

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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