R, NPT-RA, NPT-RB, NPT-RFA, series	
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	GJ series	
Jiangyin Wolong	JYDR, KYKR; series	
Mare Safety	RB series	
Narwal	SV, series	
Ned-Deck Marine	NDM 4,40 Rescue	
Noreq (Palfinger)	RRB series	
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	YZ,BJ series	
Ningbo New Marine Lifesaving Equipment CO. LTD	NM45R series	
Palfinger	RSQ series	
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd.	BH-R seris	
Shigi Shipbuilding Co Ltd	SZRS, VOX46 series	
Stocznia Utska SP. Z.O.O	R, RIB	
Valiant	RB-450 series	
Vanguarde	VG-KR, VG-DRS series	
Viking / Norsafe	Matrix, Midget, Merlion, Mako series	
Viking Neuvisa	RR-40	
Watercraft (Watercraft Hellas) (Palfinger)	4.9 RB	
Wuxi Haihong Boat Making Co., Ltd	JG series	

Wuxi Wenjiao	WJ, series	
Zhenjiang Marine Auxiliary Machinery Works	YH-FRA, YH-R series	
Zhenjiang Hengxin Ship Equipment Co. Ltd.	GJ series	
Zodiac Hurricane	H561 PROLUXE, RIBO	
Zodiac (Survitec)	RIBO	

MAKE	MODEL/SERIES
Alusafe	FRB 700, 900 series
Dafer / Narwhal	FRB-700, SV-750 series
Delta	comet, phantom, series
DSB Engineering Co Ltd	DSBRA, DSBRB series
Fassmer	FRR, FRIR series
Gepa	G-FRB series
Hatecke (Ernst Hatecke)	FRB series
HLB (Hyundai Lifeboats)	HDFR series
Jiangyinshi Beihai	JYB-G, JYB-Q series
Jiangyin Neptune	NPTR, NPTRA, NBTRB, NPTRFA series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	GJ-6.0 B, GJ 610, GJ 7.5, GJ8.0Q-2 series
Jiangyin Wolong F.R.P. Boat Co. Ltd.	JYKR series
Mare Safety	FRB, GTC 700 series
Maritime Partners (Alusafe), (Weedo), (Sea Bear)	Alusafe 700,770, 17 SOLAS, 1200DC, Weedo, 600,660,700,, Springer 660, Sea Bear series
Narwal	SV, FRB series
Ned Deck Marine	FRSQ series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	YZRA / RB series
Nishi	FRP series
Normar	FRC series
Noreq	FRB series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd.	BH-HR7, FRB series
Palfinger	FRSQ series
Shigi	FRP series
Survitec	SC60RA
Survival Systems Int.	FRC series
Vanguarde	VG-FRK, VG-FRW series
Viking / Norsafe	Merlin, Midget-530 MK II WATER JET, Magnum, Mako, Maya
Wuxi Wenjiao	WJRB, WJRA, series
Zodiac	H472S, RIB series
Zhenjiang	YH-FRB series

RELEASE GEAR	
Type Lifeboat On-Load - lift not over centre;	; locking device -flat to flat rotating cams
MAKE	MODEL/SERIES
Balden	BD-LBH series
Hoei Senpaku Co., LTD	HS series
HLB (Hyundai Lifeboats)	Talon Mk 1 series
Norsafe / Viking	Tor Mk1, Mk 2 series
Qingdao Beihai Shipbuilding Heavy Indus- try Co. Ltd.	BG series
William Mills	Titan series
Type Lifeboat on load lift not over centre, C	urve to flat rotating
MAKE	MODEL/SERIES
Fassmer	Duplex > 6t series
Hatecke	Duplex - > 6t series
Hoei Senpaku Co., LTD	HS650 96, HS 520 96 series

Jiangyinshi Beihai	JYB-HK series
Jiangyin Neptune Marine Appliance Co.,	NPT-HK, NPT 50 series
Ltd.	
Jiangyin Wolong	HK series
Ningbo Asia F.R.P. Boat Manufacturing	HK series
Co Ltd HK	
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard,	SR-3, NS series
Nishi-Nippon)	
Shigi Shipbuilding Co. Ltd.	SRS series
Vanguarde	SH, C-safe series
Zhenjiang Marine Auxiliary Machinery	HK series
Works	
Type Lifeboat on load lift not over centre; F	orward or reverse curve to curve rotating cams
MAKE	MODEL/SERIES
Fassmer	Duplex - < 6.6
BC Service	U Hook
Harding	LHR Mk 1, LHR M2
Hatecke	Duplex - <6t series
Hyundai	Talon Mk 2 series
Jiangyin Neptune Marine Appliance Co.,	PN-HCK, NPT-HCK series
Ltd.	
Jiangyin Wolong	LB80MR series
Palfinger	LHR, LHR M2 series
Survitec	Safe Launch series
Mad Rock	RocLoc series
Type Lifeboat on load lift not over centre; U	p and Down Pins / Collars
MAKE	MODEL/SERIES
Greben	NLH series
Hoei Senpaku Co., LTD	HS650 83 HS 520 83 series
IHI Marine United Inc.	JX1 series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P.	JXN,JX-1, JX1B, JXN-1B,JXN-1C series
Co., Ltd)	
Jiangyin Wolong F.R.P. Boat Co. Ltd.	JX-1, FHK series
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard,	IHM / 12 /13 series
Nishi-Nippon)	
Shigi Shipbuilding Co. Ltd.	SZK5, SZK series
Tsuneishi	43GS-1 series
Type Free Fall Hydraulic / Mechanical	
MAKE	MODEL/SERIES
Bada Heavy Industries	BHA series
DAE JIN Co. LTD	THP-1B series
Fassmer	F series
Hatecke	GFF series
Harding / Palfinger	FFH series
Jiangyinshi Beihai	JYB-HKF, series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P.	JX-2 series
Co., Ltd)	
Jiangyin Neptune	NPT-70HKF series
Jiangyin Wolong F.R.P. Boat Co. Ltd.	FHK series
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard,	ML, F seires
Nishi-Nippon)	
Normar	JX-2
Norsafe / Viking	HRS, NFFH, series
Pesbo S.A	BSL series
Verhoef	Twistlock series

MODEL/SERIES SureSafe Triple 5, Triple 5 LX
SureSafe
DIB series
MODEL/SERIES
BHR series
U Hook
OLH series
HRN series
Simplex 2.0i offload series
HLR18
MODEL/SERIES
NPT30HK
K4 series
bility
MODEL/SERIES
BHR255 series
RH series
HR series
Simplex 1.1, Simplex 1,85 -series
NPT-HK 25R series
RRH series
PX02 series
XS15 series
capability
MODEL/SERIES
JYB-HK series
JXN-3 series
HK series
JXN-3
BG-2R series
PX03
HK series
HK 40
Automatic
MODEL/SERIES
HMK, HMK-ST, HCH series
CAR 35 F
lift over centre automatic
MODEL/SERIES
BHA series
BDHR sereies
DURK SEIEIES
35kN

Gepa	G-K
Global Davit	HRL.26
Harding	ARH 23 series
Hatecke (Ernst Hatecke)	RAFTI 2.5
Neddeck	CAR 35 series
Jiangyin Neptune Marine Appliance Co., Ltd.	NPT-HK25F
Lalizas Lifsaving	LAR 36
Mansei	RH series
Optimun Marine	31-37KN
Palfinger	CAR 35 series
Servoship	200 series
Sezamor	HS series
Survitec	SLA 3.5
T-ISS BV	PX 01, PX02 series
Viking / Norsafe	RCH 36 series
Wuxi Mingzi Machinery Manufacturing Co., Ltd	15kN, 25kN, 31-37kN series
Wuxi Xingsheng	XS series
Type Free Fall Hydraulic / Mechanical MAKE	MODEL/SERIES
	BHA series
Bada Heavy Industries DAE JIN Co. LTD	THP-1B series
Fassmer	FFH45 series
	GFF series
Hatecke	FFH series
Harding / Palfinger	HKF, series
Jiangyinshi Beihai	JX-2 series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	
Jiangyin Neptune Marine Appliance Co., Ltd.	NPT-70HKF
Ningbo New Marine Lifesaving Equipment CO. LTD	JX-2 series
Normar	JX-2
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon)	ML, F seires
Norsafe / Viking	GES series
Verhoef	Twistlock series

MAKE	MODEL/SERIES
Balden	BD-LBH series
3C	U Hook
assmer	Duplex > 6t, Duplex - < 6.6 series
Greben	NLH series
Hatecke	Duplex - > 6t, Duplex - <6t series
HI Marine United Inc.	JX1 series
liangyinshi Beihai	J\YB-HK series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P.	JXN, JX-1, JX1B, JXN-1B, JXN-1C series
Co., Ltd)	
liangyin Neptune Marine Appliance Co.,	NPT-50, NPT-HAN, PNHKG series
_td.	
iangyin Wolong F.R.P. Boat Co. Ltd.	JX-1, HK, LB80MR, series

Ningbo Asia F.R.P. Boat Manufacturing	HK series
Co Ltd HK	
Hoei Senpaku Co.LTD .	HS, HS650 96, HS 520 96 series
HLB (Hyundai Lifeboats)	Talon Mk 1, Talon MK 2 series
Mad Rock	RocLoc series
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon)	NS, IHM / 12 /13 series
Norsafe / Viking	Tor Mk1, Mk 2 Nadiro D.I.B.series
Qingdao Beihai	BG series
Palfinger (Harding)	LHR Mk 1, LHR M2 series
Shigi Shipbuilding Co. Ltd	SRS, SZK5, SZK30 series
Survitec	Safe Launch series
SSI	Triple 5, Triple 5 LX series
Tsuneishi	43GS-1 series
Vanguarde	S, C-safe series
William Mills	Titan series
Type Devices for activating release Free F	
MAKE	MODEL/SERIES
Bada Heavy Industries	BHA series
DAE JIN Co. LTD	THP-1B series
Fassmer	F, FFH45 series
Hatecke	GFF series
Harding (Palfinger)	FFH series
Jiangyinshi Beihai	HKF, series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JX-2 series
Jiangyin Neptune Marine Appliance Co., Ltd.	NPT-70HKF
Ningbo New Marine Lifesaving Equipment CO. LTD	JX-2 series
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon)	ML, F seires
Normar	JX-2
Norsafe / Viking	GES series
Qingdao Beihai Shipbuilding Heavy Indus- try Co. Ltd.	BG-F series
Verhoef	Twistlock series
Type Devices for activating release; Hydros	tatic Unit with Diaphragm
MAKE	MODEL/SERIES
BC	U Hook
Hoei Senpaku Co.LTD	HS, HS650 96, HS 520 96 series
Hyundai	Talon Mk 1 Mk 2 series
IHI Marine United Inc.	JX1 series
Jiangyinshi Beihai	JYB-HK series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JXN,JX-1, JX1B, JXN-1B,JXN-1C series
Jiangyin Wolong F.R.P. Boat Co. Ltd.	JX-1, LB80MR, series
Norsafe / Viking	Tor Mk1, Mk 2 series
Palfinger (Harding)	LHR Mk 1, LHR M2 series
Qingdao Beihai	BG series
Survitec	Safe Launch series
Tsuneishi	43GS-1 series
Vanguarde	S, C-safe series
	Titan series

Type Devices for activating release; Hydros	static Unit with Float
MAKE	MODEL/SERIES
Fassmer	Duplex > 6t, Duplex - < 6.6 series
Hatecke	Duplex - > 6t, Duplex - <6t series
Jiangyin Neptune Marine Appliance Co., Ltd.	NPT-50 ,PNHKC, NPT-HAN series
Mad Rock	RocLoc series
Nishi-F Co., Ltd,. (Ex. Ishihara Dockyard, Nishi-Nippon)	NS, IHM / 12 /13 series
Shigi Shipbuilding Co. Ltd	SRS, SZK5, SZK30 series
Type Devices for activating release; Electro	nic Sensor
MAKE	MODEL/SERIES
Greben	NLH series
Norsafe / Viking	Nadiro D.I.B.series

DAVITS	
Type Gravity Twin / Single Fall Fixed Outrig	ger
MAKE	MODEL/SERIES
Acebi	A, PF, AF, series
Alexander Ryan	BH series
Bada Heavy industries	ORFP
Bianchi & Cecchi	(BC) PE, PET series
Davit International	D-FO, D-FOS series
Global Davit	Gsp.O, Rsp.O series
Greben	FOD series
Jiangyinshi Beihai	PD series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JYP series
Jiangyin Neptune	NPT-DP, NPT-PL series
Jiangyin Wolong	JYPL series
Harding (Umo Schat Harding) (Schat Davit Company) (Palfinger)	ORD,HD-FL series
Hatecke	Gsp.O
Navim Group	FDRB
Ned Deck Marine	FPG, series
Ningbo New Marine Lifesaving Equipment Co. Ltd	nmpl
NOREQ (PALFINGER)	NRD, series
Nor Davit	PL series
Palfinger	FPG series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd	BD-PL series
Survival Systems Int	PI series
Vanguarde	PL series
Viking / Norsafe	A, C, D; series
Wuxi Huahai	PD series
Vanguarde	PL series
Viking / Norsafe	A, C, D; NDC, series
Wuxi Huahai	PD series
Zhenjiang Marine Auxiliary Machinery Works	PL series
Type Twin Fall Gravity Roller Track	
	MODEL/SERIES
Acebi	GRA series
	BDTW
Bada Heavy industries	
Davit International	D-RT series
Global Davit	Gsp.RT, Glp.RT
Greben	GR-RTD series
Jiangyinshi Beihai	RB-H, HB-H series
Jiangsu Jiaoyan (Jiangvin Xingiiang F.R.P. Co., Ltd)	JYGR series
Jiangyin Wolong	JYHE, series
Harding (Umo Schat Harding) (Schat Davit Company)	GRA,HD-RT, ND, NT, series
Mansei (Muria) (Muria Vada)	GRA ,AT series
Oriental Precision	RTD series
Palfinger	NPT Series
Sekigahara	AT, STS series
Sezamor	ZZ-ZŁJ , ZZ-ZŁJ2 series
Tsuji Heavy Industries	TC, T83 series
Viking / Norsafe	E series; A, C, D; series
Watercraft	WRG series

Wuxi Dongwu	25kN-30kN series
Wuxi Shengou	SMDP series
Type Twin Fall Gravity Luffing / Pivoting	
MAKE	MODEL/SERIES
Acebi	SPG series
Arim	AHA, series
Bada Heavy industries	BDH, BDMS series
Davit International	D-NP, D-NP.MP series
Dong Nam Enterprise.,Co Ltd	DLB series
Dongnam Marine	DHGD series
Dongwoo Machinery & Engineering Co., Ltd.	DWS
DSB Engineering Co Ltd	DSBDL, DSBDTL series
Fassmer	FPD series
Global Davit	Gsp.FP, Gsp.MP, Glp.FP, Glp.MPseries
Greben	SPG series
Harding (Umo Schat Harding) (Schat Davit Company)	HD-SPG, HD-VIP , SPG(L),SPG(VL) series
(Palfinger)	
IHI Marine United Inc	MUL
Iknow Machinery (TSUJI)	HD series
Jiangyinshi Beihai	BH-G, LB-H, LA series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JYL series
Jiangyin Neptune	NPT-DL, DP, DYL, series
Jiangyin Wolong	JYPL series
Mansei (Muria) (Muria Vada)	ABD, AH, AV, EM, EH, M, CM, MVD, SPG(VD) series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	L series
Nor Davit	SDP series
Palfinger	NPT, VIP series
Pelegrini Marine Equipment	GRA Series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd	BD-PV , series
Oriental Precision	HDG, HGK, DHA, DMA series
Oriental Precision - Sekigahara	SHS
Sekigahara	SFA, SFB, SFP, SHS series
Tsuji Heavy Industries	H series
Vanguarde	VL, LE series
Viking / Norsafe	E, series
Wuxi Huahai	HMD series
Wuxi Dongwu	18kN-110Kn
WUXI SHENGOU	SHMDL series
Youngnam Machinery Co. Ltd	YNBD
Zhenjiang Marine Auxiliary Machinery Works	L
Zhejiang Taizhou Wantong Marine Machinery CO Ltd	YSJ
TYPE Twin Fall Hydraulic Luffing / Pivot	ing
MAKE	MODEL/SERIES
Acebi	TPC series
Bada Heavy industries	BDTD series
Davit International	D-NP, D-SP series
DSB Engineering Co Ltd	DSBDYL series
Fassmer	FMPD series
Global Davit	Gsp.FLh, Gsp.FPh, Glp.FLh, Glp.FPh series
Greben	HD, GD-PD series
Hatecke	GspFP
Harding (Umo Schat Harding)	SPD series
Jiangyinshi Beihai	BHGH series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	
Navim Group	SGHD- L, SPHD- T
Ned Deck Marine	PLG series
NOREQ (PALFINGER)	NPD series
Palfinger	PFH, NPD; series
TTS / Hydralift	HL9D
Vanguarde	PFH, SRH series
Viking / Norsafe	LH series
Zhenjiang Marine Auxiliary Machinery Works	SRH series
Type Single Arm Slewing	
MAKE	MODEL/SERIES
Abas	MDE. KDE series
Acebi	PFR, TPU, RRP; series
Acoin	R18700
Acta	MOB ; DR; DC, HSC series
Aota	AREH series
Alexander Ryan	AREITSEICS
	AREH, ARPV, series
Alexander Ryan	
Alexander Ryan	AREH, ARPV, series

Daesung	Combi series
Davit International	D-AS.S, D-CRm, D.BC.R, D-FOS D-BR , D-CRH.R, D- RC, D-RC.T, D.Cre.R D- SR04 series
Davit Company	SRR series
Denizsan	DSRBD, DRBD, DRBLRD series
Dongnam Marine Crane Co Ltd	DCPV, DSAD, DSAC, DNRD, DR, DRLD, DRBLRD series
Dongwoo Machinery & Engineering Co., Ltd	DBD series
DSB Engineering Co Ltd	DSB23DR series
EO Lifesaving	CH-52 R-LR
Fassmer	FSARR
FERRI	1872 series
Global Davit	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 series
Greben	SAR series
Gibert & Schmalriede Gmbh & Co. KG	PJ series
Gurdesan	GD-KHK GD-RRS series
Haean Machinery Ind. Co. Ltd.	HED-PC
Hanyoung Enterprise	RBD series
IMT.CO, LTD	ILR series
Jiangyinshi Beihai	SA, SAC, SMR series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JYR, JYRH, JYRCA series
Jiangyin Neptune	NPT-DR series
Jiangvin Wolong	JYSA series
Jung-A-Marine Co., Ltd	PCRLC series
Kyoritsu Kikai	DBZ series
Harding (Umo Schat Harding) (Schat Davit Company) (Palfinger)	LAR,MOB, SAR,SPR, SRR series
Navigations	1.1 series
Ned Deck Marine	SCH, SCM, SCT, SEC, series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	YZ, ZFDZ series
NMF	BP, KD.2 series
Noreq (Palfinger)	SCH, SCHD, SCM-L, SCH-R, SCM-R
Mansei (Muna) (Muria Vada)	R, RD, SAR, SR, series
Oriental Precision	RD series
Palfinger	SCM-L, SCH-R, SCM -R series
Pelegrini Marine Equipment	CHCD 2,507+ RLC 2,1/4,5, RLC series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd	BD- SA, BD-SH series
Oriental Precision	SHS series
Sekigahara	SSS series
Sekwang Marine Machinery CO, LTD	Single Arm Slewing Davit series
Servo Ship S.L	PR4M1100HR
Sezamor	ZZ-ZOT, ZZ-ZOL series
Shanghai Hengyuan Marine Equipment Corporation	SAF, series
Shin Myung Tech	SMRBD-SD, SMRBD&LRD, SMRBD&PV, SMRB&LRD-FT series
Taizhou Haihao Marine Equipment Co.,Ltd	21KN Boat/Raft Davit,
Tsuji Heavy Industries	RP series
Viking / Norsafe	NDSC-R, NRC-R series
Vanguarde	HS, MS, VS
Vestdavit	L series
Ulstein Fama (Fama Gniew)	ZO, ZT series
Welin Lambie	LRW, SABRE series
Wuxi Huahai	HMB series
Wuxi Dongwu	21kN-35kN DWC210 series
Wuxi Jiang Nan Marine Equipment Co., Ltd	ZFQ series
Wuxi Shengou	SMC, SMD series
Zhejiang Hengxin Ship Equipments CO.,LTD	SA23-1 series
Zhenjiang Marine Auxiliary Machinery Works	ZF, HDCL, SAFC, SAW series

MAKE	MODEL/SERIES	
Acebi	TPF, TPU series	
Arim	ARPV, series	
Bada Heavy Ind. Co., Ltd (Ex. Daeryuck Machinery)	BDA, BDFA, BFRD series	
BOPP Treuils JEB	BHD series	
Davit International	D-NPS.SP, D-TT.SP. D-NP.FR, D-NPS.MP series	
Denizsan	DSFRB series	
DSB Engineering Co Ltd	DSBARH, DSBDR, DSBDP series	
Global Davit	Rhp, Rhp.HC series	
Greben	RLC series	
Jiangyinshi Beihai	EHRD, FRH, SRH series	
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JYA, JYH, series	
Jiangyin Neptune	NPT- BE, NPT-DR series	

Jiangyin Wolong	JY-PLR; JY-LFR; JY-LRHE series
Harding (Umo Schat Harding) (Palfinger)	FR.P.SP, NPDS,SA, series
Holens AS	KOPAS A-1000
Hydralift/ TTS	HL series
Hydramarine	HMD, HMC series
Macgregor (TTS) Hydramarine)	A-Type, G-Type, HLD, HMD, HMC, series
Mansei (Muria) (Muria Vada)	EHR series
Ned Deck Marine (Palfinger)	PFH, PRH, PRHE series;
Ningbo New Marine Lifesaving Equipment Co. Ltd	NM, NMAR
NOREQ (PALFINGER)	NPD series
Palfinger	SCM-L, SCH-R, SCM -R series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd	BD-AR, series
Oriental Precision	RD series
Redrock	RDA series
Vestdavit	P, PL, PLA, PLP, PLR, PLAR PLD, PAP, PAPH, PLi series
Vanguarde	DH, PR, PRH series
Viking; / Norsafe	NDA,,NRB, series
Welin Lambie	PIV.1.0A series
Wuxi Huahai	HMDA series
Wuxi Dongwu	Rescue Boat Davit (A30-H35). series
Wuxi Shengou	HMDA series
Zhenjiang West Marine Equipment Co. Ltd	WME-LRH series
Type Single or Twin Fall Lifeboat Rescu	ue Boat / Fast Rescue Boat Telescopic Hydraulic
MAKE	MODEL/SERIES
Bada	TT, BDTD, series
Cramm Yachting Systems B.V	CDT 7000 series
Davit International	D-TT. DTT.SP series
Gibert & Schmalriede Gmbh & Co. KG	PJ series
MacGregor (Hydramarine)	T-Type series
Navim Group	SPDT L, SPDT T, SPDT R series
Palfinger	NTD Series
Redrock	RDT series
Vest Davit	TBD; series

MAKE	MODEL/SERIES
Acebi	TPF series
Acta	HSC series
Bada Heavy industries	BDF, HDFL series
Davit International	D-FH, D-TF series
Daelim Technology Co. Ltd. (Hyundai)	FF-740 series
Denizsan	DSFDD
DSB Engineering Co Ltd	DSBDF series
Fassmer	FFH, FLR series
Fassmer Marland	FFH
Greben	HFF series
Gurdesan	GD-FFD series
Jiangyinshi Beihai	FA series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JYF series
Jiangyin Neptune	NPT-DF series
Jiangyin Wolong	JY-FH series
Kyoritsu Kikai	LAF-MUF68 series
Harding (Umo Schat Harding)	LA, FF series
Hateke	FFA, FFB series
Mansei (Muria) (Muria Vada)	MFH, F, D-FH series
Ned Deck Marine	FFH series
Ningbo Asia F.R.P. Boat Manufacturing Co Ltd	YZF series
Palfinger	FF, NPT-DF series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd	BD-FF series
Oriental Precision	FD, series
SEC (Ships Equipment Centre)	HP2 series
Servo Ship S.L	FFR series
Sekigahara	SF series
Shanghai Hengyuan Marine Equipment Corporation	FH series
Stoznia Utska SP. Z.O.O	PZ, HZ
Taizhou Haihao Marine Equipment Co.,Ltd	55kn
Viking / Norsafe (Jiangyin)	H, HD, SW series
Verhoef	FL series
Wuxi Dongwu	F55, F70, NPT100F series
WUXI SHENGOU	SMDF series
Zhenjiang Just Marine Equipment Co., Ltd	FH
Zhenjiang Marine Auxiliary Machinery Works	FH series

WINCH

Type Twin drum; lifeboat gravity lowering electric hoisting

Brake system; static brake; cone / disk; pads/band; decent brake; centrifugal with pads

MAKE	MODEL/SERIES
Bada Heavy Industries	BA, BM, Elec. Motor Driven, PWD series
Davit Company	24 EPB series
Davit International	12 ;40; series
Dongwoo Machinery & Engineering Co., Ltd.	DWS series
Global davit	04 ,07 ,10, 14, 20, 26kNm series
Greben	EW, CW series
Harding (Watercraft)	NW; MW series
Harding (Umo Schat Harding) (Schat Davit Company) (Patfinger)	
Iknow Machinery (TSUJI)	EB series
IMT.CO, LTD	ILR-W series
Mansei	EW, MW, CMW, AW series
Ned-Deck Marine (Palfinger)	15 series
Nor Davit	SP series
Pelegrini Marine Equipment	VAS 45 E Series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd.	
Tsuji Heavy Industries	EB series
Watercraft	NW; MW
Welin Lambie	55; 53 ;97 series
	ic; multiple disks; decent brake; hydraulic pump
MAKE	MODEL/SERIES
Harding	CW, W series
Palfinger	
· · · · · · · · · · · · · · · · · · ·	CW, W series
Brake system; static brake mechar	nical; multiple disks; decent brake; centrifugal with pads
Brake system; static brake mechar	
Brake system; static brake mechar	nical; multiple disks; decent brake; centrifugal with pads
Brake system; static brake mechar MAKE Aciebi	nical; multiple disks; decent brake; centrifugal with pads MODEL/SERIES
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries	nical; multiple disks; decent brake; centrifugal with pads MODEL/SERIES TBE series
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd	MODEL/SERIES TBE series BW , BMW, BWR, BDTW, series
·	MODEL/SERIES TBE series BW , BMW, BWR, BDTW, series HLW
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer IHI Marine United Inc	MODEL/SERIES TBE series BW , BMW, BWR, BDTW, series HLW FDW series
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer	MODEL/SERIES TBE series BW , BMW, BWR, BDTW, series HLW FDW series MUW series MUW series MU series
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer IHI Marine United Inc Japan Marine United Corp Jiangyinshi Beihai Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co. Ltd)	MODEL/SERIES TBE series BW , BMW, BWR, BDTW, series HLW FDW series MUW series MUW series DS, DZ, DW, JYBW series
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer IHI Marine United Inc Japan Marine United Corp Jiangyinshi Beihai Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co. Ltd)	MODEL/SERIES TBE series BW , BMW, BWR, BDTW, series HLW FDW series MUW series MUW series DS, DZ, DW, JYBW series
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer IHI Marine United Inc Japan Marine United Corp Jiangyinshi Beihai Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co. Ltd)	MODEL/SERIES TBE series BW , BMW, BWR, BDTW, series HLW FDW series MUW series MU series DS, DZ, DW, JYBW series JYW, JYWP series
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer IHI Marine United Inc Japan Marine United Corp Jiangyinshi Beihai Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co. Ltd) Jiangyin Neptune	MODEL/SERIES TBE series BW , BMW, BWR, BDTW, series HLW FDW series MUW series MU series DS, DZ, DW, JYBW series JYW, JYWP series DW, DS series
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer IHI Marine United Inc Japan Marine United Corp Jiangyinshi Beihai Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co. Ltd) Jiangyin Neptune Jiangyin Wolong	MODEL/SERIES TBE series BW, BMW, BWR, BDTW, series HLW FDW series MUW series MU series DS, DZ, DW, JYBW series JYW, JYWP series DW, DS series JYD series
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer IHI Marine United Inc Japan Marine United Corp Jiangyinshi Beihai Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co. Ltd) Jiangyin Neptune Jiangyin Neptune Jiangyin Wolong Jung-A-Marine Co., Ltd	MODEL/SERIES TBE series BW, BMW, BWR, BDTW, series HLW FDW series MUW series MU series DS, DZ, DW, JYBW series JYW, JYWP series DW, DS series JYD series PCRLC seires
Brake system; static brake mechar MAKE Aciebi Bada Heavy Industries Dong Nam Enterprise.,Co Ltd Fassmer IHI Marine United Inc Japan Marine United Corp Jiangyinshi Beihai Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co. Ltd) Jiangyin Neptune Jiangyin Neptune Jiangyin Wolong Jung-A-Marine Co., Ltd Mansei	MODEL/SERIES TBE series BW, BMW, BWR, BDTW, series HLW FDW series MUW series MU series DS, DZ, DW, JYBW series JYW, JYWP series DW, DS series JYD series EBW, ABW, series

Viking (Norsafe) (Jiangyin)	NW series
Wuxi Huahai Marine	HMW series
Wuxi Dongwu	DS/Z, D/Z Series
WUXI SHENGOU	SMW series
Youngnam Machinery Co. Ltd	YNBW
Zhenjiang Marine Auxiliary Machinery Works	D, DP series
Type Single drum; lifeboat rescue	boat / gravity lowering electric hoisting

Brake system; static brake; band / pad; cone, disk, decent brake; centrifugal with pads

MAKE	MODEL/SERIES
Acebi	TBE series
ACTA	KNT
Dongnam Marine Crane Co.,Ltd.	DSAD series
Dongwoo Machinery & Engineering Co., Ltd.	DBD

Harding (Umo Schat Harding)	16 EBR series
Jiangyin Neptune	NPT-DW series
Ned deck Marine	04, series
SEC	WL series
Survival Systems Int.	W series
Viking (Norsafe) (Jiangyin)	DW

Brake system; static brake; pad / disk / eccentric cam; decent brake; centrifugal with pads	
MAKE	MODEL/SERIES
Alexander Welin	AIW series
Bada Heavy Industries	BDF, BLW, BMW, BRW series
Davit Company	16 EV, SRR series
Davit International	0.1., 02., 03., 04., 07kn series
Dongnam Marine Co Ltd	DRBD, DRBLRW series
EO Lifesaving	W
Fassmer	DEW series
FERRI	1872
Global Davit	01,02,04,08, 10 Kn, series
Gurdesan	GD-FLW series
Haean Machinery Ind. Co. Ltd.	HHD-PC series
Jiangyinshi Beihal	YZ series
Jiangsu Jiaoyan (Jiangyin Xingjiang F.R.P. Co., Ltd)	JYRZ series
Mansei	SW . RMW, MW, ERW, RBH, LBH series
Ned deck Marine	HWCT series
Oriental Precision	RDW series
Qingdao Beihai Shipbuilding Heavy Industry Co. Ltd	BW-SC series
Harding (Umo Schat Harding) (Schat Davit Company) (Palfinger)	FME series
Pelegrini Marine Equipment	RLC
Taizhou Haihao Marine Equipment Co., Ltd.	21kn
Tsuji Heavy Industries	TC series
Ulstein Fama (Fama Gniew)	ERM, ER10B series
Viking (Norsafe) (Jiangyin)	W
Welin Lambie	5619,9502, PIV.1.0A series
Wuxi Huahai Marine	MW series
Zhenjiang Dh Marine Equipment CO,. LTD	DW series
Zhejiang Hengxin Ship Equipment	YZ series

MAKE	MODEL/SERIES
Bada	HDF, PWD, series
Cramm Yachting Systems B.V	BWF1500
BOPP Treuils JEB	BHD, BHP 4200 series
BREVINI	BWF 025, BWC 050
Global Davit	W05HC, WO8HC, WS; series
Davit International	06 series
Fassmer / Marland	FFWH series
Gurdesan	GD-HC-A series
Greben	HW series
Haean Machinery Ind. Co. Ltd.	HHD-PC series
Harding (Umo Schat Harding) (Schat Davit Company) (Palfinger)	HD, LN, EW-02-PL, series
Hatecke	FFA, 07.02.08 series
Hydralift	SP series
Macgregor (TTS) Hydramarine)	HMW SERIES
Mansei	06, FW series
Noreq	NW series
Oriental Precision	WL series
Servo Ship S.L	FFRW series

TMA Winches	TN MW series
Vestvinsj	BW series
Verhoef	FL 50 series
Viking (Norsafe) (Jiangyin)	HYD-FF
Zollern	ZR, A2FM45-61A, ZHP series
Zhenjiang Marine Auxiliary Machinery Works	SAW series

Note 1: For the purpose of application of IMO Resolution MSC.402(96), including Corr.1, the service supplier is to be authorized by the Flag Administration under which the ship is registered.

For Flag Administrations which have authorized RINA as their Recognized Organization and accept RINA 'Certificate of Approval of Service Supplier' as equivalent to their authorization document to the Service Provider, according to the IMO Resolution MSC.402(96), including Corr.1, this Certificate may be accepted also for statutory purpose, in lieu of the Flag's authorization document to the Service Provider, allowing the firm to provide their services on the makes and models/series of equipment listed in the Annex N to this Certificate.

Note 2: This certificate of approval is also issued on behalf of Italian Administration according to the Italian 'Executive Decree n. 321' dated 21st April 2020 and Circular NDS n. 22/2021.

Therefore, this Service Provider is authorized to provide their services on board ships flying Italian flag for the makes and types of equipment defined according to ISO/PAS 23678, listed in the table of Annex N to this Certificate, without prejudice to the particular requirements in the aforementioned Italian official documents.

Note 3: CRALOG is authorized to perform services using also non-exclusive operators qualified by CRALOG, provided that the following conditions are satisfied for each service:

- 1. The operator holds a valid certificate of competence issued by CRALOG with a QR code including the make and type of equipment for which the service is to be carried out. The updated list of qualified operators can be verified at nhttps://verify.cralog.com/ via the instruction on the CRALOG website (www.cralog.com)
- 2. An employment order is issued by CRALOG to the qualified operator for each service.
- 3. This Certificate of Approval of Service Supplier issued to CRALOG by RINA is attached to each service job.
- 4. The service reports and the statements of fitness for purpose are issued under CRALOG's liability, via their software, each statement shall contain a QRD code for verification of authenticity.

*** UNQUOTED ***

Data Date	26/04/2023	Nome e Firma del Tecnico responsabile Audit Team Leader name and signature	RIA René O. Kristensen
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