



## Lloyd's Register Approved Service Supplier

**Supplier** **Marine Technical Solutions, S.L.U.**  
**Address** Oceano Atlantico 62, Poligono Palmones II, Los Barrios, Cadiz, 11379, Spain  
**Contact Details** Javierdel Monte - Email: javierdm@marinetechnicalsolutions.es  
**Contact Number** Tel: +34 622 23 04 66

The above company having been assessed hereby receives approval in accordance with the requirements of Lloyd's Register Procedures for Approval of Service Suppliers as Supplier from the address(es) listed above for the provision of

<b>Inspections And Maintenance Of Fire-Extinguishing Equipment And Systems</b>

<b>Hydraulic Tests Of Low And High Pressure Cylinders</b>

<b>Service Of Immersion Suits, Thermal Protective Aids, And Chemical Protective Clothing</b>

**Luzbel Fernandez**  
Senior Surveyor in Valencia to Lloyd's Register EMEA  
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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## Lloyd's Register Approved Service Supplier

<b>Inspections And Maintenance Of Self-Contained Breathing Apparatus</b>

<b>Servicing Of Inflatable Liferrafts, Inflatable Lifejackets, Hydrostatic Release Units, Marine Evacuation Systems</b>

<b>Maintenance, thorough Examination, Operational Testing, Overhaul and Repair of Lifeboats and Rescue Boats, Launching Appliances and Release Gear</b>
Service Supplier's personnel are certified in accordance with a recognised manufacturer's established certification programme. The service supplier is authorised to work on the makes and types shown in the attached appendix A. The Service Supplier has been approved to service the equipment in accordance with IMO Resolution MSC.402(96), as amended. Service engineers are to be provided with a valid Certificate, issued by this Approved Service Supplier, which defines their level of qualification and the scope of the certification (i.e. makes and types of equipment and specifically state which activities (e.g. annual thorough examination and operational tests; 5-year thorough examination, overhaul; overload operational tests; repairs) are covered by the certification). This Certificate should be made available when requested.

This approval is conditional upon the Supplier maintaining the documented scheme as audited by any member of the Lloyd's Register Group and hereby approved; and notifying Lloyd's Register in writing of any change to that scheme including any change in personnel, equipment or procedures. This certificate is issued to the Supplier and, subject to the Supplier complying with the necessary conditions, is valid to the date referred to above.

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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## APPENDIX A

Office: **Cádiz**

Date: **17 April 2026**

This Certificate is issued to MARINE TECHNICAL SOLUTIONS S.L.U.

The service supplier has been approved to service the following equipment in accordance with MSC.402(96). Certified in accordance with a recognised manufacturer's established certification programme.

### SURVIVAL CRAFT

MAKE	TYPE	MODELS / SERIES	INVENTORY LIST NO	ISO 23687:2022 REFERENCE
ACEBI	Partially enclosed lifeboat, twin fall,	PELB-series	16	5.4.3.1a
ACEBI	Totally enclosed lifeboat, twin fall with sprinkler and air system,	PELB-series, TELB-series	20	5.4.3.1a
AMBAR MARINE	Rescue Boat, single fall,	AM420-series	8	5.4.3.1b
AVON	Rescue Boat, single fall,	RB-series, SR-series	8	5.4.3.1b
BALDEN	Totally enclosed lifeboat, freefall,	BD-FFC-series, BD-FFT-series	20, 23	5.4.3.1a
BALDEN	Totally enclosed lifeboat, twin fall with air system,	BD-LB-series	20	5.4.3.1a
BALDEN	Totally enclosed lifeboat, twin fall with sprinkler and air system,	BD-LB-series	20	5.4.3.1a
BALDEN	Rescue Boat, single fall,	BD-series	8	5.4.3.1b
BIANCHI & CHECCHI	Partially enclosed lifeboat, twin fall,	PE-series	16	5.4.3.1a
BROOKER	Totally enclosed lifeboat, single fall,	CA-series	20	5.4.3.1a
CASTOLDI S.R.L.	Rescue Boat, single fall,	JET TENDER 18 RB-series	8	5.4.3.1b
DAFER (NARWHAL)	Fast Rescue Boat, single fall,	FRB-series	13	5.4.3.1b
DAFER (NARWHAL)	Rescue Boat, single fall,	FRB 700-series, FRB 900-series, SV-series	8	5.4.3.1b
DELTA	Rescue Boat, single fall,	COMET-series, PHANTOM-series	8	5.4.3.1b
DSB DEUTSCHE SCHLAUCHBOOTE	Rescue Boat, single fall,	IRB-series	8	5.4.3.1b
DSB ENGINEERING CO LTD	Partially enclosed lifeboat, twin fall,	DSBP-series	16	5.4.3.1a
DSB ENGINEERING CO LTD	Rescue Boat, single fall,	DSBRB-series, DSBRFA-series,	8	5.4.3.1b

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DSB ENGINEERING CO LTD	Totally enclosed lifeboat, freefall,	DSBFC-series, DSBFF-series	20, 23	5.4.3.1b
DSB ENGINEERING CO LTD	Totally enclosed lifeboat, twin fall with air system,	DSBC-series	20	5.4.3.1a
DSB ENGINEERING CO LTD	Totally enclosed lifeboat, twin fall with sprinkler and air system,	DSBF-series	20	5.4.3.1a
ERNST HATECKE GMBH	Rescue Boat, single fall,	FRB-series, RB-series	8	5.4.3.1b
ERNST HATECKE GMBH	Totally enclosed lifeboat, freefall,	GFF-series	20, 23	5.4.3.1b
FASSMER	Fast Rescue Boat, single fall,	FRR-series, FR(I)B-series, FRB-series, RR-series	13	5.4.3.1b
FASSMER	Partially enclosed lifeboat, twin fall,	CL-P-series, PLL-series, PLT-series, SEL-series, PL-series, SEL-T-series, SEL-R-series	16	5.4.3.1a
FASSMER	Rescue Boat, single fall,	FRIR-series, RR-series, RB-series, MOB-series	8	5.4.3.1b
FASSMER	Totally enclosed lifeboat, freefall,	CFL-series, GAR-series, GAR-T-series, CFL-C FFB-series, CFL-C 66E series	23, 20	5.4.3.1b
FASSMER	Totally enclosed lifeboat, twin fall with air system,	CL-series, CLR-series, CLX-series, GMR-series, CFL-series, DRAGON-series, CLR-C-series, CL-C-series, GAR-series	20	5.4.3.1a
FASSMER	Totally enclosed lifeboat, twin fall with sprinkler and air system,	CL-series, CLR-series, CLX-series, DRAGON-series, T-GMR-series, GAR-series, CFL-series, TGMR-series, CLR-T-series, CL-T-series	20	5.4.3.1a
FASSMER MARLAND	Rescue Boat, single fall,	RR-series	8	5.4.3.1b
FASSMER MARLAND	Totally enclosed lifeboat, freefall,	CFL-C-series, CFL-T-series	20, 23	5.4.3.1a
FASSMER MARLAND	Totally enclosed lifeboat, twin fall with air system,	DRAGON C-series, HH-C-series	20	5.4.3.1a
FASSMER MARLAND	Totally enclosed lifeboat, twin fall with sprinkler and air system,	DRAGON F-series, HH-T-series	20	5.4.3.1a
FR. FASSMER GMBH	Totally enclosed lifeboat, freefall,	GAR-series	20, 23	5.4.3.1a
GEPA	Fast Rescue Boat, single fall,	G-FRB-series	13	5.4.3.1b
GEPA	Partially enclosed lifeboat, twin fall,	G-FYK-series, G-F3YK-series, G-F3YK-T-series, G-F-series	16	5.4.3.1a
GEPA	Rescue Boat, single fall,	G-RB-series	8	5.4.3.1b
GEPA	Totally enclosed lifeboat, freefall,	G-FFF-series, G-FF-series, G-FFF-FP-series, G-F3K-series, G-F4K-series, G-F6K-series, G-F8K-series	20, 23	5.4.3.1a
GEPA	Totally enclosed lifeboat, twin fall with air system,	G-FK-series, G-F3K-series, G-F3K-FP-series, G-F4K-series, G-F6K-series, G-F8K-series	20	5.4.3.1a
GEPA	Totally enclosed lifeboat, twin fall with sprinkler and air system,	G-F3K-FP-series, G-F4K-FP-series, G-F6K-FP-series, G-F8K-series	20	5.4.3.1a
GREBEN	Partially enclosed lifeboat, twin fall,	PEL-series	16	5.4.3.1a
GREBEN	Rescue Boat, single fall,	RB-series, BR-series	8	5.4.3.1b
GREBEN	Totally enclosed lifeboat, freefall,	FFL-series, FLL-series	20, 23	5.4.3.1a
GREBEN	Totally enclosed lifeboat, twin fall with air system,	TEL-series	20	5.4.3.1a

GREBEN	Totally enclosed lifeboat, twin fall with sprinkler and air system,	TEL-FP-series	20	5.4.3.1a
HARDING (UMOESCHAT HARDING)	Partially enclosed lifeboat, twin fall,	CTL-series, ML-series, MPC-series	16	5.4.3.1a
HARDING (UMOESCHAT HARDING)	Rescue Boat, single fall,	MOB 4.5A-series, MOB-series, RRB-series	8	5.4.3.1b
HARDING (UMOESCHAT HARDING)	Fast Rescue Boat, single fall,	NPDS-series	13	5.4.3.1b
HARDING (UMOESCHAT HARDING)	Totally enclosed lifeboat, freefall,	FF-series, KISS 800-series, LBF-series	20, 23	5.4.3.1a
HARDING (UMOESCHAT HARDING)	Totally enclosed lifeboat, twin fall with air system,	MCF-series, MCM-series, MCB-series, LBT-series	20	5.4.3.1a
HARDING (UMOESCHAT HARDING)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	MCB-series, MCM-series, MC-series, MCR-series	20	5.4.3.1a
HARDING (WATERCRAFT)	Partially enclosed lifeboat, twin fall,	MOB-series, MOBAC-series, PELB-series, PERB-series	16	5.4.3.1a
HARDING (WATERCRAFT)	Totally enclosed lifeboat, freefall,	WFF-series	20, 23	5.4.3.1a
HARDING (WATERCRAFT)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	MK 1-series, MK 2-series, MK 3-series, MK 4-series, MK 5-series	20	5.4.3.1a
HARDING (WATERCRAFT)	Open lifeboat, twin fall,	MK-series	16	5.4.3.1a
HARDING BOAT BUILDING (QINGDAO) CO., LTD.	Totally enclosed lifeboat, twin fall with air system,	TECB-series	20	5.4.3.1a
HATECKE (ERNST HATECKE)	Partially enclosed lifeboat, twin fall,	PEL-series, PL-series	16	5.4.3.1a
HATECKE (ERNST HATECKE)	Rescue Boat, single fall,	FRB-series, RB-series, LB-series, GSL-series	8	5.4.3.1b
HATECKE (ERNST HATECKE)	Totally enclosed lifeboat, freefall,	GFF-series, FFB-series, FF-series, F-series	20, 23	5.4.3.1a
HATECKE (ERNST HATECKE)	Totally enclosed lifeboat, twin fall,	GLS-series, GF-series, GSL-series, PEL-series, PL-series, GFF-series, GSA R-series	20	5.4.3.1a
HATECKE (ERNST HATECKE)	Fast Rescue Boat, single fall,	FRB-series	13	5.4.3.1b
HATECKE (ERNST HATECKE)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	GSL-series, PL-series, GFF-series	20	5.4.3.1a
HOEI SENPAKU CO, LTD	Totally enclosed lifeboat, twin fall with air system,	HS-series	20	5.4.3.1a
HOEI SENPAKU CO, LTD	Totally enclosed lifeboat, twin fall with sprinkler and air system,	HS650F-series, HSF-series	20	5.4.3.1a
IHI CRAFT CO.	Totally enclosed lifeboat, twin fall,	GTC-series	20	5.4.3.1a
IHI MARINE UNITED INC	Open lifeboat, twin fall,	G-series	16	5.4.3.1a
IHI MARINE UNITED INC	Totally enclosed lifeboat, twin fall with air system,	GTC-series, GTC-C-series, GTR-series	20	5.4.3.1a
IHI MARINE UNITED INC	Totally enclosed lifeboat, twin fall with sprinkler and air system,	GT-F-series, GTC-F-series, GTRF-series, GTR-series	20	5.4.3.1a
IHI MARINE UNITED INC	Totally enclosed lifeboat, freefall,	MU-FF/FN-series	20, 23	5.4.3.1a
IHI MARINE UNITED INC	Rescue Boat, single fall,	MU-GJ-series	8	5.4.3.1b
ISHIHARA DOCKYARD CO.	Totally enclosed lifeboat, twin fall,	G-series, ML-series, F-series	20	5.4.3.1a
ISHIHARA DOCKYARD CO.	Totally enclosed lifeboat, freefall,	G-series, ML-series, F-series	20, 23	5.4.3.1a
ISHIHARA DOCKYARD CO.	Rescue Boat, single fall,	G-series, ML-series, F-series	8	5.4.3.1b
JAPAN MARINE UNITED CORP	Totally enclosed lifeboat, twin fall with air system,	GF-series, GTR-series, GTC-series, MU-FN-series	20	5.4.3.1a
JAPAN MARINE UNITED CORP	Totally enclosed lifeboat, twin fall with sprinkler and air system,	GTR-series, GF-series, GTC-series	20	5.4.3.1a
JAPAN MARINE UNITED CORP	Totally enclosed lifeboat, freefall,	MU-FF-series	20, 23	5.4.3.1a

JAPAN MARINE UNITED CORP	Open lifeboat, twin fall,	S-series, G-series	16	5.4.3.1a
JAPAN MARINE UNITED CORP	Rescue Boat, single fall,	MU-GJ-series	8	5.4.3.1b
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD (JIANGYIN XINJIANG F.R.P. CO. LTD)	Rescue Boat, single fall,	GJ-series, GJF-series, GZ-series, FRP-series	8	5.4.3.1b
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD (JIANGYIN XINJIANG F.R.P. CO. LTD)	Fast Rescue Boat, single fall,	GJ-series	13	5.4.3.1b
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD (JIANGYIN XINJIANG F.R.P. CO. LTD)	Totally enclosed lifeboat, freefall,	JY-FF-series, JY-FN-series, JYMFF-series, GJ-series, JYM-FN-series, JY-series, FN-series, FW-series, JYN-FN-series, JYM-FF-series, SY-FN-series, FRP-series, JYM-series, JY-FF-series	20, 23	5.4.3.1a
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD (JIANGYIN XINJIANG F.R.P. CO. LTD)	Totally enclosed lifeboat, twin fall with air system,	JY-QFN-series, JY-QFP-series, JY-series, JN-series, JY-QF-series, JYQFP-series, JYM-series, JY-FN-series	20	5.4.3.1a
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD (JIANGYIN XINJIANG F.R.P. CO. LTD)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	JY-QFN-series, JY-QFP-series, JY-series, JY-QF-series, GJ-series, JY-FF-series, JY-QFN-series, JYM-series, JY-FN-series	20	5.4.3.1a
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Totally enclosed lifeboat, twin fall with air system,	NPT-C-series, SC-series, NPT-series	20	5.4.3.1a
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Totally enclosed lifeboat, twin fall with sprinkler and air system,	NPT-F-series, NPT-series, SC-series	20	5.4.3.1a
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Partially enclosed lifeboat, twin fall,	NPT-P-series, NPT-PT-series, NPT-series	16	5.4.3.1a
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Rescue Boat, single fall,	NPT-R-series, NPT-RA-series, NPT-RB-series, NPT-RFA-series, NPT-series	8	5.4.3.1b
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Totally enclosed lifeboat, freefall,	NPT-FA-series, NPT-FC-series, NPT-FCA-series, NPT-FF-series, NPT-series	20, 23	5.4.3.1a
JIANGYIN NORSAFE	Totally enclosed lifeboat, twin fall with air system,	JYN-series, GES-series	20	5.4.3.1a
JIANGYIN NORSAFE	Totally enclosed lifeboat, freefall,	GES-series, JYF-series	20, 23	5.4.3.1a
JIANGYIN NORSAFE	Rescue Boat, single fall,	MATRIX-series, MIDGET-series	8	5.4.3.1b
JIANGYIN NORSAFE	Totally enclosed lifeboat, twin fall with sprinkler and air system,	JYN-series, GES-series	20	5.4.3.1a
JIANGYIN NORSAFE	Fast Rescue Boat, single fall,	MERLIN-series, FRB-series	13	5.4.3.1b
JIANGYIN NORSAFE	Partially enclosed lifeboat, twin fall,	MATHILDA-series	16	5.4.3.1a
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Open lifeboat, twin fall,	JYK-series	16	5.4.3.1a
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Partially enclosed lifeboat, twin fall,	JYP-series	16	5.4.3.1a
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Rescue Boat, single fall,	JYDR-series, JYKR-series, JY-series	8	5.4.3.1b
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Totally enclosed lifeboat, freefall,	JYCF-series, JYFF-series, JY-series, JY65-series	20, 23	5.4.3.1a
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Totally enclosed lifeboat, twin fall with air system,	JYC-series, JYCA-series, JY-series	20	5.4.3.1a
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Totally enclosed lifeboat, twin fall with sprinkler and air system,	JYF-series, JYFA-series, JY-series	20	5.4.3.1a
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Fast Rescue Boat, single fall,	JY-series, JY65-series	13	5.4.3.1b

JIANGYIN XINJIANG	Rescue Boat, single fall,	GJ-series, GJ- B-series	8	5.4.3.1b
JIANGYIN XINJIANG	Totally enclosed lifeboat, freefall,	JY-FN-series	20, 23	5.4.3.1a
JIANGYINSHI BEIHAI	Fast Rescue Boat, single fall,	JYB-G-series, JYB-Q-series	13	5.4.3.1b
JIANGYINSHI BEIHAI	Open lifeboat, twin fall,	JYB-K-series	16	5.4.3.1a
JIANGYINSHI BEIHAI	Partially enclosed lifeboat, twin fall,	JYB-B-series	16	5.4.3.1a
JIANGYINSHI BEIHAI	Rescue Boat, single fall,	JY-BR-series, JYB-KR-series, SCK-series, SC-KR-series, SC- series, LSA-series, SC45K- series	8	5.4.3.1b
JIANGYINSHI BEIHAI	Totally enclosed lifeboat, freefall,	JYB-FC-series, JYB-FF- series, JYB-series, JYM-series	20, 23	5.4.3.1a
JIANGYINSHI BEIHAI	Totally enclosed lifeboat, twin fall with air system,	JYB-C-series, JYB-series	20	5.4.3.1a
JIANGYINSHI BEIHAI	Totally enclosed lifeboat, twin fall with sprinkler and air system,	JYB-F-series, JYB-series	20	5.4.3.1a
MARE SAFETY	Rescue Boat, single fall,	RB-series	8	5.4.3.1b
MARITME PARTNER	Fast Rescue Boat, single fall,	ALUSAFE 1200 DC-series, ALUSAFE 700-series, ALUSAFE-series, ALUSAFE twin-series, ALUSAFE 900- series, SEA BEAR 23-series, WEEDO 17 SOLAS-series, WEEDO 600- series, WEEDO 700-series, WEEDO-series, MP-series, SEABEAR-series, SPRINGER-series	13	5.4.3.1b
MARITME PARTNER	Rescue Boat, single fall,	SPRINGER-series	8	5.4.3.1b
MARITME PARTNER (HUKKELBERG BOATS)	Fast Rescue Boat, single fall,	SPRINGER-series	13	5.4.3.1b
MONTMONTAZA GREBEN	Totally enclosed lifeboat, twin fall with sprinkler and air system,	TEL-series	20	5.4.3.1a
MONTMONTAZA GREBEN	Totally enclosed lifeboat, freefall,	FFL-series, FFL-P-series	20, 23	5.4.3.1a
MONTMONTAZA GREBEN	Rescue Boat, single fall,	RB-series	8	5.4.3.1b
MULDER EN RIJKE	Partially enclosed lifeboat, twin fall,	PELB-series, PTL-series	16	5.4.3.1a
MULDER EN RIJKE	Totally enclosed lifeboat, single fall,	TELB-S-series	20	5.4.3.1a
MULDER EN RIJKE	Totally enclosed lifeboat, twin fall with sprinkler and air system,	TELB-series	20	5.4.3.1a
NARWHAL	Rescue Boat, single fall,	SV-series	8	5.4.3.1b
NARWHAL (DAFER)	Fast Rescue Boat, single fall,	SV-series	13	5.4.3.1b
NED-DECK MARINE (PALFINGER)	Rescue Boat, single fall,	NMD 4.40 RESCUE-series	8	5.4.3.1b
NED-DECK MARINE (PALFINGER)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	NPT-series, PN85F-series	20	5.4.3.1a
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Fast Rescue Boat, single fall,	YZRA-series, YZRB-series	13	5.4.3.1b
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Open lifeboat, twin fall,	BJ-series	16	5.4.3.1a
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Rescue Boat, single fall,	BJ-series, YZ-series	8	5.4.3.1b
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Totally enclosed lifeboat, freefall,	YZFC-series, YZFF-series	20, 23	5.4.3.1a
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Totally enclosed lifeboat, twin fall with air system,	YZC-series	20	5.4.3.1a

NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Totally enclosed lifeboat, twin fall with sprinkler and air system,	YZF-series	20	5.4.3.1a
NINGBO NEW MARINE LIFESAVING EQUIPMENT CO. LTD	Totally enclosed lifeboat, twin fall with air system,	NM-series	20	5.4.3.1a
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Fast Rescue Boat, single fall,	FRP-series	13	5.4.3.1b
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Rescue Boat, single fall,	G-series, ML-series, F-series	8	5.4.3.1b
O., LTD. (EX. A DOCKYARD, PON)	Open lifeboat, twin fall,	NF-series, NFA-series	16	5.4.3.1a
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Partially enclosed lifeboat, twin fall,	PML-series	16	5.4.3.1a
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Totally enclosed lifeboat, freefall,	FF-series, G-series, ML-series, F-series	20, 23	5.4.3.1a
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Totally enclosed lifeboat, twin fall with air system,	CML-series, EML-series, G-TR-series, G-series, ML-series, F-series	20	5.4.3.1a
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	CML-series, EML-series, G-FR-series, G-series, ML-series, F-series	20	5.4.3.1a
NOREQ	Partially enclosed lifeboat, twin fall,	LBP-series	16	5.4.3.1a
NOREQ	Fast Rescue Boat, single fall,	FRB-series	13	5.4.3.1b
NOREQ	Rescue Boat, single fall,	RRB-series	8	5.4.3.1b
NOREQ	Totally enclosed lifeboat, freefall,	LBF-series	20, 23	5.4.3.1a
NOREQ	Totally enclosed lifeboat, twin fall with sprinkler and air system,	LBT-series, LBF-series	20	5.4.3.1a
NOREQ	Totally enclosed lifeboat, twin fall with air system,	LBT-series, MIRIAM-series	20	5.4.3.1a
NORMAR	Fast Rescue Boat, single fall,	FRC-series	13	5.4.3.1b
NORMAR	Rescue Boat, single fall,	RESCUE-series, GRP-series, FRC-series, 4.25RESCUE-series, 5.25RESCUE-series	8	5.4.3.1b
NORMAR	Totally enclosed lifeboat, freefall,	JY-FF-series, FF-series, 4.9 T-series, 5.8-T-series, 8.5C-series, JY-FF 4.9 TO 8.5T-series	20, 23	5.4.3.1a
NORSAFE	Rescue Boat, single fall,	MIDGET-series, MATRIX NDC-series	8	5.4.3.1b
NORSAFE	Totally enclosed lifeboat, twin fall,	JYN-series, GES-series, TELB-series	20	5.4.3.1a
NORSAFE	Totally enclosed lifeboat, twin fall with sprinkler and air system,	JYN-series, GES-series, MATHILDA-series, MIRIAM-series, MAUD-series, MAGGIE-series, MIDGET-series	20	5.4.3.1a
NORSAFE	Totally enclosed lifeboat, freefall,	GES-series, GLS-series, MK-series	20, 23	5.4.3.1a
NORSAFE	Fast Rescue Boat, single fall,	MERLIN-series, MAKO-series, MAGNUM-series, MIDGET-series	13	5.4.3.1b
NORSAFE	Partially enclosed lifeboat, twin fall,	MINIMA-series	16	5.4.3.1a
NORSAFE	Open lifeboat, twin fall,	JYN-series	16	5.4.3.1a
OY FISKARS AB	Totally enclosed lifeboat, twin fall with air system,	TELB-series	20	5.4.3.1a

OY FISKARS AB	Totally enclosed lifeboat, twin fall with sprinkler and air system,	TELB-series	20	5.4.3.1a
PALFINGER	Fast Rescue Boat, single fall,	FRSQ-series	13	5.4.3.1b
PALFINGER	Partially enclosed lifeboat, twin fall,	TL-series, MPC-series, NPT-T-series	16	5.4.3.1a
PALFINGER	Rescue Boat, single fall,	RSQ-series, RRB-series	8	5.4.3.1b
PALFINGER	Totally enclosed lifeboat, freefall,	FF-series, NPT-FC-series, NPTFF-series, LBF-series	20, 23	5.4.3.1a
PALFINGER	Totally enclosed lifeboat, twin fall with air system,	KISS-C-series, NPT-F-series, MCB-series	20	5.4.3.1a
PALFINGER	Totally enclosed lifeboat, twin fall with sprinkler and air system,	KISS-T-series, NPT-C-series, MCB-series	20	5.4.3.1a
PALFINGER MARINE SERVICE	Rescue Boat, single fall,	HARDING/MOB L-series	8	5.4.3.1b
PESBO S.A	Totally enclosed lifeboat, freefall,	BSL-series	20, 23	5.4.3.1a
PESBO S.A	Totally enclosed lifeboat, twin fall with air system,	BSC-series, BSL-series	20	5.4.3.1a
PESBO S.A	Totally enclosed lifeboat, twin fall with sprinkler and air system,	BSC-series	20	5.4.3.1a
PESBO S.A	Fast Rescue Boat, single fall,	BR-series	13	5.4.3.1b
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Fast Rescue Boat, single fall,	BH-HR7-series, FRB-series, BH-series	13	5.4.3.1b
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Partially enclosed lifeboat, twin fall,	BH10-series, BH-series	16	5.4.3.1a
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Rescue Boat, single fall,	BH-R-series, BH-series, BH-F-series	8	5.4.3.1b
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Totally enclosed lifeboat, freefall,	BH-F-series, BH-series, BO-series, BH-7B-series	20, 23	5.4.3.1a
O BEIHAI DING HEAVY Y CO. LTD.	Totally enclosed lifeboat, twin fall with air system,	BH-series	20	5.4.3.1a
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Totally enclosed lifeboat, twin fall with sprinkler and air system,	BH-series, BH-F-series	20	5.4.3.1a
SCHAT HARDING	Totally enclosed lifeboat, twin fall with sprinkler and air system,	TECB-series, KISS-series, MCB-series	20	5.4.3.1a
SCHAT HARDING	Totally enclosed lifeboat, twin fall with air system,	MCD-series, KISS-series, MCB-series	20	5.4.3.1a
SCHAT HARDING	Totally enclosed lifeboat, freefall,	FF-series	20, 23	5.4.3.1a
SCHAT HARDING	Rescue Boat, single fall,	MOB-series	8	5.4.3.1b
SCHAT HARDING	Partially enclosed lifeboat, twin fall,	MPC-series	16	5.4.3.1a
SCHAT HARDING	Fast Rescue Boat, single fall,	FRB-series	13	5.4.3.1b
SCHAT HARDING	Totally enclosed lifeboat, twin fall,	MCB-series	20	5.4.3.1a
SCHAT WATERCRAFT (PALFINGER)	Totally enclosed lifeboat, freefall,	NS-series	20, 23	5.4.3.1a
SEKIGAHARA SEISAKUSHO LTD.	Totally enclosed lifeboat, twin fall with sprinkler and air system,	SH-series, SFB-series, SHS-series, STS-series, SSS-series	20	5.4.3.1a
SEKIGAHARA SEISAKUSHO LTD.	Totally enclosed lifeboat, twin fall with air system,	SH-series, SFB-series, SHS-series, STS-series, SSS-series	20	5.4.3.1a
SEKIGAHARA SEISAKUSHO LTD.	Totally enclosed lifeboat, freefall,	SFS-series, SFA-series, SFB-series, SFC-series, SFD-series	20, 23	5.4.3.1a
SEKIGAHARA SEISAKUSHO LTD.	Rescue Boat, single fall,	SJS-series, SJR-series	8	5.4.3.1b
SHIGI SHIPBUILDING CO. LTD.	Fast Rescue Boat, single fall,	FRP-series	13	5.4.3.1b

SHIGI SHIPBUILDING CO. LTD.	Open lifeboat, twin fall,	SZGM-series, SZGO-series, OPEN-series	16	5.4.3.1a
SHIGI SHIPBUILDING CO. LTD.	Partially enclosed lifeboat, twin fall,	SZP-series, SZPR-series	16	5.4.3.1a
SHIGI SHIPBUILDING CO. LTD.	Rescue Boat, single fall,	SZRS-series, VOX46-series, SZ-series, VOX-series, BOX-series	8	5.4.3.1b
SHIGI SHIPBUILDING CO. LTD.	Totally enclosed lifeboat, freefall,	FEL-series, SZ-series, GARS-series	20, 23	5.4.3.1a
SHIGI SHIPBUILDING CO. LTD.	Totally enclosed lifeboat, twin fall with air system,	SZBR-series, SZ-series, FEL-series, GARS-series	20	5.4.3.1a
SHIGI SHIPBUILDING CO. LTD.	Totally enclosed lifeboat, twin fall with sprinkler and air system,	SZBR-series, SZ-series, FEL-series, GARS-series	20	5.4.3.1a
STOCZNIA USTKA SP. Z O.O.	Fast Rescue Boat, single fall,	FRB-series	13	5.4.3.1b
STOCZNIA USTKA SP. Z O.O.	Rescue Boat, single fall,	R-series, RIB-series	8	5.4.3.1b
STOCZNIA USTKA SP. Z O.O.	Totally enclosed lifeboat, freefall,	FFB-series	20, 23	5.4.3.1a
STOCZNIA USTKA SP. Z O.O.	Totally enclosed lifeboat, twin fall with air system,	Z-series	20	5.4.3.1a
SURVITEC	Totally enclosed lifeboat, freefall,	FF-series	20, 23	5.4.3.1a
SURVITEC	Totally enclosed lifeboat, twin fall with air system,	SC-series	20	5.4.3.1a
SURVITEC	Totally enclosed lifeboat, twin fall with sprinkler and air system,	SC-series	20	5.4.3.1a
SURVITEC	Rescue Boat, single fall,	HD720I-series	8	5.4.3.1b
SURVIVAL SYSTEMS INT	Fast Rescue Boat, single fall,	FRB-series	13	5.4.3.1b
SURVIVAL SYSTEMS INT.	Totally enclosed lifeboat, single fall,	CA-series	20	5.4.3.1a
TSUNEISHI	Totally enclosed lifeboat, twin fall with air system,	TL-TE-series, KL-series, TL-TE-series, TL-FP-series	20	5.4.3.1a
TSUNEISHI (KAMBARA RINGYO)	Totally enclosed lifeboat, twin fall with air system,	KL-TE-series, KL-series, TL-TE-series, TL-FP-series	20	5.4.3.1a
TSUNEISHI (KAMBARA RINGYO)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	KL-FP-series, KL-series, TL-FP-series	20	5.4.3.1a
TSUNEISHI (SANYO WORKS)	Totally enclosed lifeboat, twin fall with air system,	TE-series	20	5.4.3.1a
TSUNEISHI (SANYO WORKS)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	FP-series, KL-series, TL-FP-series	20	5.4.3.1a
VANGUARD (NANTONG)	Totally enclosed lifeboat, freefall,	VG-series	20, 23	5.4.3.1a
VANGUARDE	Fast Rescue Boat, single fall,	VG-FRK-series, VG-FRW-series	13	5.4.3.1b
VANGUARDE	Rescue Boat, single fall,	VG-DRS-series, VG-KR-series, VG-series	8	5.4.3.1b
VANGUARDE	Totally enclosed lifeboat, twin fall with air system,	VG-C-series, VG-FC-series	20	5.4.3.1a
VANGUARDE	Totally enclosed lifeboat, twin fall with sprinkler and air system,	VG-F-series, VG-HLB-series	20	5.4.3.1a
VIKING (NORSAFE)	Fast Rescue Boat, single fall,	MAGNUM-series, MAKO-series, MERLIN-series	13	5.4.3.1b
VIKING (NORSAFE)	Partially enclosed lifeboat, twin fall,	MINIMA-series, LB-series	16	5.4.3.1a
VIKING (NORSAFE)	Rescue Boat, single fall,	MAKO-series, MERLIN-series, MIDGET-series, GRP-series, 470-series, RB-series, NARWHAL-series, MOB-series, 420-series, 470GRP-series, VALIANT-series	8	5.4.3.1b
VIKING (NORSAFE)	Totally enclosed lifeboat, freefall,	JYN-series	20, 23	5.4.3.1a
VIKING (NORSAFE)	Totally enclosed lifeboat, twin fall with air system,	JYN-C-series, MAGGIE-C-	20	5.4.3.1a

		series, MATILDA-C-series, MAUD-C-series, MAXIMA-C-series, MIRAM -C-series		
VIKING (NORSAFE)	Totally enclosed lifeboat, twin fall with sprinkler and air system,	JYN-T-series, MAGGIE-T-series, MATILDA-T-series, MAUD-T-series, MAXIMA-T-series, MIRAMT-series, MCB-series	20	5.4.3.1a
VIKING (NORSAFE) (JIANGYIN)	Rescue Boat, single fall,	MATRIX-series	8	5.4.3.1b
VIKING (NORSAFE) (JIANGYIN)	Totally enclosed lifeboat, freefall,	GES-series	20, 23	5.4.3.1a
VIKING NEUVISA	Fast Rescue Boat, single fall,	RR-40-series	13	5.4.3.1b
WATERCRAFT (WATERCRAFT HELLAS)	Rescue Boat, single fall,	4.9M-RB-series	8	5.4.3.1b
WATERCRAFT (WATERCRAFT HELLAS)	Totally enclosed lifeboat, twin fall,	MKV-series	20	5.4.3.1a
WATERCRAFT INTERNATIONAL	Totally enclosed lifeboat, twin fall with air system,	MK II-series	20	5.4.3.1a
WATERMAN OY	Partially enclosed lifeboat, twin fall,	365-series, 367-series, 391-series, 393-series	16	5.4.3.1a
WATERMAN OY	Totally enclosed lifeboat, twin fall with sprinkler and air system,	351-series, 366-series, 366HRLseries, 368-series, 371-series, 371HR-series, 377-series, 379-series	20	5.4.3.1a
WHITTAKER	Totally enclosed lifeboat, single fall,	CA-series	20	5.4.3.1a
IHONG BOAT CO., LTD	Open lifeboat, twin fall,	BH-series, BJ-series	16	5.4.3.1a
WUXI HAIHONG BOAT MAKING CO., LTD	Rescue Boat, single fall,	JG-series, GJ-series	8	5.4.3.1b
WUXI HAIHONG BOAT MAKING CO., LTD	Totally enclosed lifeboat, freefall,	HH-FC-series, HH-FF-series, HH-series	20, 23	5.4.3.1a
WUXI HAIHONG BOAT MAKING CO., LTD	Totally enclosed lifeboat, twin fall with air system,	HH-C-series, HH-CS-series, HH-series	20	5.4.3.1a
WUXI HAIHONG BOAT MAKING CO., LTD	Totally enclosed lifeboat, twin fall with sprinkler and air system,	HH-T-series, HH-TS-series, HH-series	20	5.4.3.1a
WUXI HAIHONG BOAT MAKING CO., LTD	Fast Rescue Boat, single fall,	GJ-series	13	5.4.3.1b
WUXI WENJIAO	Fast Rescue Boat, single fall,	WJ-RA-series, WJ-RB-series	13	5.4.3.1b
WUXI WENJIAO	Open lifeboat, twin fall,	BH-series, BJ-series, WJ-series	16	5.4.3.1a
WUXI WENJIAO	Rescue Boat, single fall,	WJ-series	8	5.4.3.1b
WUXI WENJIAO	Totally enclosed lifeboat, freefall,	WJFF-series, WJFFC-series	20, 23	5.4.3.1a
WUXI WENJIAO	Totally enclosed lifeboat, twin fall with air system,	WJBC-series	20	5.4.3.1a
WUXI WENJIAO	Totally enclosed lifeboat, twin fall with sprinkler and air system,	WJBF-series	20	5.4.3.1a
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Fast Rescue Boat, single fall, Rescue Boat, single fall,	FRH-series, GJ-series, RH-series	13, 8	5.4.3.1b
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Totally enclosed lifeboat, twin fall, Totally enclosed lifeboat, twin fall with sprinkler and air system,	BCC-series, BCF-series, BCF-HY series	20	5.4.3.1a
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Open lifeboat, twin fall,	BJ series	16	5.4.3.1a
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Totally enclosed lifeboat, freefall,	BCFC-series, FL**C series, BCFF series, FL**F series	23	5.4.3.1a
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Fast Rescue Boat, single fall,	YH-FRB-series, YH-series	13	5.4.3.1b
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Rescue Boat, single fall,	YH-FRA-series, YH-R-series, YH-series, BH-series	8	5.4.3.1b

ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Totally enclosed lifeboat, freefall,	YH-series, GES-18-series	20, 23	5.4.3.1a
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Totally enclosed lifeboat, twin fall with air system,	YH-QFP-series	20	5.4.3.1a
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Totally enclosed lifeboat, twin fall with sprinkler and air system,	YH-DR-series	20	5.4.3.1a
ZODIAC (SURVITEC)	Fast Rescue Boat, single fall,	RIB-series	13	5.4.3.1b
ZODIAC (SURVITEC)	Rescue Boat, single fall,	H472S-series, RIBO-series	8	5.4.3.1b
ZODIAC HURRICANE	Rescue Boat, single fall,	H561 PROLUXE-series	8	5.4.3.1b
Vanguard Marine	SOLAS	420RB SOLAS, 450RB SOLAS, 620RB SOLAS, FRB620 SOLAS		

## RELEASE GEAR

MAKE	TYPE	MODELS / SERIES	INVENTORY LIST NO	ISO 23687:2022 REFERENCE
BALDEN	Lifeboat on load lift not over centre, flat to flat rotating cams,	BD-LBH-series	38	5.4.3.5a.1
BALDEN	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	BDHR-series	4	5.4.3.5g
BC SERVICE	Devices For Activating Release: Central Release Unit,	U HOOK-series	42	5.4.3.5c
BC SERVICE	Devices For Activating Release: Hydrostatic interlock with diaphragm,	U HOOK-series	39	5.4.3.5a.3
BC SERVICE	Lifeboat on load lift not over centre, forward or reverse curve to curve rotating cams,	U HOOK-series	21, 37	5.4.3.5a , 5.4.3.5a.2
BC SERVICE	Rescue boat offload lift over center,	U HOOK-series	43	5.4.3.5e
CHANG SHENG	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	35KN-series	4	5.4.3.5g
CRANSTON EAGLE	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	APR-356- CB/CBH-series	4	5.4.3.5g
DAE JIN CO. LTD	Freefall Hydraulic / mechanical,	THP-1B-series	44	5.4.3.5d
DAVIT COMPANY	Lifeboat offload release lift over center,	AMS-series	40	5.4.3.5b
DAVIT INTERNATIONAL	Rescue boat offload lift over center,	OLH-series, OHL-series	43	5.4.3.5e
DAVIT INTERNATIONAL	Freefall Hydraulic / mechanical,	ALH-series	44	5.4.3.5d
FASSMER	Devices For Activating Release: Central Release Unit,	DUPLEX < 6.6T-series, DUPLEX > 6T-series	14	5.4.3.5e
FASSMER	Devices for activating release: Free Fall Hydraulic Primary and Secondary,	FFH-series	44	5.4.3.5d
FASSMER	Devices For Activating Release: Hydrostatic interlock with float,	DUPLEX < 6.6T-series, DUPLEX > 6T-series	39	5.4.3.5a.3

FASSMER	Freefall Hydraulic / mechanical,	F-series, GAR-series	44	5.4.3.5d
FASSMER	Lifeboat on load lift not over centre, Curve to flat rotating cams,	DUPLEX>6T-series, DUPLEX-series	39	5.4.3.5a.3
FASSMER	Lifeboat on load lift not over centre, forward or reverse curve to curve rotating cams,	DUPLEX<6.6T-series, DUPLEX-series, FSAR-series	37	5.4.3.5a.2
FERRI	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	1448 TN-series	4	5.4.3.5g
GEPA	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	G-K-series	4	5.4.3.5g
GLOBAL DAVIT	Lifeboat on load lift not over centre,	HRL-series	21	5.4.3.5a
GLOBAL DAVIT	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	HRL.26-series, HRL-series	4	5.4.3.5g
GLOBAL DAVIT	Rescue boat offload lift over center,	HRN-series, HRL-series	63	5.4.3.5c
GREBEN	Devices For Activating Release: Central Release Unit,	NLH-series	40	5.4.3.5b
GREBEN	Devices For Activating Release: Electronic Sensor,	NLH-series	42	5.4.3.5c
GREBEN	Lifeboat on load lift not over centre, up and down pins / collars,	NLH-series	21	5.4.3.5a
HARDING (UMO SCHAT HARDING) (PALFINGER)	Lifeboat on load lift not over centre, forward or reverse curve to curve rotating cams,	LHR-series, LHR M2-series	37, 21	5.4.3.5a.2 , 5.4.3.5a
HARDING (UMO SCHAT HARDING)	Devices for activating release: Free Fall Hydraulic Primary and Secondary,	FFH-series	44	5.4.3.5d
HARDING (UMO SCHAT HARDING)	Fast rescue boat offload / Manual or automatic,	CAR-35F-series, CAR-series, CAR-35-series	41	5.4.3.5f
HARDING (UMO SCHAT HARDING)	Freefall Hydraulic / mechanical,	FFH-series	44	5.4.3.5d
HARDING (UMO SCHAT HARDING)	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	ARH 23-series, ARH-series	40	5.4.3.5b
HARDING (UMO SCHAT HARDING) (PALFINGER)	Devices For Activating Release: Central Release Unit,	LHR-series, LHR M2-series, LHR9M2-series	40	5.4.3.5b
HARDING (UMO SCHAT HARDING) (PALFINGER)	Devices For Activating Release: Hydrostatic interlock with diaphragm,	LHR-series, LHR M2-series	42, 39	5.4.3.5c , 5.4.3.5a.3
HATECKE (ERNST HATECKE)	Devices For Activating Release: Central Release Unit,	DUPLEX < 6T-series, DUPLEX > 6T-series	40	5.4.3.5b
HATECKE (ERNST HATECKE)	Devices for activating release: Free Fall Hydraulic Primary and Secondary,	GFF-series	44	5.4.3.5d
HATECKE (ERNST HATECKE)	Devices For Activating Release: Hydrostatic interlock with float,	DUPLEX < 6T-series, DUPLEX > 6T-series	39	5.4.3.5a.3
HATECKE (ERNST HATECKE)	Fast Rescue Boat Offload with On-Load Capability,	SIMPLEX 1,85-series, SIMPLEX-series, SIMPLEX 2,0-series	26	5.4.3.5c
HATECKE (ERNST HATECKE)	Freefall Hydraulic / mechanical,	GFF-series, F-series, FF-series	44	5.4.3.5d
HATECKE (ERNST HATECKE)	Lifeboat on load lift not over centre, Curve to flat rotating cams,	DUPLEX>6T-series	39, 21	5.4.3.5a.3 , 5.4.3.5a
HATECKE (ERNST HATECKE)	Lifeboat on load lift over centre,	Raft I-series	39	5.4.3.5a.3
HATECKE (ERNST HATECKE)	Lifeboat on load lift not over centre, forward or reverse curve to curve rotating cams,	DUPLEX-series	21, 37	5.4.3.5a , 5.4.3.5a.2
HATECKE (ERNST HATECKE)	Rescue boat offload lift over center,	SIMPLEX -series, OFFLOAD-series, DUPLEX-series	43	5.4.3.5e
HENRIKSEN	Fast rescue boat offload / Manual or automatic,	HCH-series, HMK-series, HMKST-series	43, 4	5.4.3.5e , 5.4.3.5g
HENRIKSEN	Rescue boat offload,	HMK-series, HCH-series	43	5.4.3.5e
HENRIKSEN	Rescue Boat / davit launched life raft automatic,	HCH-series	4, 41	5.4.3.5g , 5.4.3.5f
HOEI SENPAKU CO, LTD	Devices For Activating Release: Central Release Unit,	HS-series, HS520 96-series, HS650 96-series	42	5.4.3.5c

HOEI SENPAKU CO, LTD	Devices For Activating Release: Hydrostatic interlock with diaphragm,	HS-series, HS 520 96-series, HS650 96-series	42, 39	5.4.3.5c , 5.4.3.5a.3
HOEI SENPAKU CO, LTD	Lifeboat on load lift not over centre, Curve to flat rotating cams,	HS520 96-series, HS650 96-series	39, 21	5.4.3.5a.3 , 5.4.3.5a
HOEI SENPAKU CO, LTD	Lifeboat on load lift not over centre, flat to flat rotating cams,	HS-series	21, 38	5.4.3.5a , 5.4.3.5a.1
HOEI SENPAKU CO, LTD	Lifeboat on load lift not over centre, up and down pins / collars,	HS520 83-series, HS650 83-series	21	5.4.3.5a
IHI CRAFT CO.	Lifeboat on load lift not over center, Curve to flat rotating cams,	MARK-series	21, 39	5.4.3.5a , 5.4.3.5a.3
IHI MARINE UNITED INC	Devices For Activating Release: Central Release Unit,	JX-1-series	42	5.4.3.5c
IHI MARINE UNITED INC	Devices For Activating Release: Hydrostatic interlock with diaphragm,	JX-1-series	42, 39	5.4.3.5c , 5.4.3.5a.3
IHI MARINE UNITED INC	Lifeboat on load lift not over centre, up and down pins / collars,	JX-1-series	21	5.4.3.5a
INDUSTRIA FERRI	Rescue Boat automatic,	1448 TN-series, 2500-series	4, 41	5.4.3.5g , 5.4.3.5f
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Devices For Activating Release: Central Release Unit,	JX-1-series, JX-1B-series, JXN1B-series, JXN-1C-series	42	5.4.3.5c
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Devices for activating release: Free Fall Hydraulic Primary and Secondary,	JX-2-series	44	5.4.3.5d
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Devices For Activating Release: Hydrostatic interlock with diaphragm,	JX-1-series, JX-1B-series, JXN1B-series, JXN-1C-series	42, 21	5.4.3.5c , 5.4.3.5a
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Fast Rescue Boat Offload with On-Load Capability,	JXN-series, JXN-3-series, FF-series, HK-series, JX-series, JX-4-series, JX-2-series	9	5.4.3.5e
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Freefall Hydraulic / mechanical,	JX-2-series, JX-series, JX-1-series, JX-3-series, JX-5-series, JXN-3-series	44	5.4.3.5d
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Lifeboat on load lift not over centre, up and down pins / collars,	JX-1-series, JX-1B-series, JXN1B-series, JXN-1C-series	21	5.4.3.5a
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Lifeboat on load lift not over centre,	JXN-series, JX-1-series, JX-series	21, 39	5.4.3.5a , 5.4.3.5a.3
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD.	Lifeboat on load lift not over centre, up and down pins / collars,	JX-1-series, JXN-series, 3XN-1C, JXN-JC-series, JY-series, JXN-JY-series	21	5.4.3.5a, 5.4.3.5b ,5.4.3.5c
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Devices For Activating Release: Central Release Unit,	NPT-50-series, NPT-HAN-series, NPT-HKC-series, PN-HKC-series, PN-HKC-series	42	5.4.3.5c
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Devices For Activating Release: Hydrostatic interlock with float,	NPT-50-series, NPT-HAN-series, NPT-HKC-series, PN-HKC-series	42, 39	5.4.3.5c , 5.4.3.5a.3
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Freefall Hydraulic / mechanical,	NPT 70HKF-series, NPT-series	44	5.4.3.5d
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Lifeboat on load lift not over centre, Curve to flat rotating cams,	NPT-HK-series, NPT 50-series	21, 39	5.4.3.5a , 5.4.3.5a.3
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Lifeboat on load lift not over centre, forward or reverse curve to curve rotating cams,	NPT-HKC-series, PN-HKC-series	21, 37	5.4.3.5a , 5.4.3.5a.2
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	NPT-HK25F-series	4, 41	5.4.3.5g , 5.4.3.5f
JIANGYIN NORSAFE	Lifeboat on load lift not over center, Flat to flat rotating cams,	HK56-series	4, 41	5.4.3.5g , 5.4.3.5f
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Devices For Activating Release: Central Release Unit,	HK-series, JX-1-series	42, 9	5.4.3.5c , 5.4.3.5e
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Devices For Activating Release: Hydrostatic interlock with diaphragm,	JX-1-series	42, 39	5.4.3.5c , 5.4.3.5a.3
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Fast Rescue Boat Offload with On-Load Capability,	HK-series	9	5.4.3.5e
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Freefall Hydraulic / mechanical,	FHK-series	44	5.4.3.5d
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Lifeboat on load lift not over centre, Curve to flat rotating cams,	HK-series	21, 39	5.4.3.5a , 5.4.3.5a.3

JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Lifeboat on load lift not over centre, up and down pins / collars,	JX-1-series	21	5.4.3.5a
JIANGYINSHI BEIHAI	Devices For Activating Release: Central Release Unit,	JYB-HK-series	42, 9	5.4.3.5c , 5.4.3.5e
JIANGYINSHI BEIHAI	Devices For Activating Release: Hydrostatic interlock with diaphragm,	JYB-HK-series	42, 21	5.4.3.5c , 5.4.3.5a
JIANGYINSHI BEIHAI	Fast Rescue Boat Offload with On-Load Capability,	JYB-HK-series	9	5.4.3.5e
JIANGYINSHI BEIHAI	Freefall Hydraulic / mechanical,	JYB-HKF-series, JYB-HK-series, JYBHK-series, JYBHKF-series	44	5.4.3.5d
JIANGYINSHI BEIHAI	Davit launched liferaft automatic,	HK-series	4, 41	5.4.3.5g , 5.4.3.5f
JIANGYINSHI BEIHAI	Lifeboat on load lift not over centre, Curve to flat rotating cams,	JYB-HK-series	21, 39	5.4.3.5a , 5.4.3.5a.3
JIANGYINSHI BEIHAI	Lifeboat on load lift over centre,	HK56-series	21, 39	5.4.3.5a , 5.4.3.5a.3
JIANGYINSHI BEIHAI	Lifeboat on load lift not over centre, flat to flat rotating cams,	JYBHK-series, HK-series	21, 38	5.4.3.5a , 5.4.3.5a.1
MADROCK	Devices For Activating Release: Central Release Unit,	ROCLOC-series	42, 9	5.4.3.5c , 5.4.3.5e
MADROCK	Devices For Activating Release: Hydrostatic interlock with float,	ROCLOC-series	42, 39	5.4.3.5c , 5.4.3.5a.3
MADROCK	Lifeboat on load lift not over centre, forward or reverse curve to curve rotating cams,	ROCLOC-series	21, 37	5.4.3.5a , 5.4.3.5a.2
MAKE	TYPE,	MODEL	1	ISO23678 REFERENCE
MANSEI	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	RH-series, RH3-series	4, 41	5.4.3.5g , 5.4.3.5f
MILLS	Davit launched liferaft automatic,	TITAN-series	4, 41	5.4.3.5g , 5.4.3.5f
NADIRO	Lifeboat on load lift over center,	DIB-series, DIB32-series	4, 41	5.4.3.5g , 5.4.3.5f
NAVALIMPIANTI	Fast rescue boat offload,	RH-3000-series	43, 4	5.4.3.5e , 5.4.3.5g
NED-DECK MARINE	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	CAR 35-series, CAR-series	4, 41	5.4.3.5g , 5.4.3.5f
NED-DECK MARINE	Rescue Boat automatic,	CAR-series	4, 41	5.4.3.5g , 5.4.3.5f
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Devices For Activating Release: Central Release Unit,	HK-series	42, 9	5.4.3.5c , 5.4.3.5e
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Lifeboat on load lift not over centre, Curve to flat rotating cams,	HK-series	21, 39	5.4.3.5a , 5.4.3.5a.3
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Devices For Activating Release: Central Release Unit,	IHM 12-series, IHM 13-series, NS -series	42, 9	5.4.3.5c , 5.4.3.5e
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Devices for activating release: Free Fall Hydraulic Primary and Secondary,	F-series, ML-series	44	5.4.3.5d
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, PON)	Devices For Activating Release: Hydrostatic interlock with float,	IHM 12-series, IHM 13-series, NS -series	42, 39	5.4.3.5c , 5.4.3.5a.3
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Freefall Hydraulic / mechanical,	F-series, ML-series, IHIM-series, CML-series, NS-series	44	5.4.3.5d
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Lifeboat on load lift not over centre, Curve to flat rotating cams,	NS-series, SR-3-series	21, 39	5.4.3.5a , 5.4.3.5a.3
NISHI-F CO., LTD. (EX. ISHIHARA DOCKYARD, NISHI-NIPPON)	Lifeboat on load lift not over centre, up and down pins / collars,	IHM 12-series, IHM 13-series	21	5.4.3.5a
NOREQ	Fast Rescue Boat Offload with On-Load Capability,	JXN-3-series	9	5.4.3.5e

NOREQ	Free fall hydraulic,	LBF-series	44	5.4.3.5d
NORSAFE	Lifeboat onload lift not over center,	Tor, Tor MK, K4 FM, Tor MK2, 7T-series	21, 39	5.4.3.5a , 5.4.3.5a.3
NORSAFE	Free fall hydraulic,	GES, FF, Sim, NFH, HJP-series	44	5.4.3.5d
NORSAFE	Rescue boat offload,	KD, K4-FM, HK series	43	5.4.3.5e
NORSAFE	Lifeboat onload lift not over center, Curve to flat rotating cams,	MK-, MK-2, -series	21, 39	5.4.3.5a , 5.4.3.5a.3
NORSAFE	Lifeboat onload lift not over center, Flat to flat rotating cams,	CN4495/CN4494-series	21, 38	5.4.3.5a , 5.4.3.5a.1
NORSAFE	Fast rescue boat offload,	K4-D, K-4-FM, K4D-series	43, 4	5.4.3.5e , 5.4.3.5g
NORSAFE	Lifeboat offload release lift over center,	Tor VK2, K4-series	40	5.4.3.5b
NORSAFE	Lifeboat onload lift over center,	Hydraulic series	4, 41	5.4.3.5g , 5.4.3.5f
NPT	Free fall hydraulic,	HK336-series	44	5.4.3.5d
OPTIMUN MARINE	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	31-37KN-series	4, 41	5.4.3.5g , 5.4.3.5f
PALFINGER	Devices For Activating Release: Central Release Unit,	NADIRO D.I.B.SERIES-series	42	5.4.3.5c
PALFINGER	Devices for activating release: Free Fall Hydraulic Primary and Secondary,	FFH-series, NPT-series	42, 39	5.4.3.5c , 5.4.3.5a.3
PALFINGER	Fast rescue boat offload / Manual or automatic,	CAR-35F-series, Fast RSQ-series, CAR-F-series	41	5.4.3.5f
PALFINGER	Freefall Hydraulic / mechanical,	FFH-series	44	5.4.3.5d
PALFINGER	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	CAR 35-series	41	5.4.3.5f
PESBO S.A	Freefall Hydraulic / mechanical,	BSL-series	44	5.4.3.5d
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Devices For Activating Release: Central Release Unit,	BG-series	42	5.4.3.5c
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Lifeboat onload lift not over center,	BG, BHH, BH, FS-series	21, 39	5.4.3.5a , 5.4.3.5a.3
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Lifeboat onload lift not over center, Flat to flat rotating cams,	BG, BHH-series	21, 38	5.4.3.5a , 5.4.3.5a.1
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Lifeboat onload lift not over center, Up & down pins,	BHH, BG-3-series	21	5.4.3.5a
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Lifeboat onload lift over center,	BG-3, BG-series	4, 41	5.4.3.5g , 5.4.3.5f
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Lifeboat offload release lift over center,	BG-series, BG-3-series	40	5.4.3.5b
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Free fall hydraulic,	BG-series	44	5.4.3.5d
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Rescue boat offload,	BG-series	43	5.4.3.5e
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Lifeboat onload lift not over center, Curve to flat rotating cams,	BG-3F-series, BG-series	21, 39	5.4.3.5a , 5.4.3.5a.3
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Devices For Activating Release: Hydrostatic interlock with diaphragm,	BG-series	42, 39	5.4.3.5c , 5.4.3.5a.3

SCHAT HARDING	Lifeboat onload lift not over center, Flat to flat rotating cams,	FFH-series	21, 38	5.4.3.5a , 5.4.3.5a.1
SCHAT HARDING	Lifeboat onload lift not over center, Curve to curve rotating cams,	LHR-series	21, 39	5.4.3.5a , 5.4.3.5a.3
SCHAT HARDING	Free fall hydraulic,	ARH, H86-series	44	5.4.3.5d
SCHAT HARDING	Lifeboat onload lift not over center, Up & down pins,	50-85 series	21	5.4.3.5a
SCHAT HARDING	Lifeboat offload release lift over center,	H-36-M, FFH-series	40	5.4.3.5b
SCHAT HARDING	Fast rescue boat offload,	RH, RRH-series	41	5.4.3.5f
SCHAT HARDING	Rescue Boat automatic,	ARH, CAR 35-series	4, 41	5.4.3.5g , 5.4.3.5f
SCHAT HARDING	Lifeboat onload lift not over center,	KH, LHR9M2-series	21, 39	5.4.3.5a , 5.4.3.5a.3
SCHAT HARDING	Rescue Boat, single fall,	RRH 25-series	43	5.4.3.5e
SCHAT HARDING	Davit launched liferaft automatic,	ARH-series	4, 41	5.4.3.5g , 5.4.3.5f
SEZAMOR	Davit launched liferaft automatic,	HS30-series	4, 41	5.4.3.5g , 5.4.3.5f
SEZAMOR	Lifeboat onload lift over center,	HS-series, HL-series, HLR-series	40	5.4.3.5b
SHIGI SHIPBUILDING CO.	Davit launched liferaft automatic,	DUPLEX-series	4, 41	5.4.3.5g , 5.4.3.5f
SHIGI SHIPBUILDING CO.	Lifeboat onload lift not over center, Up & down pins,	SZK-series, SZ-series	21	5.4.3.5a
SHIGI SHIPBUILDING CO.	Lifeboat onload lift not over center, Flat to flat rotating cams,	SZK-series, SZ-series, SRS-series- SR-series	21, 38	5.4.3.5a , 5.4.3.5a.1
SHIGI SHIPBUILDING CO.	Lifeboat onload lift not over center,	SZK-series, SZ-series, SRS-series- SR-series	21, 39	5.4.3.5a , 5.4.3.5a.3
SURVITEC	Davit launched liferaft automatic,	SLA-series	4, 41	5.4.3.5g , 5.4.3.5f
SURVITEC	Lifeboat onload lift not over center,	SLA-series, SAFELAUNCH-series	21, 39	5.4.3.5a , 5.4.3.5a.3
SURVITEC	Rescue Boat automatic,	SLA-series, SAFELAUNCH-series	4, 41	5.4.3.5g , 5.4.3.5f
SURVITEC	Lifeboat onload lift not over center,	SLA-series, SAFELAUNCH-series	21, 39	5.4.3.5a , 5.4.3.5a.3
SURVIVAL SYSTEMS INTERNATIONAL	Lifeboat onload lift over center,	TRIPLE 5LX-series	40	5.4.3.5b
SURVIVAL SYSTEMS INTERNATIONAL	Lifeboat onload lift not over center,	TFLX-series	21, 39	5.4.3.5a , 5.4.3.5a.3
TSUNEISHI FACILITIES & CRAFT	Lifeboat onload lift over center,	43GS-1-series	40	5.4.3.5b
TSUNEISHI FACILITIES & CRAFT	Lifeboat onload lift not over center,	43GS-1-series	21, 39	5.4.3.5a , 5.4.3.5a.3
VANGUARD	Lifeboat onload lift not over center, Up & down pins,	SH-series	21	5.4.3.5a
VEST DAVIT AS.	Fast rescue boat offload,	Offload TH 5478 series	41	5.4.3.5f
VIKING (NORSAFE)	Devices for activating release: Free Fall Hydraulic Primary and Secondary,	GES-series, HRS-series, NFFH-series	44	5.4.3.5d
VIKING (NORSAFE)	Devices For Activating Release: Hydrostatic interlock with diaphragm,	TOR MK 1-series, TOR MK 2-series	42, 39	5.4.3.5c , 5.4.3.5a.3
VIKING (NORSAFE)	Fast rescue boat offload,	K4-series, VIKING 1,8-series	43, 9	5.4.3.5e
VIKING (NORSAFE)	Rescue Boat offload with on load capability,	HR-series	43	5.4.3.5e
VIKING (NORSAFE)	Freefall Hydraulic / mechanical,	HRS-series, NFFH-series	44	5.4.3.5d
VIKING (NORSAFE)	Lifeboat on load lift not over centre, flat to flat rotating cams,	TOR MK 1-series, TOR MK 2-series	21, 38	5.4.3.5a , 5.4.3.5a.1
WATERCRAFT	Lifeboat onload lift over center,	TITAN-series	40	5.4.3.5b

WILLIAM MILLS	Devices For Activating Release: Central Release Unit,	TITAN-series	42	5.4.3.5c
WILLIAM MILLS	Devices For Activating Release: Hydrostatic interlock with diaphragm,	TITAN-series	42, 39	5.4.3.5c , 5.4.3.5a.3
WILLIAM MILLS	Lifeboat offload release lift over center,	EMPRESS-series	40	5.4.3.5b
WILLIAM MILLS	Lifeboat on load lift not over centre, flat to flat rotating cams,	TITAN-series	21, 38	5.4.3.5a , 5.4.3.5a.1
WUXI HAI HONG	Lifeboat on load lift over center,	HH43, HH65C-series	40	5.4.3.5b
WUXI MINGZI MACHINERY	Lifeboat on load lift not over center, Up & down pins,	WHK-series	21	5.4.3.5a
WUXI MINGZI MACHINERY	Lifeboat on load lift not over center, Curve to flat rotating cams,	WHK-series	21, 39	5.4.3.5a , 5.4.3.5a.3
WUXI MINGZI MACHINERY	Rescue boat offload,	WHK-series, 150-T 15-series	43	5.4.3.5e
WUXI MINGZI MACHINERY	Fast rescue boat offload,	WHK-series, 150-T 15-series, 250 T-series	41	5.4.3.5f
WUXI WENJIAO	Fast Rescue Boat Offload with On-Load Capability,	HK-series	9	5.4.3.5e
WUXI XINGSHENG	Rescue boat / Davit Launched Liferaft / Lift over centre automatic,	XS-series	4, 41	5.4.3.5g , 5.4.3.5f
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Freefall Hydraulic / mechanical,Lifeboat on load lift not over centre,Rescue boat / Davit Launched Liferaft / Lift over centre automatic,Rescue boat offload lift over center,	HK series	21, 37, 38, 4, 40, 41	5.4.3.5a.1 / 5.4.3.5b /5.4.3.5c / 5.4.3.5d
ZHENJIANG MARINE AUXILIARY MACHINERY	Lifeboat on load lift not over centre, Curve to flat rotating cams,	HK-series, HS-series, SH-series, H-series	21, 39	5.4.3.5a , 5.4.3.5a.3
Servoship	Type 2000 y OLH2,5	2000-series, OLH2.5-eries		

## WINCH

MAKE	TYPE	MODELS / SERIES	INVENTORY LIST NO	ISO 23687:2022 REFERENCE
ABAS	Single drum/gravity lowering/Hydraulic hoisting,	MDE-series	7	5.4.3.4.b , 5.4.3.4.c.2
ACEBI	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	TBE-series	7	5.4.3.4.b , 5.4.3.4.c.2
ACEBI	Single drum/gravity lowering/Hydraulic hoisting,	SPG-20-I, RRP-76-RAD-01-series	7	5.4.3.4.b , 5.4.3.4.c.2
ACEBI	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	TR-series	7	5.4.3.4.b , 5.4.3.4.c.2
ACEBI	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	TBE-series	19	5.4.3.4.c.4

ACOIN	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	BE-2-series	7	5.4.3.4.b , 5.4.3.4.c.2
ACTA	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	KNT-series	7	5.4.3.4.b , 5.4.3.4.c.2
ACTA	Single drum/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	KMER-series	7	5.4.3.4.b , 5.4.3.4.c.2
ACTA	Single drum,	KMER-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
ACTA	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	KMER-series	7	5.4.3.4.b , 5.4.3.4.c.2
ALEXANDER WELIN	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	AIW-series	7	5.4.3.4.b , 5.4.3.4.c.2
DAVIT COMPANY	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	16 EV-series, SRR-series, FM-series	7	5.4.3.4.b , 5.4.3.4.c.2
DAVIT COMPANY	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	24EPB-series, FB-series, ARVE-series	19	5.4.3.4.c.4
DAVIT INTERNATIONAL	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	01KN-series, 02KN-series, 03KN-series, 04KN-series, 06KNseries, 07KN-series, D-BR-series, D-CRM-series, D-BC-series, D-FH-series, D-NPS-series, D-TT-series	7	5.4.3.4.b , 5.4.3.4.c.2
DAVIT INTERNATIONAL	Single Drum, hydraulic lowering/hydraulic hoisting,	06KN-series, D-CRM-series, D-BC-series, D-FH-series, D-TT-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
DAVIT INTERNATIONAL	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	02-series, 03-series, 04-series, 12-series, 40-series, D-NP-series, D-TT-series, D-FO-series, D-RT-series	19	5.4.3.4.c.4
DAVIT INTERNATIONAL	Twin Drum, hydraulic lowering/hydraulic hoisting,	D-FH-series, D-TF-series	80, 19	5.4.3.4.c.4
DONGNAM MARINE CRANE CO, LTD. (Sangsangin Industry Co Ltd)	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	DSAD-series, DRLD, LHRD, DRDB, DSND-series	7	5.4.3.4.b , 5.4.3.4.c.2
DONGNAM MARINE CRANE CO, LTD. (Sangsangin Industry Co Ltd)	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	DRBD-series, DRLD-series, DRBLRW-series	7	5.4.3.4.b , 5.4.3.4.c.2
DONGNAM MARINE CRANE CO, LTD. (Sangsangin Industry Co Ltd)	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Mechanically operated multiple disks Friction pads,	DHGD, HGW, DLBW, HF38-series	80, 19	5.4.3.4.c.4

DONGWOO MACHINERY & ENGINEERING CO., LTD.	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	LW-series, DBS, DWS, LW, RW-series	80, 19	5.4.3.4.c.4
DONGWOO MACHINERY & ENGINEERING CO., LTD.	Twin drums/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	DWS, DWS-10A, Electric driven series	80, 19	5.4.3.4.c.4
EO LIFESAVING	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	W-series	7	5.4.3.4.b , 5.4.3.4.c.2
ERNST HATECKE	Single drum/gravity lowering/Hydraulic hoisting,	BBK-series	7	5.4.3.4.b , 5.4.3.4.c.2
ERNST HATECKE	Twin drums/gravity lowering/Hydraulic hoisting,	FFA-series	80, 19	5.4.3.4.c.4
FASSMER	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	DEW--FOD80, FPD80, FHD80, FHD175, FSAR 14, FSAR 21-series, FSARR-series	7	5.4.3.4.b , 5.4.3.4.c.2
FASSMER	Single Drum, hydraulic lowering/hydraulic hoisting,	FFWH-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
FASSMER	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake hydraulic pump,	FDW-series, DEW-series	80, 19	5.4.3.4.c.4
FASSMER	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes, multiple disks, hydraulically operated / decent brake hydraulic pump,	FDW-series, DEW-series	80, 19	5.4.3.4.c.4
FASSMER MARLAND	Single Drum, hydraulic lowering/hydraulic hoisting,	FFWH-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
FERRI	Single Drum, hydraulic lowering/hydraulic hoisting,	MMI-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
GLOBAL DAVIT	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	01KN-series, 02KN-series, 03KNseries, 04KN-series, 08KN-series, FHS.S-series, W02-series, W04-series, W07-series, W08-series, RMS.L-series, O2E-series, RHS.L-series	7	5.4.3.4.b , 5.4.3.4.c.2
GLOBAL DAVIT	Single Drum, hydraulic lowering/hydraulic hoisting,	W05HC-series, W08HC-series, WS-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
GLOBAL DAVIT	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	W05HC-series up to W20HC	7	5.4.3.4.b , 5.4.3.4.c.2
GREBEN	Single Drum, hydraulic lowering/hydraulic hoisting,	HW-series, SAR-series, EW2-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a

GREBEN	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	CW-series, EW-series, HW-series, SAR-series	80, 19	5.4.3.4.c.4
GURDESAN	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	GD-FLW-series	88, 7	5.4.3.4.b , 5.4.3.4.c.2 , 88
GURDESAN	Single Drum, hydraulic lowering/hydraulic hoisting,	GD-HC-A-series, GD-PR-series, GD-KHK-series, GD-RRS-series, KHK-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
GURDESAN	Twin drums/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	GD-FLW-series, GD-series	80, 19	5.4.3.4.c.4
HAEAN MACHINERY IND. CO. LTD.	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	HMI-series	7	5.4.3.4.b , 5.4.3.4.c.2
HAEAN MACHINERY IND. CO. LTD.	Single Drum, hydraulic lowering/hydraulic hoisting,	HHD-PC-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
HARDING (UMOESCHAT HARDING)	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	16 EBR-series, EW02 PL-series	7	5.4.3.4.b , 5.4.3.4.c.2
HARDING (UMOESCHAT HARDING)	Single Drum gravity lowering hydraulic hoisting,	EW8PL HS-series	7	5.4.3.4.b , 5.4.3.4.c.2
HARDING (UMOESCHAT HARDING)	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	HD-series, MW-series, LWO-series	80, 19	5.4.3.4.c.4
HARDING (UMOESCHAT HARDING)	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes, multiple disks, hydraulically operated / decent brake hydraulic pump,	CW-series, W-series, LWO-series	80, 19	5.4.3.4.c.4
HARDING (UMOESCHAT HARDING) (SCHAT DAVIT COMPANY) (PALFINGER)	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	08-02-series, FME-series	7	5.4.3.4.b , 5.4.3.4.c.2
HARDING (UMOESCHAT HARDING) (SCHAT DAVIT COMPANY) (PALFINGER)	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	BE-series, LWO-series	80, 19	5.4.3.4.c.4
HARDING (WATERCRAFT)	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	MW-series, NW-series, LWO-series	80, 19	5.4.3.4.c.4
HATECKE (ERNST HATECKE)	Single Drum, hydraulic lowering/hydraulic hoisting,	FFA-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
HYDRALIFT	Single Drum, hydraulic lowering/hydraulic hoisting,	SP-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
HYDRALIFT	Single drum,	HL-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a

HYDRALIFT	Single drum/gravity lowering/Hydraulic hoisting,	SP7-V-2174-2A2 series, 3622 series	7	5.4.3.4.b , 5.4.3.4.c.2
HYDRAULIK & MACHINENBAU	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	B-series	7	5.4.3.4.b , 5.4.3.4.c.2
IHI MARINE UNITED INC	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	MUW-series	80, 19	5.4.3.4.c.4
IHI MARINE UNITED INC	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	MUW-series	7	5.4.3.4.b , 5.4.3.4.c.2
IKNOW MACHINERY	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	EB-series	80, 19	5.4.3.4.c.4
IMT CO., LTD	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	ILR-W-series	7	5.4.3.4.b , 5.4.3.4.c.2
INI HYDRAULIC	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes/Multiple disks hydraulically operated,	IMB-series, IMC-series, INM-series, IPM-series, ZHP-series, ZPN-series	80, 19	5.4.3.4.c.4
INI HYDRAULIC	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	IMB-series, IMC-series, INM-series, IPM-series, ZHP-series, ZPN-series	7	5.4.3.4.b , 5.4.3.4.c.2
JAPAN MARINE UNITED CORP.	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	MU-series	80, 19	5.4.3.4.c.4
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	JYRZ-series	7	5.4.3.4.b , 5.4.3.4.c.2
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Single Drum Gravity lowering / hydraulic hoisting,	JYFW-series, JYRZ-series, JYR-series, JYF-series, FW-series, JY-series	7	5.4.3.4.b , 5.4.3.4.c.2
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Single Drum, hydraulic lowering/hydraulic hoisting,	FW-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	JYW-series, JYWP-series, JYWN-series, JY-series	80, 19	5.4.3.4.c.4
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	NPT-DW-series, NPT-series	7	5.4.3.4.b , 5.4.3.4.c.2
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	NPT-DS-series, NPT-DW-series	80, 19	5.4.3.4.c.4

JIANGYIN NORSAFE	Single drum/gravity lowering/Hydraulic hoisting,	FHD-series	7	5.4.3.4.b , 5.4.3.4.c.2
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	JYD-series	80, 19	5.4.3.4.c.4
JIANGYIN XINJIANG	Single drum/gravity lowering/Hydraulic hoisting,	JYW70-series	7	5.4.3.4.b , 5.4.3.4.c.2
JIANGYINSHI BEIHAI	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	YZ-series	7	5.4.3.4.b , 5.4.3.4.c.2
JIANGYINSHI BEIHAI	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	DS-series, DW-series, DZ-series, JYBW-series	80, 19	5.4.3.4.c.4
JIANGYINSHI BEIHAI LSA CO.	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	JYB, SM, FA, BHGH170-series	7	5.4.3.4.b , 5.4.3.4.c.2
JUNG-A-MARINE CO., LTD	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	PCRLC-series	80, 19	5.4.3.4.c.4
MACGREGOR (TTS) (HYDRAMARINE)	Single Drum, hydraulic lowering/hydraulic hoisting,	HMW-series, MAC-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
MANSEI	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	M-series, MW-series, ERW-series, MLW-series, RMW-series, SW-series, N-995-series,	7	5.4.3.4.b , 5.4.3.4.c.2
MANSEI	Single Drum, hydraulic lowering/hydraulic hoisting,	M-series, MW-series, 06KN-series, FW-series, SW-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
MANSEI	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	M-series, MW-series, AW-series, CMW-series, EW-series, MW-series, EH-series, EELF-series, N-series	80, 19	5.4.3.4.c.4
MANSEI	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	M-series, MW-series, ABW-series, FBW-series, EH-series, EELF-series, EW-series, N-716-series	80, 19	5.4.3.4.c.4
MIURA MACHINE CO, LTD (MIURA VIDER) (MANSEI)	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	LBH-series, RBH-series	19	5.4.3.4.c.4
MIURA MACHINE CO, LTD (MIURA VIDER) (MANSEI)	Single drum/gravity lowering/Hydraulic hoisting,	RBH-series, LBH-series	7	5.4.3.4.b , 5.4.3.4.c.2
MONTMONTAZA GREBEN	Single drum/gravity lowering/Hydraulic hoisting,	BREVINI-series	7	5.4.3.4.b , 5.4.3.4.c.2

NAVALIMPIANTI & TECHNIMPIANTI	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Mechanically operated multiple disks Friction pads,	EW, REW, RBEW, RMW-series	80, 19	5.4.3.4.c.4
NAVALIMPIANTI & TECHNIMPIANTI	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	EWR, DG-EHW-series	80, 19	5.4.3.4.c.4
NED-DECK MARINE (PALFINGER)	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	WL, 04.03 E QR, 04.03 E-series	7	5.4.3.4.b , 5.4.3.4.c.2
NED-DECK MARINE (PALFINGER)	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	HWCT-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
NED-DECK MARINE (PALFINGER)	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	15-series, SCH 10-5.2R series, SCM-series, 04.03 E-series	80, 19	5.4.3.4.c.4
NINGBO ASIA FRP BOAT MANUFACTURING CO.	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	DS, DZ, Z, YZD, D-series	7	5.4.3.4.b , 5.4.3.4.c.2
NINGBO NEW MARINE LIFESAVING EQUIPMENT	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	NMW-series	7	5.4.3.4.b , 5.4.3.4.c.2
NOR DAVIT	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	SP-series	80, 19	5.4.3.4.c.4
NOREQ (PALFINGER)	Single Drum, hydraulic lowering/hydraulic hoisting,	NW-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
NOREQ (PALFINGER)	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	NW-series, NOREQ-series	80, 19	5.4.3.4.c.4
NORSAFE	Twin drums/gravity lowering/electric. Hoisting/hydraulic pump lowering brakes,	NWE, LH-series, DW-series, HD-series	80, 19	5.4.3.4.c.4
NORSAFE	Single drum/gravity lowering/Hydraulic hoisting,	NWE, LH-series, DW-series, HD-series	7	5.4.3.4.b , 5.4.3.4.c.2
PALFINGER	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes, multiple disks, hydraulically operated / decent brake hydraulic pump,	CW-series, W-series, BWF-series	80, 19	5.4.3.4.c.4
PALFINGER	Single drum/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	N-series	7	5.4.3.4.b , 5.4.3.4.c.2
PELLEGRINI MARINE EQUIPMENT	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	RLC-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
PELLEGRINI MARINE EQUIPMENT	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	VAS 45 E-series	80, 19	5.4.3.4.c.4

QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	BW-SC-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	BW-HL-series, BW-HR-series, BW-LL-series	80, 19	5.4.3.4.c.4
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	BD-series, BW-series	80, 19	5.4.3.4.c.4
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Twin drums/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	BE-series, BW-series, BD-series, YSB-series	80, 19	5.4.3.4.c.4
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Single drum/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	BE-series, BW-series	7	5.4.3.4.b , 5.4.3.4.c.2
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Single drum/gravity lowering/Hydraulic hoisting,	BE-series, BW-series, BD-series, YSB-series	7	5.4.3.4.b , 5.4.3.4.c.2
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Mechanically operated multiple disks Friction pads,	BW-series, LL-series	80, 19	5.4.3.4.c.4
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	BW-SC-series	7	5.4.3.4.b , 5.4.3.4.c.2
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Twin drums/gravity lowering/Hydraulic hoisting,	BHA-series	80, 19	5.4.3.4.c.4
SCHAT DAVIT COMPANY	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	BE-series	80, 19	5.4.3.4.c.4
SCHAT DAVIT COMPANY	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	FME-series, MOB-series, PAR21-series	7	5.4.3.4.b , 5.4.3.4.c.2
SCHAT DAVIT COMPANY	Twin drums/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	BE-series	80, 19	5.4.3.4.c.4
SCHAT HARDING	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	2, 3 series, BE series	80, 19	5.4.3.4.c.4
SCHAT HARDING	Single drum/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	BE, W, FME 2.7, WH, FME-series	7	5.4.3.4.b , 5.4.3.4.c.2
SCHAT HARDING	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	BE, W120, FME, 08-02, SRR, W120-series	7	5.4.3.4.b , 5.4.3.4.c.2
SCHAT HARDING	Single drum/gravity lowering/Hydraulic hoisting,	BE, EWO8, TW, 08-02, WHO2-LD, FME, HD-series	7	5.4.3.4.b , 5.4.3.4.c.2

SCHAT HARDING	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Mechanically operated multiple disks Friction pads,	LW-series, TW-series	80, 19	5.4.3.4.c.4
SCHAT HARDING	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes/Multiple disks hydraulically operated,	TW-series, BE-series	80, 19	5.4.3.4.c.4
SCHAT HARDING	Twin drums/gravity lowering/electric. Hoisting/hydraulic pump lowering brakes,	TW-series, BE-series, W80L-series	80, 19	5.4.3.4.c.4
SCHAT HARDING	Twin drums/gravity lowering/Hydraulic hoisting,	TW-series, BE-series, W80L-series	80, 19	5.4.3.4.c.4
SEC (SHIPS EQUIPMENT CENTRE)	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	WL-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
SEKIGAHARA	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	SNW-series, SWE-series, MSWE-series	80, 19	5.4.3.4.c.4
SERVO SHIP S.L	Single Drum, hydraulic lowering/hydraulic hoisting,	FFRW 4500KG-series 1100-series, 2200 series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
SHIGI	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	FW-series, WLT-series	7	5.4.3.4.b , 5.4.3.4.c.2
SURVIVAL SYSTEMS INT	Single Drum Gravity lowering electric hoisting lifeboat / rescue boat / static brake pad, cone, disk, band / decent brake centrifugal pads,	W-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.
TAIZHOU HAIHAO MARINE EQUIPMENT CO, LTD	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	21KN-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
TMA	Single Drum, hydraulic lowering/hydraulic hoisting,	TN/MW-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
TSUJI HEAVY INDUSTRIES	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	TC-series, H-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
TSUJI HEAVY INDUSTRIES	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	EB-series, ER-series, WLZ-series	80, 19	5.4.3.4.c.4
TTS MARINE CRANE AS DAVIT	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	RL-series	7	5.4.3.4.b , 5.4.3.4.c.2
ULSTEIN FAMA (FAMA GNIEW)	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	ER10B-series, ERM-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
VERHOEF	Single Drum, hydraulic lowering/hydraulic hoisting,	FL 50-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a

VEST DAVIT	Single drum/gravity lowering/Hydraulic hoisting,	C-series, PL2000-series, CVS-series	7	5.4.3.4.b , 5.4.3.4.c.2
VIKING (NORSAFE) (JIANGYIN)	Single Drum, hydraulic lowering/hydraulic hoisting,	HYD-FF-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
VIKING (NORSAFE) (JIANGYIN)	Single Drum, hydraulic lowering/hydraulic hoisting,	HYD-FF-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
WELIN LAMBIE	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	5619-series, 9502-series, RBW-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
WELIN LAMBIE	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	53-series, 55-series, 97-series	80, 19	5.4.3.4.c.4
WUXI DONGWU	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	DS/Z-series, DZ-series, W-series	80, 19	5.4.3.4.c.4
WUXI HUAHAI MARINE EQUIPMENT	Single drum/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	HMW-series, HM-series, HMCD-series	80, 19	5.4.3.4.c.4
YOUNGNAM MACHINERY CO. LDT	Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	YNBW-series	80, 19	5.4.3.4.c.4
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,Single drum/gravity lowering/Hydraulic hoisting,Twin Drum, gravity lowering /electrically hoisting w / static brake cone /disk / pads / band / decent brake centrifugal w pads,	DZB series, DW series, D series	12, 19, 24, 7, 80	5.4.3.4.b / 5.4.3.4.c / 5.4.3.4.d / 5.4.3.4.a /
ZHENJIANG DH MARINE EQUIPMENT CO., LTD	Single drum Gravity lowering electric hoisting liferaft / rescue boat / static brake pad, cone, disk, eccentric cam / decent brake centrifugal pads,	DW-series	2, 7	5.4.3.4.b , 5.4.3.4.c.2 , 5.4.3.4.c.1 , 5.4.3.4.c.3
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Single Drum, hydraulic lowering/hydraulic hoisting,	SAW30-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Single drum/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	HYO-series	7	5.4.3.4.b , 5.4.3.4.c.2
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	SAFC-series	7	5.4.3.4.b , 5.4.3.4.c.2
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Twin drums/gravity lowering/electric. Hoisting w/holding static brakes with Mechanically operated multiple disks Friction pads,	D, DP, 0482, 63Z-series	80, 19	5.4.3.4.c.4
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Single drum/gravity lowering/Hydraulic hoisting,	OW-series	7	5.4.3.4.b , 5.4.3.4.c.2

ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Single drum/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	BH-series, LE-series	7	5.4.3.4.b , 5.4.3.4.c.2
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Twin drums/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	DP-series, D-series, D48Z- series	80, 19	5.4.3.4.c.4
ZHENJIANG MARINE AUXILIARY MACHINERY WORKS	Twin Drum, gravity lowering /electrically hoisting w/holding static brakes with mechanically operated multiple disks friction pads / decent brake centrifugal w pads,	D-series, DP-series	80, 19	5.4.3.4.c.4
ZHENJIANG WEST MARINE EQUIPMENT CO., LTD	Single Drum, hydraulic lowering/hydraulic hoisting,	WME-LRH35-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
ZOLLERN	Single Drum, hydraulic lowering/hydraulic hoisting,	A2FM45-61A-series, ZHP- series, ZR-series	12, 24	5.4.3.4.d , 5.4.3.4.c.5 , 5.4.3.4.a
ZOLLERN	Single drum/gravity lowering/electric. Hoisting w/centrifugal brakes with Friction pads,	ZR-series	7	5.4.3.4.b , 5.4.3.4.c.2
ZOLLERN	Single drum/gravity lowering/Hydraulic hoisting,	SZK-series	7	5.4.3.4.b , 5.4.3.4.c.2
ZOLLERN	Single drum/gravity lowering/electric. Hoisting w/holding static brakes with Friction pads,	ZR-series	7	5.4.3.4.b , 5.4.3.4.c.2



**LAUNCHING APPLIANCES**

<b>MAKE</b>	<b>TYPE</b>	<b>MODELS / SERIES</b>	<b>INVENTORY LIST NO</b>	<b>ISO 23687:2022 REFERENCE</b>
A-TECH	Gravity Roller Track,	RLD-series	17	5.4.3.3.c
A-TECH	Single arm Slewing,	HD-series	6, 1	5.4.3.3.e
A-TECH	Free fall hydraulic/el secondary,	RLD-series, HD-series	25, 11	5.4.3.3.d , 5.4.3.3.b
ABAS	Single arm Slewing,	KDE-Series, MDE-Series	6, 1	5.4.3.3.e
ACEBI	Free fall secondary hydraulic A Frame,	TPF-Series	25	5.4.3.3.d
ACEBI	Gravity Single & Twin Fall Outrigger,	A-Series, AF-Series, PF-Series	17, 18	5.4.3.3.c , 5.4.3.3.a
ACEBI	Single arm Slewing,	PFR-Series, RRP-Series, TPU-Series	6, 1	5.4.3.3.e
ACEBI	Single Fall Rescue / Fast Rescue,	TPF-Series, TPU-Series	11, 6, 1	5.4.3.3.b , 5.4.3.3.e
ACEBI	Twin Fall Gravity Pivoting / Luffing,	SPG-series, RRP-series, RAD-series	17, 18	5.4.3.3.c , 5.4.3.3.a
ACEBI	Twin Fall Gravity Rollertrack,	GRA-series	17	5.4.3.3.c
ACEBI	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	TPC-series	17, 18	5.4.3.3.c , 5.4.3.3.a
ACOIN	Single arm Slewing,	R18700-series	6, 1	5.4.3.3.e
ACTA	Free fall secondary hydraulic A Frame,	HSC-series, HTD-series	25, 11	5.4.3.3.d , 5.4.3.3.b
ACTA	Gravity Single & Twin Fall Outrigger,	MOB-series	17, 18	5.4.3.3.c , 5.4.3.3.a
ACTA	Gravity freefall primary,	DC, MOB, HYO electrically	25	5.4.3.3.d
ACTA	Single arm Slewing,	DC-series, DR-series, HSC-series, MOB-series, NDA-series, MDE-series, HYO-series	6, 1	5.4.3.3.e
ALEXANDER RYAN	Gravity Single & Twin Fall Outrigger,	BH-series	17, 18	5.4.3.3.c , 5.4.3.3.a
ARIM	Single arm Slewing,	AREH-series, ARPV-series, SKH-series	6, 1	5.4.3.3.e
ARIM	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	ARPV-series, SKH-series	11	5.4.3.3.b
ARIM	Twin Fall Gravity Pivoting / Luffing,	AHA-series	17	5.4.3.3.c
BIANCHI & CHECCHI	Gravity Single & Twin Fall Outrigger,	PE-series, PET-series	17, 18	5.4.3.3.c , 5.4.3.3.a
BOLIN MACHINERY	Single arm Slewing,	BL-series	6, 1	5.4.3.3.e

COASTAL MARINE EQUIPMENT, INC.	Single arm Slewing,	D-series	6, 1	5.4.3.3.e
DAVIT COMPANY	Gravity Single & Twin Fall Outrigger,	FFFDA-series, AMS-series	25, 17	5.4.3.3.d , 5.4.3.3.c
DAVIT COMPANY	Single arm Slewing,	SRR-series, MOB-series, FM-series	6, 1	5.4.3.3.e
DAVIT COMPANY	Hydraulic/el Pivoting & Luffing,	NOP-series	25, 11	5.4.3.3.d , 5.4.3.3.b
DAVIT INTERNATIONAL	Free fall secondary hydraulic A Frame,	D-FH-series, D-HF-series, D-FN-series, D-FH60-series, D-CRRC-series	25	5.4.3.3.d
DAVIT INTERNATIONAL	Gravity Single & Twin Fall Outrigger,	D-FO-series, D-FOS-series, D-HP-series, D-NP-series	17, 18	5.4.3.3.c , 5.4.3.3.a
DAVIT INTERNATIONAL	Single arm Slewing,	D-CR, D-CRMR, D-CRM, D-RC, D-RF, D-RT, D-FG, D-F, D-BC, D-, D-CRC, D-FH, RH20, D-CRM-R, D-RCS, D-BR, D-BCR-series	6, 1	5.4.3.3.e
DAVIT INTERNATIONAL	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	D-NPS.FR-series, D-NPS.MP-series, D-NPS.SP-series, DTT.SP.-series, D-CRRC-series	11	5.4.3.3.b
DAVIT INTERNATIONAL	Gravity freefall primary,	D-FS-series	25	5.4.3.3.d
DAVIT INTERNATIONAL	Single or Twin Fall Lifeboat Rescue Boat / Fast Rescue Boat Telescopic Hydraulic,	D-FP.R-series, D-TT-series, DTT.SP-series	25, 11	5.4.3.3.b , 5.4.3.3.d
DAVIT INTERNATIONAL	Twin Fall Gravity Pivoting / Luffing,	D-NP-series, D-NP.MP-series	17, 18	5.4.3.3.c , 5.4.3.3.a
DAVIT INTERNATIONAL	Twin Fall Gravity Rollertrack,	D-RT-series	17	5.4.3.3.c
DAVIT INTERNATIONAL	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	D-NP-series, D-SP-series	18	5.4.3.3.a
DENIZSAN	Free fall secondary hydraulic A Frame,	DSFDD-series	25	5.4.3.3.d
DENIZSAN	Single arm Slewing,	DRBD-series, DRBLRD-series, DSRBD-series	6, 1	5.4.3.3.e
DENIZSAN	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	DSFRB-series	11	5.4.3.3.b
DONGNAM MARINE CRANE CO, LTD.	Single arm Slewing,	DCPV-series, DNRD-series, DR-series, DRBLRD-series, DSAC-series, DSAD-series, D-SAD-series, DRBD-series, DNRD-series	6, 1	5.4.3.3.e
DONGNAM MARINE CRANE CO, LTD.	Twin Fall Gravity Pivoting / Luffing,	DHGD-series, DWS-series, HF-series, DCPV, DSAD, DHGD, DHG-series	17	5.4.3.3.c
DONGWOO MACHINERY & ENGINEERING CO., LTD.	Twin Fall Gravity Pivoting / Luffing,	DWS-series, DHGD-series, HF-series	18	5.4.3.3.a
DONGWOO MACHINERY & ENGINEERING CO., LTD.	Gravity Single & Twin Fall Outrigger,	DBD, DBS-series	17, 18	5.4.3.3.c , 5.4.3.3.a
DONGWOO MACHINERY & ENGINEERING CO., LTD.	Single arm Slewing,	DWS-series	6, 1	5.4.3.3.e

DREGGEN CRANE AS	Free fall secondary hydraulic A Frame,	HSC-series, HTD-series	25, 11	5.4.3.3.d , 5.4.3.3.b
DREGGEN CRANE AS	Gravity Single & Twin Fall Outrigger,	MOB-series	17, 18	5.4.3.3.c , 5.4.3.3.a
DREGGEN CRANE AS	Gravity freefall primary,	DC, MOB, HYO electrically	25	5.4.3.3.d
DREGGEN CRANE AS	Single arm Slewing,	DC-series, DR-series, HSC-series, MOB-series, NDA-series, MDE-series, HYO-series	6, 1	5.4.3.3.e
DSB ENGINEERING CO LTD	Free fall secondary hydraulic A Frame,	DSBDF-series	25	5.4.3.3.d
DSB ENGINEERING CO LTD	Single arm Slewing,	DSB23DR-series	6, 1	5.4.3.3.e
DSB ENGINEERING CO LTD	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	DSBARH-series, DSBDP-series, DSBDL-series	11	5.4.3.3.b
DSB ENGINEERING CO LTD	Twin Fall Gravity Pivoting / Luffing,	DSBDL-series, DSBDTL-series	17	5.4.3.3.c
EFFER	Single arm Slewing,	65000-SSL-series	6, 1	5.4.3.3.e
EO LIFESAVING	Single arm Slewing,	CH-52-series	6, 1	5.4.3.3.e
ERNST HATECKE	Free fall hydraulic/el secondary,	FFA, FFD, FFB, GFF-series	25	5.4.3.3.d
ERNST HATECKE	Gravity freefall primary,	FFB, FFA-series	17	5.4.3.3.c
ERNST HATECKE	Gravity Single & Twin Fall Outrigger,	GSPFP, GSP-series	17, 18	5.4.3.3.c , 5.4.3.3.a
ERNST HATECKE	Single arm Slewing,	RHS.L-series	6, 1	5.4.3.3.e
ERNST HATECKE	Gravity Roller Track,	GSPF-series	17	5.4.3.3.c
ERNST HATECKE	Hydraulic/el Pivoting & Luffing,	GSPFP, GSP-series	11	5.4.3.3.b
ERNST HATECKE	A-frame hydraulic / single arm / Telescopic,	DFR-series	11	5.4.3.3.b
FASSMER	Free fall secondary hydraulic A Frame,	FFH-series, FFB-series	25	5.4.3.3.d
FASSMER	Gravity freefall primary,	FLR-series, FFH-series	25	5.4.3.3.d
FASSMER	Single arm Slewing,	FSARR-series, FSAR-series	6, 1	5.4.3.3.e
FASSMER	Twin Fall Gravity Pivoting / Luffing,	FPD-series	17	5.4.3.3.c
FASSMER	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	FMPD-series, FSARR-series, FHD-series, FPD-series	25	5.4.3.3.d
FASSMER	Gravity Single & Twin Fall Outrigger,	FOD-series	17, 18	5.4.3.3.c , 5.4.3.3.a

FASSMER	A-frame hydraulic / single arm / Telescopic,	FOD-series, FFH-series	11	5.4.3.3.b
FASSMER MARLAND	Free fall secondary hydraulic A Frame,	FFH-series	11	5.4.3.3.b
GILBERT & SCHMALRIEDE. GMBH & CO. KG	Single arm Slewing,	PJ1385-series	6, 1	5.4.3.3.e
GILBERT & SCHMALRIEDE. GMBH & CO. KG	Single or Twin Fall Lifeboat Rescue Boat / Fast Rescue Boat Telescopic Hydraulic,	PJ-1386-series	17, 18, 1, 6, 11	5.4.3.3.c , 5.4.3.3.a , 5.4.3.3.e , 5.4.3.3.b
GLOBAL DAVIT	Gravity Single & Twin Fall Outrigger,	GSP.O-series, RSP.O-series, LGP-series	17, 18	5.4.3.3.c , 5.4.3.3.a
GLOBAL DAVIT	Single arm Slewing,	FHS-series, FHS.L-series, FHS.R-series, FHS.R.L- series, FHS.R.L.S-series, FHS.R.S-series, FHS.S- series, LMES.S-series, LML- series, LMS-series, LMS.S- series, R RMS-series, LHS- series, RHL -series, RHP-series, RHS-series, RHS.L-series, RHS.L.S-series, RHS.S-series, RMES.L.S- series, RMES.S-series, RML- series, RMS.L-series, RMS.L.S- series, RMS.S- series, RMS-series	6, 1	5.4.3.3.e
GLOBAL DAVIT	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	RHP-series, RHP.HC-series	11	5.4.3.3.b
GLOBAL DAVIT	Free fall hydraulic/el secondary,	RHS-series	25	5.4.3.3.d
GLOBAL DAVIT	A-frame hydraulic / single arm / Telescopic,	FHS, RHP, RSP, HC-series	11	5.4.3.3.b
GLOBAL DAVIT	Twin Fall Gravity Pivoting / Luffing,	GLP.FP-series, GLP.MP- series, GSP.FP-series, GSP.MP- series	18	5.4.3.3.a
GLOBAL DAVIT	Twin Fall Gravity Rollertrack,	GLP.RT-series, GSP.RT-series, GSP.RT, GLP.RT- series	17	5.4.3.3.c
GLOBAL DAVIT	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	GLP.FLH-series, GLP.FPH- series, GSP.FLH-series, GSP.FPH-series, RHL-series, RHP-series, GSP-series, GLP- series	17, 18	5.4.3.3.c , 5.4.3.3.a
GREBEN	Free fall secondary hydraulic A Frame,	HFF-series	25	5.4.3.3.d
GREBEN	Gravity Single & Twin Fall Outrigger,	FOD-series	17	5.4.3.3.c
GREBEN	Single arm Slewing,	SAR-series, PH-series	6, 1	5.4.3.3.e
GREBEN	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	RLC-series	11	5.4.3.3.b
GREBEN	Twin Fall Gravity Pivoting / Luffing,	SPG-series	18	5.4.3.3.a

GREBEN	Twin Fall Gravity Rollertrack,	GR-RTD-series	17	5.4.3.3.c
GURDESAN	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	GD-PD-series, HD-series	18	5.4.3.3.a
GURDESAN	Free fall secondary hydraulic A Frame,	GD-FFD-series, GD-FF-series, GD-KV	25	5.4.3.3.d
GURDESAN	Twin Fall Gravity Pivoting / Luffing,	GD-GR series	18	5.4.3.3.a
GURDESAN	Single arm Slewing,	GD-KHK-series, GD-RRS-series	6, 1	5.4.3.3.e
HAEAN MACHINERY IND. CO. LTD.	Single arm Slewing,	HED-PC-series, HHD-PC-series	6, 1	5.4.3.3.e
HANYOUNG ENTERPRISE	Single arm Slewing,	RESCUE BOAT DAVIT-series	6, 1	5.4.3.3.e
HARDING (UMOE SCHAT HARDING)	Free fall secondary hydraulic A Frame,	FF-series, LA-series	25	5.4.3.3.d
HARDING (UMOE SCHAT HARDING)	Gravity freefall primary,	FFB-series, LA-series	25	5.4.3.3.d
HARDING (UMOE SCHAT HARDING)	Gravity Single & Twin Fall Outrigger,	HD-FL-series, ORD-series	17, 18	5.4.3.3.c , 5.4.3.3.a
HARDING (UMOE SCHAT HARDING)	Single arm Slewing,	LAR-series, SAR-series, SPR-series, SRR-series, FR-series	6, 1	5.4.3.3.e
HARDING (UMOE SCHAT HARDING)	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	SA-series	11	5.4.3.3.b
HARDING (UMOE SCHAT HARDING)	Twin Fall Gravity Pivoting / Luffing,	HD-SPG-series, HD-VIP-series, SPG(VL)-series	18	5.4.3.3.a
HARDING (UMOE SCHAT HARDING)	Twin Fall Gravity Rollertrack,	GRA-series, HD-RT-series	17	5.4.3.3.c
HARDING (UMOE SCHAT HARDING)	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	SPD-series, SPR-series, NPD-series, NPDS-series, VIP-series	25	5.4.3.3.d
HARDING (UMOE SCHAT HARDING) (SCHAT DAVIT COMPANY) (PALFINGER)	Single arm Slewing,	MOB-series	6, 1	5.4.3.3.e
HARDING (UMOE SCHAT HARDING) (SCHAT DAVIT COMPANY) (PALFINGER)	Twin Fall Gravity Pivoting / Luffing,	SPG(L)-series	18	5.4.3.3.a
HARDING (UMOE SCHAT HARDING) (SCHAT DAVIT COMPANY) (PALFINGER)	Twin Fall Gravity Rollertrack,	NT-series	17	5.4.3.3.c
HARDING (WATERCRAFT)	Twin Fall Gravity Rollertrack,	WRG-series	17	5.4.3.3.c
HATECKE (ERNST HATECKE)	Free fall secondary hydraulic A Frame,	FFA-series	25	5.4.3.3.d
HATECKE (ERNST HATECKE)	Gravity freefall primary,	FFB-series	25	5.4.3.3.d
HATECKE (ERNST HATECKE)	Gravity Single & Twin Fall Outrigger,	GSP.O-series	18	5.4.3.3.a
HATECKE (ERNST HATECKE)	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	GSP.FP-series	17	5.4.3.3.c

FT	Single arm Slewing,	HL6D, HL-series	6, 1	5.4.3.3.e
FT	A-frame hydraulic / single arm / Telescopic,	HL-series	11	5.4.3.3.b
HYDRALIFT	Hydraulic/el Pivoting & Luffing,	HL-series	11	5.4.3.3.b
IHI MARINE UNITED INC	Twin Fall Gravity Pivoting / Luffing,	MUL-series	17, 18	5.4.3.3.c , 5.4.3.3.a
IHI MARINE UNITED INC	Free fall hydraulic/el secondary,	SH-series, SC-series	25	5.4.3.3.d
IKNOW MACHINERY (TSUJI)	Twin Fall Gravity Pivoting / Luffing,	HD-series	17, 18	5.4.3.3.c , 5.4.3.3.a
IMT CO., LTD	Single arm Slewing,	ILR-series	6, 1	5.4.3.3.e
JAPAN MARINE UNITED CORP.	Hydraulic/el Pivoting & Luffing,	MUL-series, MUH-series	11	5.4.3.3.b
JAPAN MARINE UNITED CORP.	Free fall hydraulic/el secondary,	MUF-series, US-series	25	5.4.3.3.d
JAPAN MARINE UNITED CORP.	Single arm Slewing,	MUR-series	6, 1	5.4.3.3.e
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Free fall secondary hydraulic A Frame,	JYF-series, JY-series, JYM-series, JYFF-series, FW-series, JYRC-series, JYR-series, FN-series, JYFN-series	25	5.4.3.3.d
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Gravity Single & Twin Fall Outrigger,	JYP-series	17, 18	5.4.3.3.c , 5.4.3.3.a
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Single arm Slewing,	JYRCA-series, JY-series, JYR-series	6, 1	5.4.3.3.e
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	JYR-series, JYH-series	11	5.4.3.3.b
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Twin Fall Gravity Pivoting / Luffing,	JYL-series	18	5.4.3.3.a
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Twin Fall Gravity Rollertrack,	JYGR-series	17	5.4.3.3.c
JIANGSU JIAOYAN MARINE EQUIPMENT CO., LTD	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	JYHG-series, JYL-series	17	5.4.3.3.c
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Free fall secondary hydraulic A Frame,	NPT-DF-series, NPT-series	25	5.4.3.3.d
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Gravity Single & Twin Fall Outrigger,	NPT-DP-series, NPT-PL-series, NPT-series	18	5.4.3.3.a
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Single arm Slewing,	NPT-DR-series, NPT-OR-series, NPT-series, OR-series	1, 6	5.4.3.3.e
JIANGYIN NEPTUNE MARINE APPLIANCE CO., LTD.	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	NPT- BE-series, NPT-DR-series	11	5.4.3.3.b
NEPTUNE MARINE CE CO., LTD.	Twin Fall Gravity Pivoting / Luffing,	NPT-DL-series, NPT-DP-series, NPT-DYL-series, NPT-series	18	5.4.3.3.a

JIANGYIN NORSAFE	Free fall hydraulic/el secondary,	HD-series	25	5.4.3.3.d
JIANGYIN NORSAFE	Gravity freefall primary,	FRP-series	25	5.4.3.3.d
JIANGYIN NORSAFE	Hydraulic/el Pivoting & Luffing,	NOSC-series	11	5.4.3.3.b
JIANGYIN NORSAFE	Single arm Slewing,	NOSC-series, MOB-series	6, 1	5.4.3.3.e
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Free fall secondary hydraulic A Frame,	JY-FH-series	25	5.4.3.3.d
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Gravity Single & Twin Fall Outrigger,	JYPL-series	17	5.4.3.3.c
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Single arm Slewing,	JYSA-series	6, 1	5.4.3.3.e
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	JY-LFR-series, JY-LRHE- series, JY-PLR-series	11	5.4.3.3.b
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Twin Fall Gravity Pivoting / Luffing,	JYPL-series	18	5.4.3.3.a
JIANGYIN WOLONG F.R.P. BOAT CO. LTD.	Twin Fall Gravity Rollertrack,	JYHE-series	18	5.4.3.3.a
JIANGYIN XINJIANG	Gravity Roller Track,	JYL-series	18	5.4.3.3.a
JIANGYIN XINJIANG	Free fall hydraulic/el secondary,	JYF-series	25	5.4.3.3.d
JIANGYIN XINJIANG	Single arm Slewing,	JYR-series, JYFR-series	6, 1	5.4.3.3.e
JIANGYINSHI BEIHAI	Free fall secondary hydraulic A Frame,	FA-series, JYB-series, SM- series, JYF-series	25	5.4.3.3.d
JIANGYINSHI BEIHAI	Gravity Single & Twin Fall Outrigger,	PD-series, BHGH-series	18	5.4.3.3.a
JIANGYINSHI BEIHAI	Single arm Slewing,	SA-series, SAC-series, SMR- series, SAR-series, SRR-series	6, 1	5.4.3.3.e
JIANGYINSHI BEIHAI	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	EHRD-series, FRH-series, SRH- series	11	5.4.3.3.b
JIANGYINSHI BEIHAI	Twin Fall Gravity Pivoting / Luffing,	BH-G-series, LA-series, LB-H- series	18	5.4.3.3.a
JIANGYINSHI BEIHAI	Twin Fall Gravity Rollertrack,	HB-H-series, RB-H-series	17	5.4.3.3.c
JIANGYINSHI BEIHAI	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	BHGH-series	17, 18	5.4.3.3.c , 5.4.3.3.a
JUNG-A-MARINE CO., LTD	Single arm Slewing,	PCRLC-series	6, 1	5.4.3.3.e
KGW SCHWERINER MASCHINENBAU GMBH	Single arm Slewing,	RB-series	6, 1	5.4.3.3.e
MACGREGOR (TTS) (HYDRAMARINE)	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	G-TYPE-series	11	5.4.3.3.b

MACGREGOR (TTS) (HYDRAMARINE)	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	A-TYPE-series, HLD-series, HMC -series, HMD-series	11	5.4.3.3.b
MACGREGOR (TTS) HYDRAMARINE)	Single or Twin Fall Lifeboat Rescue Boat / Fast Rescue Boat Telescopic Hydraulic,	T-TYPE-series	6, 1	5.4.3.3.e
MANSEI	Free fall secondary hydraulic A Frame,	D-FH-series, FE-series, MFH- series, DH-series, M-FH-series, N-series	25	5.4.3.3.d
MANSEI	Hydraulic/el Pivoting & Luffing,	M, EH, E, N-series	11	5.4.3.3.b
MANSEI	Single arm Slewing,	M-series, R-series, SAR-series, SR-series, S-series, N-Series, E- series	6, 1	5.4.3.3.e
MANSEI	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	HER-series, N-series, M-series, EH-series, E-series	11	5.4.3.3.b
MANSEI	Twin Fall Gravity Pivoting / Luffing,	ABD-series, AH-series, AV- series, EH-series, EM-series, M-series, E-series	18	5.4.3.3.a
MANSEI	Twin Fall Gravity Rollertrack,	AT-series, GRA-series, N- series, M-series, EH-series, E- series	17	5.4.3.3.c
MIURA MACHINE CO, LTD (MIURA VIDER) (MANSEI)	Single arm Slewing,	SPG(VD)-series	6, 1	5.4.3.3.e
MIURA MACHINE CO, LTD (MIURA VIDER) (MANSEI)	Twin Fall Gravity Pivoting / Luffing,	MVD-series	18	5.4.3.3.a
MIURA MACHINE CO, LTD (MIURA VIDER) (MANSEI)	Gravity Single & Twin Fall Outrigger,	MV-series, MVD-series	17, 18	5.4.3.3.c , 5.4.3.3.a
MONTMONTAZA GREBEN	Gravity Roller Track,	SPG-series	17	5.4.3.3.c
MONTMONTAZA GREBEN	Free fall hydraulic/el secondary,	FFL-series, HW-series	25	5.4.3.3.d
MONTMONTAZA GREBEN	Gravity Single & Twin Fall Outrigger,	RC-series	17, 18	5.4.3.3.c , 5.4.3.3.a
MONTMONTAZA GREBEN	A-frame hydraulic / single arm / Telescopic,	HFF-series, SPG(GA)-series	11	5.4.3.3.b
MONTMONTAZA GREBEN	Single arm Slewing,	EW, RID, RLC, PHA, HPRLC- series	6, 1	5.4.3.3.e
NAVALIMPIANTI	Hydraulic/el Pivoting & Luffing,	GDMP-series	11	5.4.3.3.b
PIANTI	Gravity Single & Twin Fall Outrigger,	GDET-series, NPS-series	17, 18	5.4.3.3.c , 5.4.3.3.a
IONS	Single arm Slewing,	1,1-series	6, 1	5.4.3.3.e
NAVIM GROUP	Gravity Single & Twin Fall Outrigger,	FDRB-series	18	5.4.3.3.a
NAVIM GROUP	Single or Twin Fall Lifeboat Rescue Boat / Fast Rescue Boat Telescopic Hydraulic,	SPDT-L-series, SPDT-R- series, SPDT-T-series	11	5.4.3.3.b
NAVIM GROUP	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	SGHD- L-series, SPHD- T- series	18	5.4.3.3.a

NED-DECK MARINE (PALFINGER)	Gravity Single & Twin Fall Outrigger,	FPG-series	17	5.4.3.3.c
NED-DECK MARINE (PALFINGER)	Single arm Slewing,	SCH-series, SCM-series, SCT-series, SEC-series, SCM, SCH, SCT, MS, SCHD, HS-series	6, 1	5.4.3.3.e
NED-DECK MARINE (PALFINGER)	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	PFH-series, PRH-series, PRHE-series	11	5.4.3.3.b
NED-DECK MARINE (PALFINGER)	Twin Fall Gravity Pivoting / Luffing,	PL-series	18	5.4.3.3.a
NED-DECK MARINE (PALFINGER)	A-frame hydraulic / single arm / Telescopic,	FFH-series, PRH-series	11	5.4.3.3.b
NED-DECK MARINE (PALFINGER)	Free fall hydraulic/el secondary,	RTD-series	25	5.4.3.3.d
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Free fall secondary hydraulic A Frame,	YZF-series	25	5.4.3.3.d
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Single arm Slewing,	YZ-series, ZFDZ-series	6, 1	5.4.3.3.e
NINGBO ASIA F.R.P. BOAT MANUFACTURING CO LTD	Twin Fall Gravity Pivoting / Luffing,	L-series	18	5.4.3.3.a
NINGBO KAIRONG	Free fall hydraulic/el secondary,	FFD-series, HW-series	25	5.4.3.3.d
NINGBO KAIRONG	Single arm Slewing,	C-series	6, 1	5.4.3.3.e
NINGBO NEW MARINE LIFESAVING EQUIPMENT CO. LTD	Gravity Single & Twin Fall Outrigger,	NMPL-series	17, 18	5.4.3.3.c , 5.4.3.3.a
NINGBO NEW MARINE LIFESAVING EQUIPMENT CO. LTD	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	NM-series, NMAR-series	11	5.4.3.3.b
NMF	Single arm Slewing,	BPK-series, KD.2-series	6, 1	5.4.3.3.e
NOR DAVIT	Gravity Single & Twin Fall Outrigger,	PL-series, E-series	18	5.4.3.3.a
NOR DAVIT	Twin Fall Gravity Pivoting / Luffing,	SDP-series, SSP-series, RD-series, SSP-RD-series	17	5.4.3.3.c
NOREQ (PALFINGER)	Gravity Single & Twin Fall Outrigger,	NRD-series	18	5.4.3.3.a
NOREQ (PALFINGER)	A-frame hydraulic / single arm / Telescopic,	SDP-series	11	5.4.3.3.b
NOREQ (PALFINGER)	Hydraulic/el Pivoting & Luffing,	NDP-series, NPD-series, LBT-series	11	5.4.3.3.b
NOREQ (PALFINGER)	Single arm Slewing,	SCH-series, SCH-R-series, SCHD-series, SCM-L-series, SCM -R-series	6, 1	5.4.3.3.e
NOREQ (PALFINGER)	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	NPD-series	11	5.4.3.3.b
NOREQ (PALFINGER)	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	NPD-series	18	5.4.3.3.a

NORSAFE	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	NDA-series	11	5.4.3.3.b
NORSAFE	Free fall hydraulic/el secondary,	HD, FFA, FF-series	25	5.4.3.3.d
NORSAFE	Single arm Slewing,	NDSC, SAFC, SAF, NDSC-R, NRC-series	6, 1	5.4.3.3.e
NORSAFE	A-frame hydraulic / single arm / Telescopic,	NDA-series	11	5.4.3.3.b
NORSAFE	Hydraulic/el Pivoting & Luffing,	TOR-series	11	5.4.3.3.b
PALFINGER	Free fall secondary hydraulic A Frame,	NPT-DF-series, FFH-series	25	5.4.3.3.d
PALFINGER	Gravity freefall primary,	FF-series	25	5.4.3.3.d
PALFINGER	Gravity Single & Twin Fall Outrigger,	FPG-series	18	5.4.3.3.a
PALFINGER	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	SCH-R-series, SCM-L-series, SCM -R-series, SCHD-series	11	5.4.3.3.b
PALFINGER	Single or Twin Fall Lifeboat Rescue Boat / Fast Rescue Boat Telescopic Hydraulic,	NTD-series, NPDS-series	11	5.4.3.3.b
PALFINGER	Twin Fall Gravity Pivoting / Luffing,	NPT-series, VIP-series	18	5.4.3.3.a
PALFINGER	Twin Fall Gravity Rollertrack,	NPT-series	17	5.4.3.3.c
PALFINGER	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	NPD-series, PFH-series, PRM-series, PRH-series	18	5.4.3.3.a
PELLEGRINI MARINE EQUIPMENT	Single arm Slewing,	CHCD 2,507+ RLC 2.1/4.5-series, RLC-series	6, 1	5.4.3.3.e
PELLEGRINI MARINE EQUIPMENT	Twin Fall Gravity Pivoting / Luffing,	GRA-series	18	5.4.3.3.a
QINGDAO BEIHAI SHIPBUILDING HEAVY Y CO. LTD.	Free fall secondary hydraulic A Frame,	BD-FF-series, BD-series, BH-series, BD-F-series, BDFN-series	25	5.4.3.3.d
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Gravity Single & Twin Fall Outrigger,	BD-PL-series, BD-series	18	5.4.3.3.a
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Single arm Slewing,	BD-series, SA-series, BD-SH-series, BDR-series	6, 1	5.4.3.3.e
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	BD-AR-series, BD-series	11	5.4.3.3.b
QINGDAO BEIHAI SHIPBUILDING HEAVY INDUSTRY CO. LTD.	Twin Fall Gravity Pivoting / Luffing,	BD-PV-series, BD-series	18	5.4.3.3.a
REDROCK	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	RDA-series	11	5.4.3.3.b
REDROCK	Single or Twin Fall Lifeboat Rescue Boat / Fast Rescue Boat Telescopic Hydraulic,	RDT-series	11	5.4.3.3.b

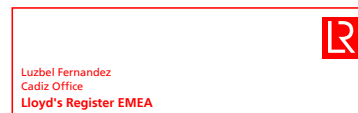
SCHAT HARDING	Gravity freefall primary,	FF, UZ, HD-series	11	5.4.3.3.b
SCHAT HARDING	Free fall hydraulic/el secondary,	SA, TME, FF, LA, RSD-series	25	5.4.3.3.d
SCHAT HARDING	Hydraulic/el Pivoting & Luffing,	SPG, RSD, VIP, NPD, VIP 8-series	11	5.4.3.3.b
SCHAT HARDING	Single arm Slewing,	SPR, SSR, SRR, RSD, SPMOB, PAR-series	6, 1	5.4.3.3.e
SCHAT HARDING	Gravity Single & Twin Fall Outrigger,	VIP, GSP, PAR15, SPR-series	17, 18	5.4.3.3.c , 5.4.3.3.a
SCHAT HARDING	Gravity Roller Track,	NT-series	17	5.4.3.3.c
SCHAT HARDING	A-frame hydraulic / single arm / Telescopic,	NPDS-series	11	5.4.3.3.b
SEC (SHIPS EQUIPMENT CENTRE)	Free fall secondary hydraulic A Frame,	HP2-series	25	5.4.3.3.d
SEC (SHIPS EQUIPMENT CENTRE)	Single arm Slewing,	MS-series	6, 1	5.4.3.3.e
SEKIGAHARA	Free fall secondary hydraulic A Frame,	FD-series, WL-series	25	5.4.3.3.d
SEKIGAHARA	Gravity Single & Twin Fall Outrigger,	HGK, RTD, DHA, DMA-series, WL-series	17, 18	5.4.3.3.c , 5.4.3.3.a
SEKIGAHARA	Hydraulic/el Pivoting & Luffing,	HGD, SHS, RTD, SWE, DMA, DHA, RD, RDW-series	11	5.4.3.3.b
SEKIGAHARA	Single arm Slewing,	RD-series, SHS-series, RTD-series, RDW-series	6, 1	5.4.3.3.e
SEKIGAHARA	Twin Fall Gravity Pivoting / Luffing,	DHA-series, DMA-series, HGD-series, HGK-series	18	5.4.3.3.a
SEKIHARAARA	Twin Fall Gravity Rollertrack,	RTD-series, HGD-series, SHS-series	17	5.4.3.3.c
SEKIGAHARA	Free fall secondary hydraulic A Frame,	SF-series, SFS-series, S-series, SFA-series, SFC-series, SFD-series, SHS-series	25	5.4.3.3.d
SEKIGAHARA	Single arm Slewing,	SSS-series, SJS-series, SJR-series, S-series	6, 1	5.4.3.3.e
SEKIGAHARA	Twin Fall Gravity Pivoting / Luffing,	SFA-series, SFB-series, SFP-series, SHS-series, SH-series, SHN-series, STS-series, SSS-series	18	5.4.3.3.a
SEKIGAHARA	Twin Fall Gravity Rollertrack,	AT-series, STS-series, SH-series, SHS-series	17	5.4.3.3.c
SERVO SHIP S.L	Free fall secondary hydraulic A Frame,	FFR-20-series, RCL16-series	25	5.4.3.3.d
SERVO SHIP S.L	Single arm Slewing,	PR4M1100HR-series SWL-series, PR-series	6, 1	5.4.3.3.e
SEZAMOR	Single arm Slewing,	ZOL, ZZ, ZZ-ZOT, ZZ-ZOL, ZZ-ZOLT-series	6, 1	5.4.3.3.e

SEZAMOR	Hydraulic/el Pivoting & Luffing,	ZOK, ZZ-ZU, ZZ-ZU2-series	25	5.4.3.3.d
SEZAMOR	Free fall hydraulic/el secondary,	PB-series, ZOK, ZZ-ZU, ZZ-ZU2-series, ZFN-series, ZFY-series	25	5.4.3.3.d
SHANGHAI HENGYUAN MARINE EQUIPMENT CORPORATION	Free fall secondary hydraulic A Frame,	FH-series	25	5.4.3.3.d
SHANGHAI HENGYUAN MARINE EQUIPMENT CORPORATION	Single arm Slewing,	SAF-series	6, 1	5.4.3.3.e
SHEYANG SAIFUTE	Single arm Slewing,	14KN-series, 21KN-series, KN-series	6, 1	5.4.3.3.e
SHEYANG SAIFUTE	Hydraulic/el Pivoting & Luffing,	KN-series	11	5.4.3.3.b
SHEYANG SAIFUTE	Free fall hydraulic/el secondary,	55KN-series, KN-series	25	5.4.3.3.d
SHIGI	Gravity Single & Twin Fall Outrigger,	MFH-S600-series	17, 18	5.4.3.3.c , 5.4.3.3.a
SHIN MYUNG TECH	Single arm Slewing,	SMRBD&LRD-FT-series, SMRBD-SD -series, SMRBD&LRD-series, SMRBD&PV-series	6, 1	5.4.3.3.e
SORMEC	Single arm Slewing,	M-series, RB-series	6, 1	5.4.3.3.e
STOCZNIA USTKA SP. Z O.O.	Free fall secondary hydraulic A Frame,	HZ-series	25	5.4.3.3.d
STOCZNIA USTKA SP. Z O.O.	Gravity freefall primary,	PZ-series	25	5.4.3.3.d
L SYSTEMS INT	Gravity Single & Twin Fall Outrigger,	PL-series	18	5.4.3.3.a
TAIZHOU HAIHAO MARINE EQUIPMENT CO, LTD	Free fall secondary hydraulic A Frame,	55KN-series	25	5.4.3.3.d
TAIZHOU HAIHAO MARINE EQUIPMENT CO, LTD	Single arm Slewing,	21KN BOAT/RAFT DAVIT-series	6, 1	5.4.3.3.e
TSUJI HEAVY INDUSTRIES	Single arm Slewing,	RP-series	6, 1	5.4.3.3.e
TSUJI HEAVY INDUSTRIES	Twin Fall Gravity Pivoting / Luffing,	H-series	18	5.4.3.3.a
TSUJI HEAVY INDUSTRIES	Twin Fall Gravity Rollertrack,	T83-series, TC-series	17	5.4.3.3.c
TSUJI HEAVY INDUSTRIES	Hydraulic/el Pivoting & Luffing,	H-series, EB-series	11	5.4.3.3.b
TTS (HYDRALIFT)	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	HL-series	11	5.4.3.3.b
TTS (HYDRALIFT)	Single arm Slewing,	HL-series	6, 1	5.4.3.3.e
TTS (HYDRALIFT)	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	HL9D-series	18	5.4.3.3.a

TTS (HYDRALIFT)	A-frame hydraulic / single arm / Telescopic,	HL-series, HP-series	11	5.4.3.3.b
ULSTEIN FAMA (FAMA GNI EW)	Single arm Slewing,	ZO-series, ZT-series	6, 1	5.4.3.3.e
VANGUARDE	Gravity Single & Twin Fall Outrigger,	PL-series	18	5.4.3.3.a
VANGUARDE	Single arm Slewing,	HS-series, MS-series, VS-series	6, 1	5.4.3.3.e
VANGUARDE	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	DH-series, PR-series, PRH-series	11	5.4.3.3.b
VANGUARDE	Twin Fall Gravity Pivoting / Luffing,	LE-series, VL-series	18	5.4.3.3.a
VANGUARDE	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	PFH-series, SRH-series	17	5.4.3.3.c
VERHOEF	Free fall secondary hydraulic A Frame,	FL-series	25	5.4.3.3.d
VESTDAVIT	Single arm Slewing,	L-series	6, 1	5.4.3.3.e
VESTDAVIT	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	P-series, PAP-series, PAPH-series, PL-series, PLAR-series, PLD-series, PLI-series, PLP-series, PLR-series, C-series, PLRS-series	11	5.4.3.3.b
VESTDAVIT	Single or Twin Fall Lifeboat Rescue Boat / Fast Rescue Boat Telescopic Hydraulic,	TBD-series, P-series, PAP-series, PAPH-series, PL-series, PLAR-series, PLD-series, PLI-series, PLP-series, PLR-series, C-series, PLRS-series	11	5.4.3.3.b
VESTDAVIT	Gravity Single & Twin Fall Outrigger,	TDB-series	17, 18	5.4.3.3.c , 5.4.3.3.a
VIKING (NORSAFE)	Gravity freefall primary,	SW-series	25	5.4.3.3.d
VIKING (NORSAFE)	Gravity Single & Twin Fall Outrigger,	A-series, C-series, D-series, NDC-series	18	5.4.3.3.a
VIKING (NORSAFE)	Single arm Slewing,	NRC-R-series, NRC-series	6, 1	5.4.3.3.e
VIKING (NORSAFE)	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	NDA-series, NRB-series	11	5.4.3.3.b
VIKING (NORSAFE)	Twin Fall Gravity Pivoting / Luffing,	E-series	18	5.4.3.3.a
VIKING (NORSAFE)	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	LH-series, NRC-series	17	5.4.3.3.c
VIKING (NORSAFE) (JIANGYIN)	Single arm Slewing,	NDSC-series, NDSC-R-series	6, 1	5.4.3.3.e
VIKING (NORSAFE) (JIANGYIN)	Free fall secondary hydraulic A Frame,	HD-series	25	5.4.3.3.d
WELIN LAMBIE	Single arm Slewing,	LRW-series, SARBE-series	6, 1	5.4.3.3.e

WUXI DONGWU	Free fall secondary hydraulic A Frame,	F55-F70-series, NPT100F-series, F-series	25	5.4.3.3.d
WUXI DONGWU	Single arm Slewing,	21 - 35KN-series, DCW210-series	6, 1	5.4.3.3.e
WUXI DONGWU	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	A30/H35-series	11	5.4.3.3.b
WUXI DONGWU	Twin Fall Gravity Pivoting / Luffing,	18KN-110KN-series	18	5.4.3.3.a
WUXI DONGWU	Hydraulic/el Pivoting & Luffing,	50KN-series, KN-series, 60KN-series	11	5.4.3.3.b
WUXI DONGWU	Twin Fall Gravity Rollertrack,	25KN -30KN-series	17	5.4.3.3.c
WUXI HAIDELONG MARINE	Single arm Slewing,	SA-series	6, 1	5.4.3.3.e
WUXI HAIHONG BOAT MAKING CO., LTD	Single arm Slewing,	23KN-series	6, 1	5.4.3.3.e
WUXI HUAHAI	Gravity Single & Twin Fall Outrigger,	PD-series	18	5.4.3.3.a
WUXI HUAHAI	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	HMB-series	11	5.4.3.3.b
WUXI HUAHAI	Single arm Slewing,	HMCD-series, HMD-series, HM-series	6, 1	5.4.3.3.e
WUXI HUAHAI	Hydraulic/el Pivoting & Luffing,	HMD-series	11	5.4.3.3.b
WUXI HUAHAI	Twin Fall Gravity Pivoting / Luffing,	HMD-series	17	5.4.3.3.c
WUXI SHENGOU	Free fall secondary hydraulic A Frame,	SMDF-series	25	5.4.3.3.d
WUXI SHENGOU	Single arm Slewing,	SMC-series, SMD-series	6, 1	5.4.3.3.e
WUXI SHENGOU	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	HMDA-series	11	5.4.3.3.b
WUXI SHENGOU	Twin Fall Gravity Pivoting / Luffing,	SHMDL-series	18	5.4.3.3.a
WUXI SHENGOU	Twin Fall Gravity Rollertrack,	SMD-series	17	5.4.3.3.c
YILMAZ DENİZCİLİK	Single arm Slewing,	YD series,	6, 1	5.4.3.3.e
YILMAZ DENİZCİLİK	Gravity freefall primary,	YD series,	25	5.4.3.3.d
YOUNGNAM MACHINERY CO. LDT	Twin Fall Gravity Pivoting / Luffing,	YNBD-series, YNHD-series	18	5.4.3.3.a
YOUNGNAM MACHINERY CO. LDT	Gravity Roller Track,	YNBD-series	17	5.4.3.3.c
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Free fall hydraulic/el secondary,	FH-series	25	5.4.3.3.d

ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Single arm Slewing, Single or Twin Fall Lifeboat Rescue Boat / Fast Rescue Boat Telescopic Hydraulic,	SARC21 series, SA- series, HDC- series	11, 6	5.4.3.3.e / 5.4.3.3.b
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	PD series, LFR- series, LR- series	11	5.4.3.3.b
ZHEJIANG HENGXIN SHIP EQUIPMENT CO., LTD	Twin Fall Gravity Pivoting / Luffing, Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	HE series, SRH series, LB series, - KN series, PD series	17, 18	5.4.3.3.a / 5.4.3.3.c
ZHEJIANG TAIZHOU WANTONG MARINE MACHINERY CO LTD	Twin Fall Gravity Pivoting / Luffing,	YSJ-series	18	5.4.3.3.a
ZHEJIANG TAIZHOU WANTONG MARINE MACHINERY CO LTD	Twin Fall Hydraulic / Pivoting / Luffing Gravity Lowering,	SRH-series	17, 18	5.4.3.3.c , 5.4.3.3.a
ZHEJIANG TAIZHOU WANTONG MARINE MACHINERY CO LTD	Free fall secondary hydraulic A Frame,	FH-series	25	5.4.3.3.d
ZHEJIANG TAIZHOU WANTONG MARINE MACHINERY CO LTD	Gravity Single & Twin Fall Outrigger,	PL-series	17, 18	5.4.3.3.c , 5.4.3.3.a
ZHEJIANG TAIZHOU WANTONG MARINE MACHINERY CO LTD	Single arm Slewing,	HDCL-series, SAFC-series, SAW30-series, ZF-series	6, 1	5.4.3.3.e
ZHEJIANG TAIZHOU WANTONG MARINE MACHINERY CO LTD	Twin Fall Gravity Pivoting / Luffing,	L-series	18	5.4.3.3.a
ZHENJIANG MARINE AUXILIARY MACHINE WORKS	Hydraulic/el Pivoting & Luffing,	LE, SAFC, SAF, SAPC, GL-series	11	5.4.3.3.b
ZHENJIANG MARINE AUXILIARY MACHINE WORKS	Free fall hydraulic/el secondary,	FH, F, FR-series	25	5.4.3.3.d
ZHENJIANG MARINE AUXILIARY MACHINE WORKS	Gravity Single & Twin Fall Outrigger,	LE, HDC, HDCL, PL-series	17, 18	5.4.3.3.c , 5.4.3.3.a
ZHENJIANG MARINE AUXILIARY MACHINE WORKS	Gravity freefall primary,	FW-series	11	5.4.3.3.b
ZHENJIANG MARINE AUXILIARY MACHINE WORKS	A-frame hydraulic / single arm / Telescopic,	SHA, LFR, PR-series	11	5.4.3.3.b
ZHENJIANG MARINE AUXILIARY MACHINE WORKS	Single arm Slewing,	SAFC, SA, SH, SAF, HDCL-series	6, 1	5.4.3.3.e
ZHENJIANG MARINE AUXILIARY MACHINE WORKS	Gravity Roller Track,	HE, RE-series	17	5.4.3.3.c
ZHENJIANG WEST MARINE EQUIPMENT CO., LTD	Single Fall Rescue / Fast Rescue Boat A Frame Hydraulic,	WME-LRH35-series	11	5.4.3.3.b



Luzbel Fernández  
Surveyor to Lloyd's Register EMEA

a member of the Lloyd's Register group.



## Lloyd's Register Approved Service Supplier

<b>Supplier</b>	<b>Marine Technical Solutions, S.L.U.</b>
<b>Address</b>	Oceano Atlantico 62, Poligono Palmones II, Los Barrios, Cadiz, 11379, Spain
<b>Contact Details</b>	Mr.: Javier del Monte; E-mail: javierdm@marinetechnicalsolutions.es
<b>Contact Number</b>	+3491025641 +34622230466

The above company having been assessed hereby receives approval in accordance with the requirements of Lloyd's Register Procedures for Approval of Service Suppliers as Supplier from the address(es) listed above for the provision of

<b>Surveys Using Remote Inspection Techniques (RIT) Of The Structure Of Ships And Mobile Offshore</b>
<b>By use of Rope Access.</b> <b>Authorised technicians for rope access remote technique:</b>  - Julian Alcaina - Juan Antonio Corrales  <b>By use of UAV- Drone with camera to perform Close-up surveys in support of attending surveyor and excluding TM.</b> <b>Authorised technician for drone:</b>  - Ruben Martinez Rivero  <b>The following drone model to be used:</b>  - DJI AVATA 2



## Lloyd's Register Approved Service Supplier

This approval is conditional upon the Supplier maintaining the documented scheme as audited by any member of the Lloyd's Register Group and hereby approved; and notifying Lloyd's Register in writing of any change to that scheme including any change in personnel, equipment or procedures. This certificate is issued to the Supplier and, subject to the Supplier complying with the necessary conditions, is valid to the date referred to above.

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### Additional Sites

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## Lloyd's Register Approved Service Supplier

<b>Company</b>	<b>Marine Technical Solutions, S.L.U.</b>
<b>Address</b>	Oceano Atlantico 62, Poligono Palmones II, Los Barrios, Cadiz, 11379, Spain
<b>Scope</b>	<b>Thickness Measurement of Hull Structure - Type B (Ships and Ship Units) as defined in MQPS, Book N, Procedure 17-1</b>

This is to certify that Lloyd's Register has approved the above firm in accordance with the requirements of the Lloyd's Register Approval for Thickness Measurement of Hull Structure in accordance with Lloyd's Register's Rules and Regulations for Classification of Ships as amended from time to time. The thickness measurements may be used by Lloyd's Register Group surveyors or shipowner's representatives when making decisions affecting classification, certification or the operation of a ship.

Personnel Authorised to carry out Thickness Measurement Survey's pertinent to this approval are listed on page 2 of 2.

The approval is conditional upon the aforementioned firm maintaining its audited scheme and notifying Lloyd's Register of any significant changes to that audited scheme including changes to personnel, equipment or procedures.

This certificate is issued to the above firm and is valid until the date given above.

**Phil Leaver**

NDE team Leader to Lloyd's Register EMEA  
A member of the Lloyd's Register group

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## Lloyd's Register Approved Service Supplier

### Supervisors

Javier Del Monte Doblás

Julian Alcaina Navajas

Juan Antonio Corrales Ramos

### Operators

Abraham Gil Lopez

Angel Marina Cilleruello

Gabrielle Franzone

Juan Blazquez Benitez

Pedro Sanchez Garcia

Ruben Martinez Riveiro

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