Sales & Services Catalogue

MARINE CONSULTANTS (TRINIDAD) LTD.

Keeping Marine Operators Operating Since 1971

www.mcl.co.tt

MARINE CONSULTANTS (TRINIDAD) LTD.

KHARI LOOK LOY
COUNTRY MANAGER

MARC SORZANO
CHIEF FINANCIAL OFFICER

"Keeping Marine Operators Operating."

RENEE PAYNE
PROCUREMENT WAREHOUSE AND LOGISTICS MANAGER

AKEISHA MCDONALD
HUMAN RESOURCE MANAGER

KAREN FREDERICK
SENIOR OPERATIONS COORDINATOR / PLANNER

ISO 9001:2015 CERTIFIED

RUEBEN POLLIDORE
SALES & MARKETING LEAD

MARCUS DIN CHONG
SERVICES TEAM LEAD

WHO ARE WE?

Our logo completely characterizes our Company's philosophy. In the same manner that a Navigator's sextant is considered an eminently practical backup navigation tool for ships, we at Marine Consultants (Trinidad) Limited, work alongside the customer to navigate through the markeplace. We help you efficiently manage your shipping business, with safety and technical experience at the forefront of our minds.

Since being founded in 1971 by Master Mariners, and as an ISO 9001-2015 organization, our goal has been to "Keep Marine Operators Operating." We realize the high cost of downtime and we aim to continually minimize its effects on our customers.

To achieve this, we supply equipment and maintenance services for vessels and offshore installations. We also provide consultancy services for asset management and safety procedures. We draw on a network of local and international expertise that offers world-class products and services to the maritime industry.

We work hand in hand with our customers as they rely on us to understand their business process to offer appropriate solutions that add value and assurance to stakeholders. Our clients come from many sectors including the Oil and Gas Industry, Marine, National Security, and Pleasure Crafts.

OUR SERVICES INCLUDE:

- *Life Raft & Evacuation Systems • Life Boats, Davits & Rescue Crafts • Inflatable Boats • Navigational Aids*
- *Marine Fire System Inspections • CO2 Suppression Systems • Fire Extinguishers • Marine Electronic Services*
- *Self Contained Breathing Apparatus (S.C.B.A) • Emergency Escape Breathing Apparatus (E.E.B.D)*
- *Immersion Suits • Life Jackets • Rope & Specialty Rigging • Safety & Survival Equipment including Pyrotechnics*
- *Security & Law Enforcement Equipment*

Class Society Approvals include:
· ABS · DNV · BV · LLoyd's Register · DOT

Contact us! 43A Charles Street, Port of Spain Phone: 1 (868) 235-5406 Email: mcl@mcl.co.tt Website: www.mcl.co.tt

United States
Nassau
Bahamas
Havana
Cuba
Turks and Caicos Islands (U.K.)
Grand Turk
Cayman Islands (U.K.)
George Town
Dominican Republic
Haiti
Santo Domingo
Port-au-Prince
Jamaica
Kingston
Navassa Island (U.S.)
British Virgin Islands (U.K.)
San Juan
Puerto Rico (U.S.)
Anguilla (U.K.)
Saint Martin
Saint Barthelemy (France)
Netherlands Antilles (Neth.)
Basseterre
St. John's
Antigua and Barbuda
Saint Kitts and Nevis
Plymouth
Montserrat (U.K.)
Basse-Terra
Guadeloupe (France)
Isla Aves (Venezuela)
Roseau
Dominica
Fort-de-France
Martinique (France)
Casrties
Saint Lucia
Saint Vincent and the Grenadines
Kingstown
Barbados
Bridgetown
Grenada
St. Georges's
Isla de Providencia (Colombia)
Isla de San Andres (Colombia)
Aruba (Neth.)
Oranjestad
Netherlands Antilles (Neth.)
Willemstad
Port-of-Spain
Trinidad and Tobago
Caracas
Panama
Panama
Colombia
Venezuela
Guyana

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MARINE CONSULTANTS (TRINIDAD) LTD.

Keeping Marine Operators Operating Since 1971

ISO 9001:2015 CERTIFIED

MARINE CONSULTANTS (TRINIDAD) LTD.

VISION STATEMENT

Marine Consultants (Trinidad) Limited will be recognised as the industry leader for customer satisfaction by delivering quality products and services to the marine and offshore industries, and all areas of safety.

We will meet and exceed internationally established regulatory compliance through innovation and best practice. A culture of unity and empowerment will permeate all areas of our company with the customer as our driver.

MISSION STATEMENT

Marine Consultants (Trinidad) Limited will keep marine operators operating to provide safety of lives at sea. We will provide the highest standard of products and services in the delivery of customer satisfaction, whilst meeting regulatory demands and compliance with contractual obligations of all stakeholders.

Adherence to documented procedures and objectives as set out in our quality management system and our health, safety and environment management system will guide our daily operations and lead continual improvement throughout the organization.

We will provide opportunities for the continual upliftment of our employees as we grow our business for the benefit of our customers, our stakeholders and ourselves.

Our goal is to keep marine operators operating.

OUR CORE VALUES

UNITED	Our management and staff are united as one team.
COMMITTED	We are committed to each other as we share a mutual desire to succeed.
INNOVATIVE	We will develop superior competencies as we continually improve and exceed established goals and objectives by being creative and initiating positive change.
ASSURANCE	MCL will assure competency and quality assurance in accordance with industry best practices.
INTEGRITY	We will be free from influence as we uphold all global anti-bribery acts.
ETHICAL	We will be honest in all our endeavours, providing fair treatment to all.
HIGH PERFORMING	We will meet the demands of the industries within which we operate with the highest standards of professionalism.

QUALITY POLICY STATEMENT

Marine Consultants (Trinidad) Limited is committed to delivering quality products and services ensuring total customer satisfaction.

We adhere to all regulatory frameworks under which we operate whilst providing opportunities for the progressive development of our employees.

Khari Look Loy
Country Manager
Marine Consultants (Trinidad) Limited

MARINE CONSULTANTS (TRINIDAD) LTD.

Keeping Marine Operators Operating Since 1971

ISO 9001:2015 CERTIFIED

Navigational Aids

Specialty Mooring Rope & Rigging

Nautical Instruments Publications & Charts

ICOM
SIMRAD FURUNO
Raymarine GARMIN
KVH JRC
eaTel B&G

Marine Electronics

SOLAS & Marine Safety Equipment

Fire Equipment & Suppression Systems

Inflatable Boat Repairs Leisure & Military

Lifeboats & Rescue Crafts

Evacuation Systems: Chutes, Escape Systems

Life Rafts

CONTACT US:

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MARINE CONSULTANTS (TRINIDAD) LTD.

Keeping Marine Operators Operating Since 1971

ISO 9001:2015 CERTIFIED

Safety Solutions

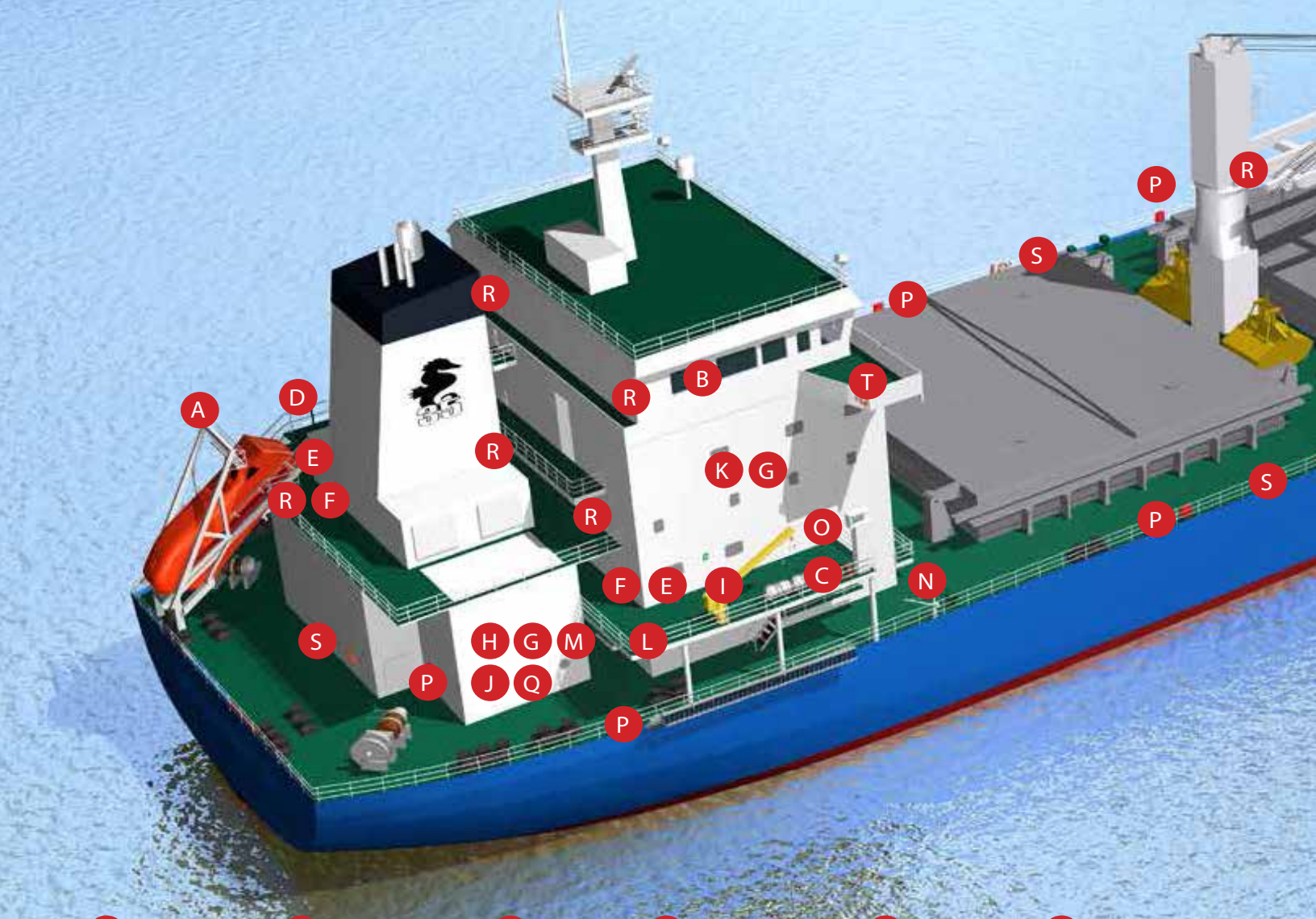
TOTAL SAFETY SOLUTIONS PROVIDER

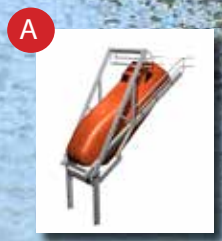
By harnessing our knowledge and expertise of safety and survival equipment, we have been able to develop market-leading solutions that address the specific issues faced by the oil and gas industry. For over 30 years our Offshore Projects team has been providing in-depth marine safety advice and putting together bespoke packages tailored to the specific requirements of different offshore environments.

Our services range from the provision of marine lifesaving equipment for offshore vessels, survival equipment for those travelling over water to offshore oil rigs, through to the total offshore installations.

At Marine Consultants, we not only pride ourselves on our ability to provide technically advanced products, we also strive to ensure all aspects of each project are fully met.

For further information please contact a member of our Projects Team today by sending an e-mail to mcl@mcl.co.tt

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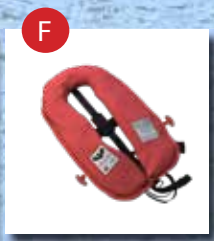
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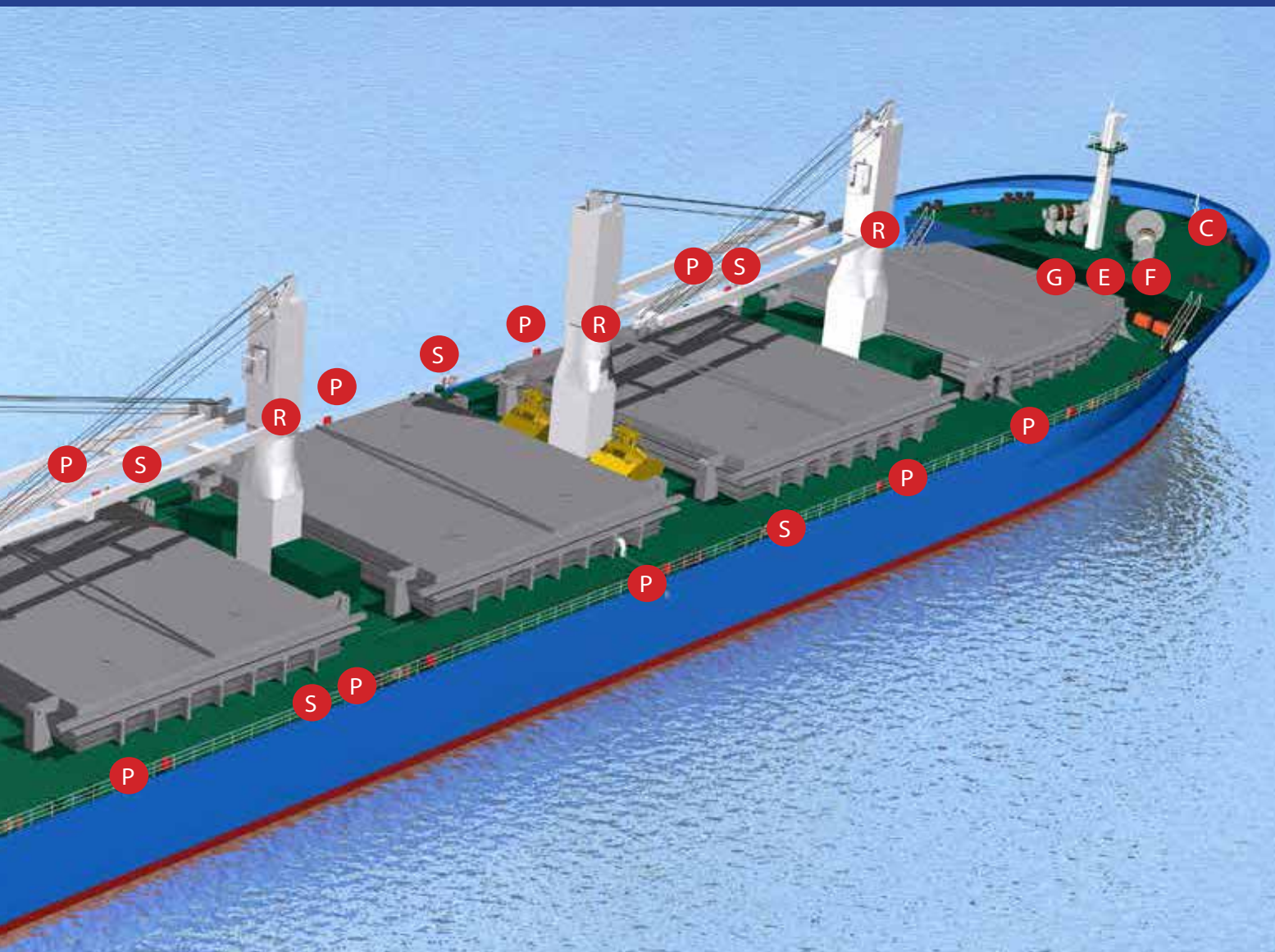

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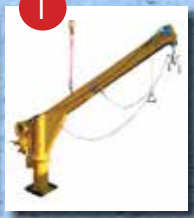

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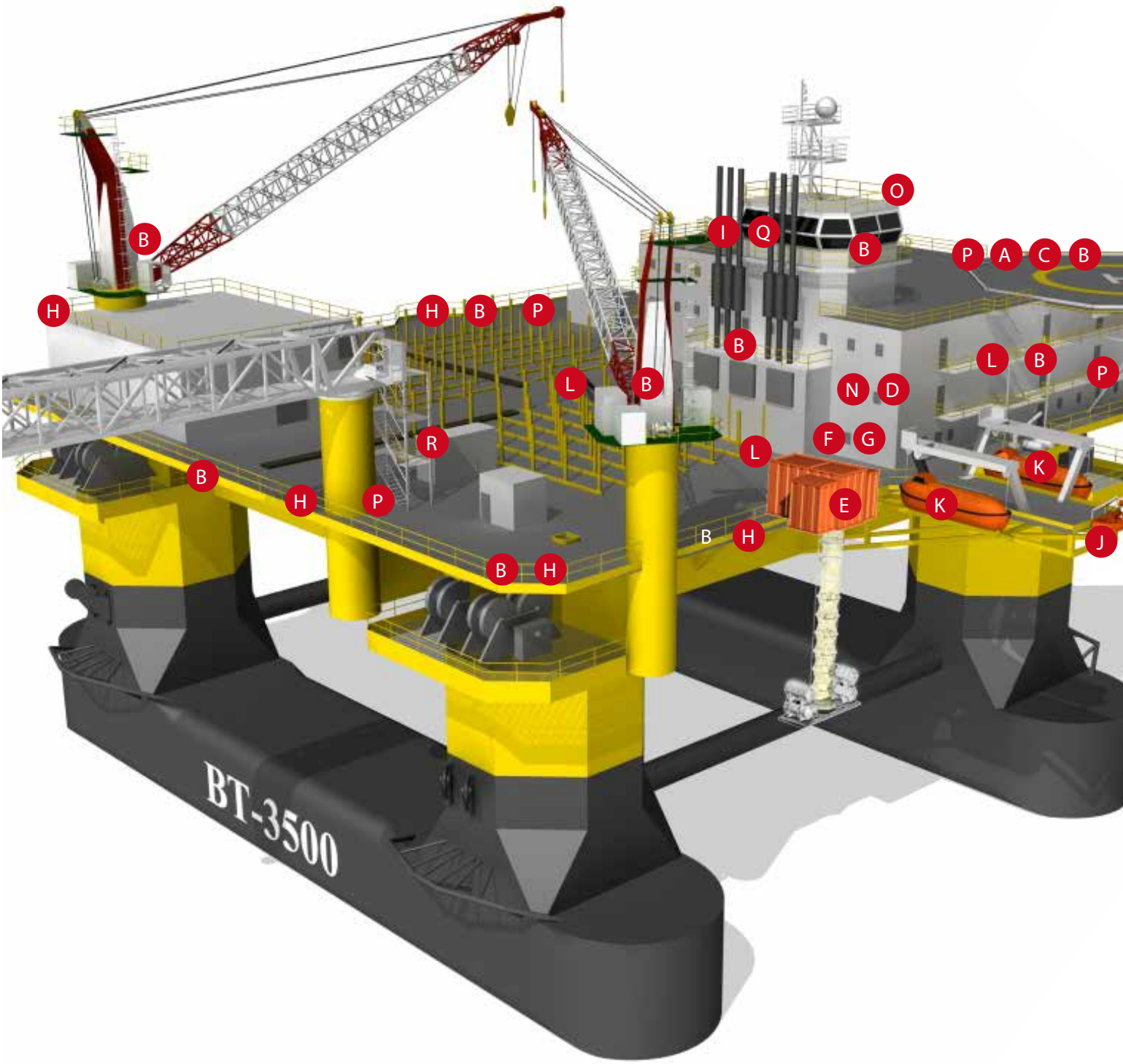
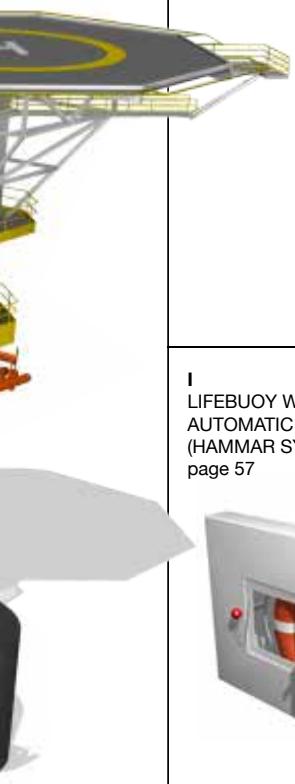
Safety Solutions





HERE ARE SOME OF THE PRODUCTS THAT CAN BE SUPPLIED:

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Liferafts & Evacuation Systems

BRANDS WE SERVICE

VIKING LIFE-SAVING EQUIPMENT

survitecgroup

LSA LIFERAFT SYSTEMS AUSTRALIA

SURVITEC ZODIAC SOLAS LIFERAFTS

DSB

SURVITEC SURVIVAL PRODUCTS

Crewsaver®

PLASTIMO

DBC Marine Safety Systems Ltd.

REVERE SURVIVAL INC.

RFD BEAUFORT

LALIZAS Simply life saving

VIKING Throw-overboard Liferaft

- Type VIKING DK+
- High durability with an expected lifespan of 15-20 years. Exceptionally stable even in extremely rough seas. Can be deployed even at very low temperatures
- Two individual buoyancy chambers, each carrying capacity weight, so a puncture in one tube will not cause destabilisation
- Available in sizes 6-35 persons

VARIANTS	
L006D00	6 person throw-overboard liferaft
L008D00	8 person throw-overboard liferaft
L010D00	10 person throw-overboard liferaft
L012D00	12 person throw-overboard liferaft
L016D00	16 person throw-overboard liferaft
L020D00	20 person throw-overboard liferaft
L025D00	25 person throw-overboard liferaft
L025DS0	25 person self-righting throw-overboard liferaft
L035D00	35 person throw-overboard liferaft
L039DS0	39 person self-righting throw-overboard liferaft
RELATED PRODUCTS	
-	-

Viking Davit-launched Liferafts

- Type VIKING DKF+ Designed to be inflated on deck level and lowered to water level
- Provide safe effective means of dry-shod evacuation and suitable for all types of vessels, regardless of deck height or hull shape
- Available in sizes 12-39 persons

VARIANTS	
L012DF00	12 person davit-launchable liferaft
L016DF00	16 person davit-launchable liferaft
L020DF00	20 person davit-launchable liferaft
L025DF00	25 person davit-launchable liferaft
L035DF00	35 person davit-launchable liferaft
L025DFS0	25 person self-righting davit-launchable liferaft
L039DFS0	39 person davit-launchable liferaft, self-rightin g
RELATED PRODUCTS	
1006148	Liferaft davit for 12 - 16 person liferaft, type SCM 14-3,5L
1006149	Liferaft davit for 20 - 25 person liferaft, type SCM 21-4,0L
1006150	Liferaft davit for 35 - 39 person liferaft, type SCM 33-4,0L
1006553	Release hook for rescue boats and liferafts, max. SWL: 3500

VIKING Open Reversible Liferafts, type DKR USCG Inflatable Buoyant Apparatus (IBA)

- For passenger ships operating in domestic inland and coastal waters
- Available in sizes 6-150 persons

VARIANTS	
L006DKR2	6 person open reversible liferaft, type DKR
L012DKR1	12 person open reversible liferaft, type DKR
L025DKR1	25 person open reversible liferaft, type DKR
L050DKR	50 person open reversible liferaft, type DKR
L100DKR	101 person open reversible liferaft, type DKR
L150DKR	150 person open reversible liferaft, type DKR
L006IBA0	6 person open reversible liferaft, type IB A
L012IBA0	12 person open reversible liferaft, type IB A
L025IBA0	25 person open reversible liferaft, type IB A
L050IBA0	50 person open reversible liferaft, type IB A
L100IBA0	100 person open reversible liferaft, type IB A
L150IBA0	150 person open reversible liferaft, type IB A
RELATED PRODUCTS	
-	-

SURVITEC SURVIVAL PRODUCTS
OceanMaster Liferaft

OceanMaster liferafts are renowned for uncompromising quality and design sophistication. In addition to meeting the requirements of the International Convention of the Safety of Life at Sea (SOLAS) 1996, as amended (except for 4-person model), the OceanMaster is manufactured to NATO AQAP 1 quality standards and holds approvals from most major international marine authorities, including the United States Coast Guard and UK Department of Trade. Today there are thousands of OceanMaster liferafts in service on commercial, naval and fishing vessels worldwide.

- Manufactured from polyurethane (PU) coated nylon, ensuring its durability
- Fully enclosed double skinned high visibility canopy complete with SOLAS-grade reflective tape
- Non-inflatable easy access boarding ramp
- All models are SOLAS Approved (except for 4-person model) and come with SOLAS “A” Equipment Packs unless otherwise requested
- Rafts come packed in containers with hydrostatic release unit (HRU) assembly and cradle

OCEANMASTER
10-25 PERSON

OCEANMASTER
4-8 PERSON

LOW PROFILE
CONTAINER ON CRADLE

ROUND
CONTAINER
ON CRADLE

SOLAS “A” EQUIPMENT PACK

6 USCG/SOLAS Hand Flares	Sea Sickness Bags	Repair plugs
4 USCG/SOLAS Parachute Flares	Survival Instructions	1 Drinking Cup
2 USCG/SOLAS Smoke Signals	1 Spare sea Anchor	Seasick Tablets
1 Topping-Up Air Pump	2400 Cal. Food Rations	1 Flashlight,
1 Sea Anchor with SS swivel	4.2 oz. water packs	Spare Bulb and
Throwing quoit w/ 100 ft. line	Bailer (1 for 4-12 person rafts;	Extra batteries
Thermal Protective Aids	2 for 16-25 person rafts)	1 Signal Mirror
	2 Paddles	1 First Aid Kit
	2 Sponges	1 Fishing Kit
	Repair Kit	3 Can Openers
	Signal whistle	1 Floating Knife
		1 Lock back knife

SURVITEC Davit-launched Liferafts

SSP OceanMaster davit-launch liferafts are renowned for uncompromising quality and design sophistication. In addition to meeting the requirements of the International Convention of the Safety of Life at Sea (SOLAS) 1996, as amended the OceanMaster is manufactured to NATO AQAP 1 quality standards and holds approvals from most major international marine authorities, including the United States Coast Guard and UK Department of Trade.

Designed to be launched by a davit, OceanMaster davit-launch liferafts can also be dropped from up to 36 meters in emergency evacuation conditions

APPROVALS
USCG
SOLAS

Cylindrical Container Mk 10						
Capacity Persons	Container A Pack			Container B Pack		
	L mm	D mm	W Kg	L mm	D mm	W Kg
8	12756	10	84	11605	60	63
12	12758	00	145	12756	80	110
16	12758	00	155	12756	80	110
20	12758	00	160	12756	80	115
25	14508	00	200	12758	00	140
37	15009	50	310	14508	00	200

SURVITEC SURVIVAL PRODUCTS

SURVITEC Inflatable Buoyant Apparatus (IBA)

The ShoreMaster IBA offers double buoyancy chambers which are constructed from specially formulated polyurethane (PU) proofed nylon fabric, which is highly resistant to abrasion and impervious to corrosion in the marine environment. Welded seams make this raft impervious to wear and tear. All 8-man ShoreMaster IBAs include a boarding ladder, rescue light and equipment pack.

A lightweight, water-resistant, durable valise is available for all sizes of ShoreMaster liferafts. Valises are made of a high visibility material, and are easy to launch overboard. Also available in Low Profile Container.

- All rafts in containers come with hydrostatic release unit (HRU) assembly and cradle
- Equipment Pack including bailers, sponges, hand pump, paddles, signal mirrors, knife, sea anchor and more

IBA EQUIPMENT PACK

- Compact Paddles
- Safety Knife
- Heaving Line
- Rescue Quoit
- Extra Batteries/Bulbs
- Anti-Seasick Tablets
- Emergency Instructions
- Bailer
- Hand Pump
- 2 Sponges
- Repair Kit
- Flashlight
- Sea Anchor
- 2 PRV Bungs
- Signal Mirror

INFLATABLE BUOYANT APPARATUS (IBA) TECHNICAL DATASHEET

CAPACITIES AND SPECIFICATIONS												
IBA SIZE	CONTAINER TYPE	CONTAINER SIZE / REFERENCE	DROP HEIGHT IN FEET (IN M)	PACKED DIMENSIONS IN INCHES (IN MM)			INFLATED DIMENSIONS IN INCHES (IN MM)			WEIGHT IN LBS (IN KG)	USCG APPROVAL
				L	H	W	L	H	W		
4 PERSON	VALISE	SIZE 2 or CHX VAL N3	20 (6)	30.7 (780)	13.4 (340)	13.0 (330)	64.6 (1640)	16.4 (416)	64.6 (1640)	58.6 (26.6)	160.010/105/0
	LOW PROFILE	MK12 SIZE 1 or N131	20 (6)	33.9 (860)	9.8 (250)	20.1 (510)				70.5 (32)	
6 PERSON	VALISE	SIZE 3 or CHX VAL N3	20 (6)	30.7 (780)	14.2 (360)	16.5 (420)	90.2 (2290)	18.9 (480)	66.9 (1700)	70.1 (31.8)	160.010/106/0
	LOW PROFILE	MK12 SIZE 2 or N131	20 (6)	33.9 (860)	11.8 (300)	20.1 (510)				82.7 (37.5)	
8 PERSON	VALISE	SIZE 3	20 (6)	30.7 (780)	14.2 (360)	16.5 (420)	107.1 (2720)	20.5 (520)	72.8 (1850)	76.9 (34.9)	160.010/107/0
	LOW PROFILE	MK12 SIZE 2	20 (6)	33.9 (860)	11.8 (300)	20.1 (510)				87.1 (39.5)	
10 PERSON	ROUND	N11	49 (15)	40.2 (1020)	17.4 (440)	18.8 (476)	119.3 (3030)	21.8 (553)	103.8 (2636)	102 (46)	160.010/109/0
	LOW PROFILE	N132	59 (18)	35.1 (890)	12.5 (315)	20.5 (520)				102 (46)	
20 PERSON	ROUND	N12	49 (15)	45.7 (1160)	20.2 (513)	22.1 (560)	159.5 (4050)	27.3 (692)	147.3 (3740)	168 (76)	160.010/110/0
	LOW PROFILE	N134	59 (18)	38 (965)	15 (380)	23.5 (596)				166 (75)	
30 PERSON	ROUND	MK10 SIZE 6 or N13	59 (18)	54.7 (1390)	21.5 (545)	22.2 (565)	178.7 (4540)	30.6 (778)	178.7 (4540)	266.8 (121)	160.010/135/0
	LOW PROFILE	MK16 SIZE 3 or N135	59 (18)	47.2 (1200)	16.3 (415)	25.6 (650)				273.4 (124)	
50 PERSON	ROUND	MK14 SIZE 17	59 (18)	51.5 (1308)	27.0 (685)	28.1 (713)	231.9 (5890)	33.9 (860)	231.9 (5890)	385.8 (175)	160.010/102/0
	LOW PROFILE	MK16 SIZE 4	33 (10)	60.2 (1530)	15.0 (380)	30.3 (770)				390.2 (177)	
100 PERSON	ROUND (two 50 person)	MK15 SIZE 31	49 (15)	66.5 (1690)	29.9 (760)	30.5 (775)	463.8 (11780)	33.9 (860)	231.9 (5890)	747.4 (339)	160.010/102/0
	ROUND (single 100 person)	N18	66 (20)	61.4 (1560)	32.9 (835)	33.6 (852)	441.8 (11220)	39.4 (1000)	240.2 (6100)	666 (302)	160.010/125/0

ZODIAC Throw-over Liferafts

Manufactured with a durable polyurethane coated fabric, all SurvitecZodiac throw-over liferafts are assembled using the advanced SurvitecZodiac hot assembly technique, Thermobonding™. The fabric's chemical nature and the Thermobonding™ process make these throw-over liferafts resilliant in the Marine environment, enhancing the liferaft's extreme strength and safety when loaded, an essential factor for this type of liferaft. Due to the fabric weight and structure, SurvitecZodiac throw-over liferafts are easy to service and fit in light, small sized but strong, glass reinforced plastic containers. SurvitecZodiac throw-over liferafts can be dropped from up to 36 meters (may vary depending on the size of the liferaft). Equipment packs are sealed in strong watertight bags, secured to the internal safety line of the liferafts.

- Manufactured with a durable polyurethane (PU) coated fabric, SurvitecZodiac
- Uses Thermobonding™ hot assembly technique
- Easy access boarding ramp
- Rafts come packed in containers with hydrostatic release unit (HRU) assembly, lashing and cradle for U.S. product only

Round Container

Low Profile Container

ZODIAC XTREM Throw-over Liferafts

SurvitecZodiac Xtrem is an innovative solution for maximizing deck space on vessels. These are standard SurvitecZodiac throwover liferafts vacuum-packed into an Xtrem container, which provides a 25-35% smaller footprint than any other conventionally packed low profile container in the market.

Xtrem Container

Comparison To Standard Low Profile Container

ZODIAC Self-righting Throw-over Liferafts

Utilizing the same manufacturing quality as the standard SurvitecZodiac throw-over liferafts, the self-righting throw-over models integrate a unique self-righting design. The design causes the liferaft to rotate into the correct position for boarding, regardless of how it inflates in the water after deployment from its container.

- Manufactured from durable polyurethane (PU) coated fabric
- Uses Thermobonding™ hot assembly technique
- Easy access boarding ramp
- Rafts come packed in containers with hydrostatic release unit (HRU) assembly, lashing and cradle for U.S. product only

Cylindrical Container						
Capacity Persons	Container A Pack			Container B Pack		
	L mm	D mm	W Kg	L mm	D mm	W Kg
6	11605	60	72	11605	60	58
8	11605	60	88	11605	60	69
10	12756	10	98	11605	60	73
12	12756	10	114	11605	60	82
25	14508	00	207	15306	80	146
37	15009	50	312	14508	00	222
50	15609	52	360	15608	52	246
100	1950	10505	60	1725	1050	430
150	3340	1150	1300	3340	1050	880

SURVITEC ZODIAC
SOLAS LIFERAFTS

ZODIAC Davit-launched Liferafts

Manufactured with durable polyurethane (PU) coated fabric, all SurvitecZodiac davit-launch liferafts are assembled using the advanced SurvitecZodiac hot assembly technique, Thermobonding™.

Designed to be launched by a davit, SurvitecZodiac davit launch liferafts can also be dropped from up to 36 meters in emergency evacuation conditions.

- Raft fabric weight and structure allow for easy servicing
- Light, more compact GRP container design gives quick access to the lifting bridle
- All liferafts are submitted to 4 times overload test and fully loaded 10 foot drop test, side impact and abrasion test
- Equipment pack is sealed in a strong watertight bag and secured to the internal safety line of the liferaft
- Rafts come packed in containers with hydrostatic release unit (HRU) assembly, lashing and cradle for U.S. product only
- Available in sizes 12-37 persons

ZODIAC Self-righting Davit-launched Liferafts

- Available in sizes 25 & 37 persons

APPROVALS
USCG
IC
SOLAS

ZODIAC Means Of Rescue (MOR)

SurvitecZodiac Means of Rescue (MOR) is a unique design specially developed to meet the latest requirements of the Roll on/Roll off passenger ships and is fully approved. These are now mandatory on RO/RO passenger ships as they provide a safe transfer of survivors from sea level to the deck of a ship in recovery situations.

- Manufactured with a durable polyurethane coated fabric
- Provides extreme strength and safety when loaded
- Assembled using the advanced SurvitecZodiac Thermobonding™ hot assembly technique, which eliminates the inconsistencies inherent in the old-fashioned gluing methods still used by other manufacturers
- The fabric's chemical nature The fabric's chemical nature process make SurvitecZodiac MOR units especially inert to the aging factors in the Marine environment
- Supplied in light, short sized strong cylindrical containers
- Rafts come packed in distinctive orange color container, complete with hydrostatic release unit (HRU) assembly, lashing and cradle for U.S. product only
- Available in 10 persons

Round Container

APPROVALS
USCG
IC
SOLAS

Liferafts

DSB Throw-over Liferafts

- Manufactured from polyurethane (PU) coated nylon, ensuring its durability
- Fully enclosed double skinned high visibility canopy complete with SOLAS-grade reflective tape
- Semi-rigid easy access boarding ramp
- Large water pockets to ensure maximum stability when inflating
- Fully insulated floor to ensure maximum thermal protection
- Available in sizes from 6-25 persons

Cylindrical Container						
Capacity Persons	Container A Pack			Container B Pack		
	L mm	D mm	W Kg	L mm	D mm	W Kg
6	12604	85	76	10506	10	63
8	12604	85	80	10506	10	63
10	11565	84	99	12604	85	80
12	11565	84	108	12604	85	85
16	13086	85	139	11565	84	101
20	13086	85	160	11565	84	106
25	13086	85	180	13086	85	130

Flat Pack			
Capacity Persons	B Pack		
	L mm	D mm	H mm
69	15	490	430
89	15	490	510
12	11886	47	320

Flat Pack Cradle available for 6 and 8 persons only

APPROVALS

USCG

SOLAS

DSB Davit-launched Liferafts

The LR07 is the latest MED approved DSB liferaft which provides a quality product that is both durable and cost effective. Stability, insulation, visibility and ease of stowage all feature highly in the design of this liferaft.

- Manufactured from polyurethane (PU) coated nylon, ensuring its durability
- Fully enclosed double skinned high visibility canopy complete with retro reflective tape
- Semi-rigid easy access boarding ramp
- Fully insulated floor to ensure maximum thermal protection
- Large water pockets to ensure maximum stability when liferaft is inflated
- As with all Davit Launch liferafts each raft is designed to be deployed on a davit and have all passengers boarded before being safely lowered to the water
- Available in sizes 12, 16, 20, 25 persons

Cylindrical Container						
Capacity Persons	Container A Pack			Container B Pack		
	L mm	D mm	W Kg	L mm	D mm	W Kg
12	11565	84	113	12604	85	92
16	13086	85	141	11565	84	106
20	13086	85	163	13086	85	123
25	13086	85	185	13086	85	135

DBC Throw-over Liferafts

- Manufactured from durable butyl fabric, ensuring its durability
- Fully enclosed double skinned high visibility canopy complete with SOLAS-grade reflective tape
- Non-inflatable easy access boarding ramp
- Rafts come packed in containers with hydrostatic release unit (HRU) assembly and cradle
- Available in sizes from 4-50 persons

DBC Marine Safety Systems

ELLIOT

ELLIOT Davit-launched Liferaft

Elliot davit-launch liferafts are manufactured to the highest quality standards and stowed in cylindrical containers designed to suit most deck spaces. Manufactured from polyurethane (PU) coated nylon, ensuring the durability of the liferaft.

- Fully enclosed double skinned high visibility canopy complete with SOLAS-grade reflective tape
- Non-inflatable easy access boarding ramp
- High volume water pockets to ensure maximum stability when inflated
- Canopy fitted with LED light ensuring maximum visibility
- Fully insulated floor to ensure maximum thermal protection
- Stowed in lightweight streamlined GRP containers enabling maximum deck space utilization
- Available in sizes 12, 16, 20, 25 persons

ELLIOT Throw-over Liferafts

- Manufactured from polyurethane (PU) coated nylon, ensuring its durability
- Non-inflatable easy access boarding ramp
- Fully enclosed double skinned high visibility canopy complete with SOLAS-grade reflective tape
- Rafts come packed in containers with hydrostatic release unit (HRU) assembly and cradle
- Available in sizes from 4-25 persons

ELLIOT Coastal Liferafts

Elliot liferafts benefit from high frequency welding and polyurethane proofed nylon fabric material to produce a higher quality, longer lasting liferaft than those produced from rubber-based fabrics with glued seams. Our Coastal liferafts offer double buoyancy chambers, are highly abrasion resistant, impervious to corrosion in the harsh marine environment and are USCG approved.

- All rafts in containers come with hydrostatic release unit (HRU) assembly and cradle
- Equipment Pack including bailers, sponges, hand pump, paddles, signal mirrors, knife, sea anchor and more
- Available in 4, 6 & 8 persons

INFLATABLE BUOYANT APPARATUS (IBA) TECHNICAL DATASHEET

CAPACITIES AND SPECIFICATIONS											
IBA SIZE	CONTAINER TYPE	CONTAINER SIZE / REFERENCE	DROP HEIGHT IN FEET (IN M)	PACKED DIMENSIONS IN INCHES (IN MM)			INFLATED DIMENSIONS IN INCHES (IN MM)			WEIGHT IN LBS (IN KG)	USCG APPROVAL
				L	H	W	L	H	W		
4 PERSON	VALISE	SIZE 2 or CHX VAL N3	20 (6)	30.7 (780)	13.4 (340)	13.0 (330)	64.6 (1640)	16.4 (416)	64.6 (1640)	58.6 (26.6)	160.010/105/0
	LOW PROFILE	MK12 SIZE 1 or N131	20 (6)	33.9 (860)	9.8 (250)	20.1 (510)				70.5 (32)	
6 PERSON	VALISE	SIZE 3 or CHX VAL N3	20 (6)	30.7 (780)	14.2 (360)	16.5 (420)	90.2 (2290)	18.9 (480)	66.9 (1700)	70.1 (31.8)	160.010/106/0
	LOW PROFILE	MK12 SIZE 2 or N131	20 (6)	33.9 (860)	11.8 (300)	20.1 (510)				82.7 (37.5)	
8 PERSON	VALISE	SIZE 3	20 (6)	30.7 (780)	14.2 (360)	16.5 (420)	107.1 (2720)	20.5 (520)	72.8 (1850)	76.9 (34.9)	160.010/107/0
	LOW PROFILE	MK12 SIZE 2	20 (6)	33.9 (860)	11.8 (300)	20.1 (510)				87.1 (39.5)	
10 PERSON	ROUND	N11	49 (15)	40.2 (1020)	17.4 (440)	18.8 (476)	119.3 (3030)	21.8 (553)	103.8 (2636)	102 (46)	160.010/109/0
	LOW PROFILE	N132	59 (18)	35.1 (890)	12.5 (315)	20.5 (520)				102 (46)	
20 PERSON	ROUND	N12	49 (15)	45.7 (1160)	20.2 (513)	22.1 (560)	159.5 (4050)	27.3 (692)	147.3 (3740)	168 (76)	160.010/110/0
	LOW PROFILE	N134	59 (18)	38 (965)	15 (380)	23.5 (596)				166 (75)	
30 PERSON	ROUND	MK10 SIZE 6 or N13	59 (18)	54.7 (1390)	21.5 (545)	22.2 (565)	178.7 (4540)	30.6 (778)	178.7 (4540)	266.8 (121)	160.010/135/0
	LOW PROFILE	MK16 SIZE 3 or N135	59 (18)	47.2 (1200)	16.3 (415)	25.6 (650)				273.4 (124)	
50 PERSON	ROUND	MK14 SIZE 17	59 (18)	51.5 (1308)	27.0 (685)	28.1 (713)	231.9 (5890)	33.9 (860)	231.9 (5890)	385.8 (175)	160.010/102/0
	LOW PROFILE	MK16 SIZE 4	33 (10)	60.2 (1530)	15.0 (380)	30.3 (770)				390.2 (177)	
100 PERSON	ROUND (two 50 person)	MK15 SIZE 31	49 (15)	66.5 (1690)	29.9 (760)	30.5 (775)	463.8 (11780)	33.9 (860)	231.9 (5890)	747.4 (339)	160.010/102/0
	ROUND (single 100 person)	N18	66 (20)	61.4 (1560)	32.9 (835)	33.6 (852)	441.8 (11220)	39.4 (1000)	240.2 (6100)	666 (302)	160.010/125/0

Liferafts

CREWSAVER

CREWSAVER Coastal Liferafts

Similar to Elliot liferafts, Crewsaver liferafts feature high frequency welding, polyurethane proofed nylon fabric material, double buoyancy chambers, high abrasion resistance, an imperviousness to the marine environment and USCG approval.

- All rafts in containers come with hydrostatic release unit (HRU) assembly and cradle
- Equipment Pack including bailers, sponges, hand pump, paddles, signal mirrors, knife, sea anchor and more
- Available in 4, 6 & 8 persons

APPROVALS
USCG

CREWSAVER Davit-launched Liferafts

- Fully enclosed double skinned high visibility canopy complete with SOLAS-grade reflective tape
- Non-inflatable easy access boarding ramp
- High volume water pockets to ensure maximum stability when inflated
- Canopy fitted with LED light ensuring maximum visibility
- Fully insulated floor to ensure maximum thermal protection
- Stowed in lightweight streamlined GRP containers enabling maximum deck space utilization
- Available in sizes 12, 20 & 25 persons

APPROVALS
USCG
SOLAS

CREWSAVER Inflatable Buoyant Apparatus (IBA)

- Designed and certified for passenger and/or commercial fishing vessels operating in protected or in-shore waters
- 25, 50 and 100 person capacities are fully reversible
- Constructed of that Polyurethane coated nylon fabric for superior abrasion resistance
- Manufactured using radio frequency (RF) welded seams for increased strength and reliability
- Outfitted with applicable government specified emergency equipment
- Optional roll-off cradles are available for single, double and triple container mounting/stowage
- Available in sizes 4, 6, 8, 25, 50, & 100 persons

APPROVALS
USCG

Round Container | **Low Profile Container** | **Valise**

CREWSAVER Throw-over Liferafts

- Manufactured from polyurethane (PU) coated nylon, ensuring its durability
- Non-inflatable easy access boarding ramp
- Fully enclosed double skinned high visibility canopy complete with SOLAS-grade reflective tape
- Rafts come packed in containers with hydrostatic release unit (HRU) assembly and cradle
- Available in sizes from 4-25 persons

APPROVALS
USCG
SOLAS

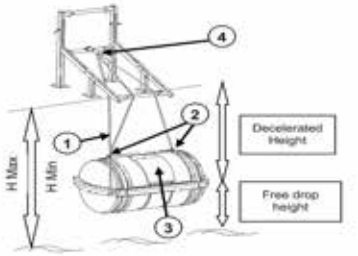
SURVITEC SURVIVAL PRODUCTS

SURVITEC Liferaft Decelerating System

Designed for extreme height storage of liferaft containers (up to 50 meters), such as those fitted onboard Offshore or Oil Rig installations. This system allows the stowage height of SurvitecZodiac throw-over liferafts, packed in round containers, to be increased over the standard approved stowage height. It does this by controlling the descent speed of the liferaft during the major part of its fall, thus reducing the impact of the liferaft on the water and bringing additional safety.

Installation of a liferaft configured to use the decelerating system on deck is simple and operation is similar to conventional throw-over liferafts. There is no special operation or training needed for the crew in order to launch a liferaft fitted with the system.

- The liferaft decelerating system is suitable for installation on a tilting or fixed cradle, without modification to the existing cradle installation.
- The system consists of: a pocket (#3 in the diagram); 2 “U” bolds (#2 in the diagram) fitted onto the upper shell of the container; a painter line of suitable length for the distance of the drop ((#1 in the diagram).
- The loose end of the decelerating system and the painter line are connected to the HRU (#4 in the diagram).
- Throw-over liferafts fitted with a decelerating system are MED approved up to 50 meters installation height.

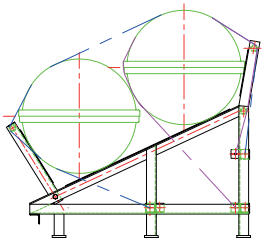


Rescue Net For Rescue Boat

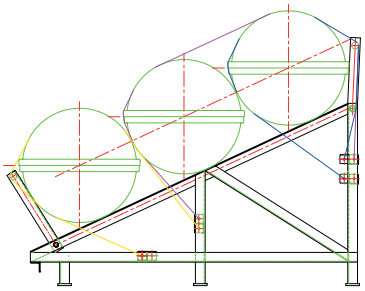
- MOB recovery system for rescue boats
- Roll and net ladder, size 185 cm

SURVITEC Liferaft Container Roll-Off Cradles

Survitec Group offers single, double and triple liferaft container roll-off cradles. They are designed to accommodate liferaft containers with 6 - 50 person capacities. Each liferaft is individually released either by HRU or manually. The cradle is of by HRU or manually. The cradle is of welded steel construction and is hot dip galvanized to maximize corrosion resistance. All fastening are of stainless steel.



Double Liferaft Container
Roll-Off Cradle

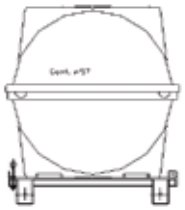


Triple Liferaft Container
Roll-Off Cradle

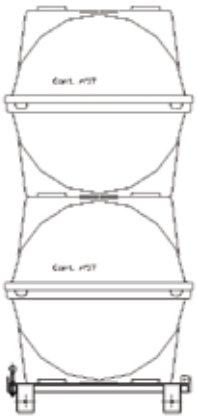
ZODIAC Davit-launched Liferaft Stacking Cradle

Designed for both shipyards and operators, the davit-launch liferaft with stackable containers perfectly addresses their need for a simple and easily operated solution which provides a complete set of these liferafts with reduced operation for deck installation.

The liferafts are delivered completely fitted with their lashing, HRU and the painters connected. They are set up on a galvanized steel cradle either as a single liferaft or a set of 2 liferafts.



Single Stack



Double Stack

APPROVALS

USCG

Installation On Deck Only Requires The Welding Of 2 Steel Hinges

Delivered Pre-Fitted On Their Deck Cradle, The Liferafts Become Easily Portable During Installation Or Removal For Servicing By Either A Pallet Jack Or Forklift

ZODIAC Throw Overboard Cradle

Various sizes of cradles are available for the SurvitecZodiac range of Throw Over and Davit Launch liferafts in either galvanised steel or aluminium.

Three tilting cradles are also available in galvanised steel or aluminium for the SurvitecZodiac Throw Over liferafts.

Stainless steel cradles are available for the SurvitecZodiac LPC/Xtrem range of rafts.

SurvitecZodiac Cradles available
Zodiac Aluminium 25 Person Cradle
Zodiac Steel 25 Person Cradle

ZODIAC Medium Inflatable Slide (MIS)
Medium Freeboard MES (Up to 12.5M)

The Survitec Zodiac Medium Inflatable Slide (MIS), for vessels with freeboard heights of between 3.8 metres and 12.5 metres, incorporates a twin-track inflatable slide that deploys at right angles to ships' sides. The Survitec Zodiac MIS is packed together with 100- and 150-person Throw Over Liferafts or with Canopied Self-righting Throw Over Liferafts. When supplied for use with 100- and 150-person Open Reversible Liferafts, a second liferaft can be packed into the container, which when inflated and bowsed is immediately boardable.

- MIS can evacuate 731 persons in 30 minutes for SOLAS passenger ship requirements
- MIS can evacuate 397 persons in 17min 40sec for High Speed Code (HSC) requirements
- 4 slide lengths to cover vessel freeboard heights up to 12.5 meters
- Range of liferafts (throw-over self-righting, throw-over or IBA) large capacity equipped with Venturi aspirators (using fewer gas cylinders and saving significant weight)
- Flexible installation for closed deck and open deck vessels
- Approved via heavy weather sea trials, with Beaufort 6 wind conditions and minimum 3 meters significant waves
- Electric remote release system which automatically performs a complete system test
- Float-free system operates before the water reaches the evacuation deck
- Reduced crew requirements for operation and easy to operate
- Simple and quick to install and re-install after service
- Push-button system deployment and detachment of slide from raft
- Additional liferafts stored close to slide location in separate cradles
- Installation of the Medium Height Inflatlable Slide system can be provided between two decks or in an open deck area according to the available space on the ship. Each installation style shown below in diagrams and photos.

Marine Evacuation Systems

LIFERAFT SYSTEMS AUSTRALIA

Liferaft Systems Australia Pty Ltd. (LSA) specializes in Marine Evacuation Systems (MES)

EACH MES COMPRISES:

- An inflatable inclined evacuation slide
- Large capacity canopied or open reversible inflatable liferafts
- A lightweight stowage cradle
- MES exterior door and coaming

LSA MES' do not use winches or hydraulics in order to deploy.

EVACUATION SLIDE

The evacuation slides are made from durable, lightweight and abrasion resistant advanced polyurethane coated nylon fabric. the slides provide evacuations up to a height of up to 13.6m.

LIFERAFTS

Liferafts are available in the following configurations:

- 50 person capacity self righting liferaft
- 100 person capacity self righting liferaft
- 128 person capacity open reversible liferaft

STOWAGE CRADLE

The stowage cradle and inflation cylinders are made from marine grade aluminum. The cradle can be installed in an area of less than 4m2.

Marine Evacuation Systems

BETWEEN DECKS

OPEN DECK

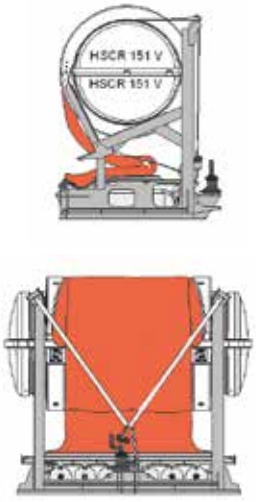


DIAGRAM OF ENCLOSED INSTALLATION

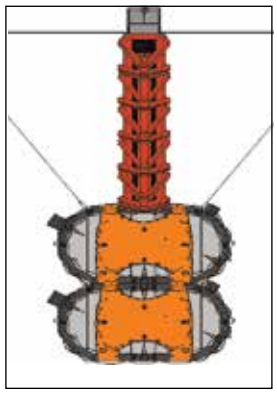
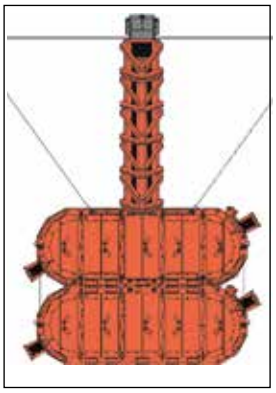
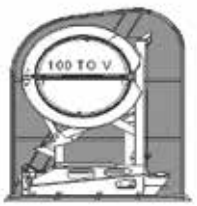
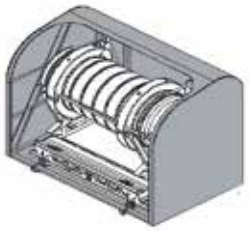


DIAGRAM OF OPEN DECK







BETWEEN DECK HOUSING SYSTEM

OPEN DECK HOUSING SYSTEM

VIKING SES- Offshore Evacuation System

Light and small container appropriate for reduced spaces. Installation heights up to 25 meters and fire retardant chute. Operational in air temperatures ranging from 0°C to +65°C. Standard capacity of 25 persons expandable with the use of additional throw overboard liferafts.

CONTAINER
The container is the structural interface to the platform deck. It protects the evacuation chute against all types of weather and consists of a load bearing welded frame for bolting onto a foundation in the deck structure.

The foundation is integrated into the deck structure, either in-deck mounted or cantilevered out from the deck edge.

FIRE RETARDING EVACUATION CHUTE
The evacuation chute provides a simple, safe and reliable method for transferring evacuees from deck levels down to sea level. It is divided into cells with speed retarding slides running at opposing angles in a zigzag effect.

Openings in the chute located behind each slide, provide easy entry and exit at any level.

The speed retarding slides also permit evacuees wearing lifejackets, survival suits and breathing apparatus to pass safely through the chute. The length of the chute is calculated to allow for side motion under strong wind and current conditions.

RELEASE SYSTEM
The system is drop released using a special knife or pneumatic cutter. After the strap has been cut the stabilising weight, boarding platform and chute fall freely down to sea level.

BOARDING PLATFORM
The boarding platform inflates automatically and acts as sea reference point where evacuees can await dry transfer to throw-overboard liferafts or fast rescue crafts.

STABILISING WEIGHT
The stabilising weight is attached to 3 winch wires at the base of the chute and hangs below the waterline when deployed. It keeps the escape passage/chute taut and reduces side motion from wind and sea current.

This unit must be serviced annually.

Donut Safety Systems

MARINE CONSULTANTS (TRINIDAD) LTD.

DONUT INTERNATIONAL®

The leading manufacturer and supplier of Personal Controlled Descent Devices for the offshore Oil & Gas, Renewables and Marine Industries.

A UK based company with an international network of approved distributors, training providers and service agents, providing local services to clients.

Safety
Integrity
Innovation

DONUT Personal Control Descent Device

The patented Donut Personal Control Descent Device is the offshore industry standard, and was designed and developed after the Piper Alpha tragedy with the cooperation of the UK regulatory authorities and the North Sea operators.

Donut is a simple, lightweight device designed as a tertiary means of escape from an offshore platform or vessel when evacuation methods are unavailable.

It enables personnel to escape by means of Individual Controlled Descent once the device has been attached to a dedicated escape station or at any safe location using the integral moveable anchor system.
It is easy to use and requires little physical effort.

Contact us! 43A Charles Street, Port of Spain Telephone: 1 (868) 235-5406 www.mcl.co.tt

Donut Safety Systems

MARINE CONSULTANTS (TRINIDAD) LTD.

DONUT INTERNATIONAL®

Supplied in a vacuum sealed bag the DONUT features:

Containment Bag	Lightweight and portable.
Vacuum Seal	Ensures the integrity of the unit.
Double Action Fixing Hook	Double action hook alleviates the risk of accidental re-opening. One hand operation enables the user to connect to a fixing point even if one arm or hand is injured. Made from high grade marine stainless steel.
High Strength/High Visibility Tape	Reduces the volume and weight of the containment bag. High tensile strength, (tested to 10 times average body weight). Prevents the problem of spinning during descent (a problem when a rope is used).
Harness	High visibility colours. One size fits all.
Descender Handle	Friction device with no moving parts, obviating mechanical failure associated with other devices.
Quick Release	Safe, one handed action for immediate release when required. Made from high grade marine stainless steel.

DONUT - guided escape to a Liferaft

The Donut has been designed to assist escape to a deployed liferaft by incorporating a strop, attaching the user to the liferaft painter line, guaranteeing entry into the safety of the liferaft.

The evacuee remains safely attached via the Donut harness to the painter line throughout this operation alleviating the risk of being washed away when entering the water.

DONUT SAFELAND - escape from Drill Derricks and Cranes

Donut provides a means of escape from areas of entrapment such as cranes and derricks. The unit can be stored in these areas for use in an emergency situation or hand carried to the workplace as required.

DONUT - Injured Party Rescue

The Donut can be simply adapted to enable the rescue of an injured or medically unwell person either seated in the harness or fixed to a stretcher. The injured person can then be lowered in a controlled manner.

Contact us! 43A Charles Street, Port of Spain Telephone: 1 (868) 235-5406 www.mcl.co.tt

MARINE CONSULTANTS (TRINIDAD) LTD.

DONUT INTERNATIONAL®

1. Harness
2. Containment Bag
3. Descender Unit
4. High Strength Tape
5. Wire Strop
6. Liferaft Strop
7. Quick Release Mechanism

Donut overcomes problems associated with other fixed means of escape:

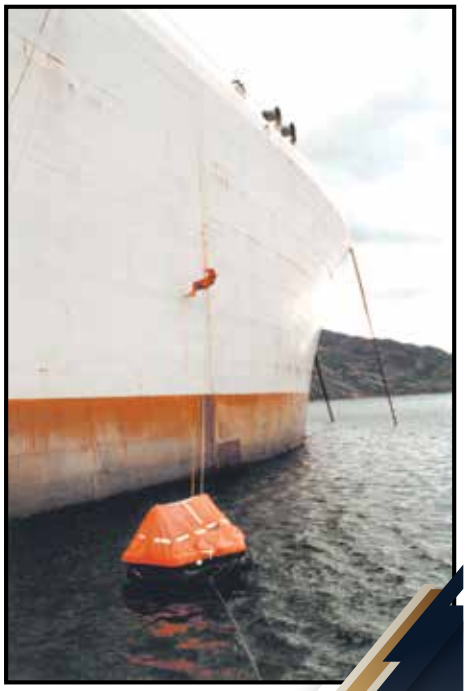
- Scramble nets and knotted ropes are difficult to use and require a great deal of physical and mental dexterity. The demands are increased if the person is wearing additional PPE such as a survival suit and lifejacket. Nets and ropes require frequent inspection and periodic replacement.
- Ladders, ropes, nets or chute systems are unsuitable for injured person escape.
- Chutes are a fixed entity, which may be rendered inoperative if the cause of the emergency is in the area where the chute is situated. Chutes are expensive and have high service demands.
- Ladders for escape to sea are subject to corrosion and wave impact, with an expense and risk involved in maintaining them.

MARINE CONSULTANTS (TRINIDAD) LTD.

DONUT INTERNATIONAL®

Advantages of Donut over other fixed means of escape:

- Donut is both lightweight and portable. It can be deployed from any safe area on the platform or FPSO.
- It can be used with any other type of survival equipment found onboard the platform or vessel.
- Users do not have to wait their turn to use the equipment.
- It can be used during an escape to a liferaft, where a strop is attached to the liferafts painter line allowing a guided descent to the liferaft, preventing the risk of being washed away.
- The user can lock off the Donut device above the water, remaining visible and more importantly dry.
- The Donut is fitted with a non-spark chemical lightstick allowing the user to illuminate their descent or attract attention.
- The Donut can also be used to lower injured parties to a safe area using the units own harness or a stretcher.
- Donut units can be deployed around the platform including the drill derrick and the crane.
- The Donut device, has an expected life in excess of 25 years if properly serviced within a recognized recertification scheme.
- In order to maintain safety requirements during recertification, hire units are available at cost effective rates.
- Donut is backed by an international network of support services, including sales, service, hire and product training.
- Donut has proven reliability in the offshore environment. Units have been deployed in the field for over 30 years from the extreme heat conditions of the Middle East, Far East and Australia to the extreme cold of Canada and Russia.



Contact us! 43A Charles Street, Port of Spain Telephone: 1 (868) 235-5406 www.mcl.co.tt

LIFERAFTS AND EVACUATION SYSTEMS SERVICE INFORMATION

"Will Your Life Saving Equipment Save Your Life?"

Our Life Raft Team offers a turnkey service, i.e. collection, inspection/repairs/re-certification, and return of equipment to your vessel. Where necessary, we provide back-up units to accommodate your crew should your stay not be sufficient for service to be completed.

All repairs are carried out in a controlled environment by certified, factory-trained technicians who undergo regular training and re-certification. Our Service Station undergoes annual inspection by Classification Societies such as Lloyds Register of Shipping, The United States Coast Guard (USCG), Det Norske Veritas (DNV) , Bureau Veritas (BV) and American Bureau of Shipping (ABS). We are recognised and approved by our local maritime authority, Maritime Service Division.

We are the only Authorized Service Station for Viking in Trinidad and Tobago. We are also an authorized service station for brands under the Survitec Umbrella such as: DSB, Beaufort and Zodiac. We also service LSA, Switlik, and Arimar brands.

SERVICE DEPARTMENT INFORMATION:
For more information on our services or to schedule a service, please call **1 (868) 235-5406** or send an email to **mcl@mcl.co.tt.**

Life Boats Davits & Rescue Crafts

Life Boats

Lifeboatbuilder since 1903

NORSAFE Free Fall Lifeboats
SURVIVAL by Gravity Escape

Norsafe free fall lifeboats are designed for skid launched free fall. The skid launch ensures that water entry is from a safe distance from the installation and enables maximum forward motion. The craft can be launched during all weather conditions and is always ready for use. The benefits are clear – 100% preparedness for a safe evacuation with the shortest possible time frame from muster of survivors to full escape from the installation.

Norsafe GES lifeboats (Gravity Escape System) have optimised design. Lifeboats and davits are designed and manufactured according to SOLAS, Classification Society and National Authority requirements. All equipment has been approved and Wheel Marked in accordance with the EC Marine Equipment Directive.

LIFESAVING Free Fall Escape

Large numbers of ships and offshore installations are equipped with Norsafe free-fall lifeboats. Our models are certified for heights up to 51 metres. Space and weight efficient davits are specially designed for each installation and suit all onboard layouts.

FAST BOARDING
The craft has a large watertight embarkation door in the stern and a centre aisle throughout the full length of the boat. This ensures that the boarding time can be kept to a minimum.

ADVANCED DESIGN AND CONSTRUCTION
The boats are double skinned, with foam buoyancy injected into the space between the inner and outer elements. The boats also have dedicated buoyancy tanks. This means that the boats are unsinkable, even if damaged or in a fully flooded condition. The craft has a positive stability up to 180° degrees and is self-righting both in intact and flooded condition. The steering rudder nozzle has been specially designed to give maximum thrust from the propeller. The lifeboat system is robust and can easily withstand the powerful winds and high waves associated with extreme weather conditions.

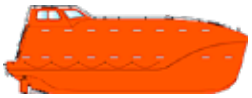
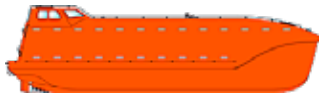
ADVANTAGES OF FREE FALL SYSTEM FOR EMERGENCY ESCAPE:
- Fast embarkation and seating
- Maximum distance from installation to water entry point.
- Positive forward motion after water entry.
- Good guidance during initial phase of drop, giving stability during the free-fall phase.
- Well proven system designed for large heel/trim angles.
- System is robust against heavy wind and waves from any direction.
- High level of comfort.
- Significantly reduced risk of equipment failure compared to conventional lowering of lifeboats.

FREE-FALL LIFEBOAT DAVIT HD SYSTEM
The Norsafe HD davit system is especially designed for safe and efficient launching and retrieval of free fall lifeboats. The davit system is designed for long time operation in harsh marine and offshore environments. The davit system is designed to fulfil all requirements as given in SOLAS.

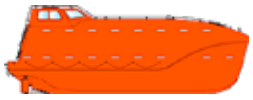
THE SYSTEM PROVIDES THE FOLLOWING FUNCTIONS:
- Free-fall launch of the fully loaded lifeboat.
- Free-fall launch of fully loaded lifeboat with 20° list and 10° trim, completely independent of any power supply.
- Controlled launch of the fully loaded lifeboat (secondary launching).
- Recovery of the boat including crew of 3 persons (the system can also be designed for recovery of a fully laden boat.)

NEW REGULATIONS APPLICABLE FROM 2015: DNV-OS-E406
The DNV-OS-E406 regulations are required for Norwegian waters from 2015. Norsafe offers several free-fall lifeboat models and davit systems according to the new standards, which are increasingly adopted worldwide.

Lifeboatbuilder since 1903

TECHNICAL DATA	GES18	GES25	GES30	GES40
Dimesions LxBxH (m)	5,80x2,35x3,00	7,50x2,75x3,42	9,0x2,75x3,42	12x2,75x3,42
Weight with equipment	3.415kg	4.560kg	5.733kg	8.862kg
Max. Capacity	18 persons / 82.5kg	32 persons / 82.5kg	40 persons / 82.5kg	55 persons / 82.5kg
Max. Drop height	15m	20,4m	23m	32m
Standard engine	Inboard diesel	Inboard diesel	Inboard diesel	Inboard diesel
Speed	Min. 6 knots	Min. 6 knots	Min. 6 knots	Min. 6 knots
Version	Tank / Cargo	Tank / Cargo	Tank / Cargo	Tank / Cargo
Standard release system	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Optional release system	Mechanical hook	Mechanical hook	N/A	N/A
Davit load (max capacity) MSC272	4.900kg	7.200kg	9.033kg	13.400kg



TECHNICAL DATA	GES45	GES30	GES40
Dimesions LxBxH (m)	13,54x3,58x4,24	14,9x3,75x4,5	15,75x4,16x4,85
Weight with equipment	14.500kg	19.500kg	21.850kg
Max. Capacity	60 persons / 100kg	70 persons / 100kg	70 persons / 100kg
Max. Drop height	40m	47m	50m
Standard engine	Inboard diesel	Inboard diesel	Inboard diesel
Speed	Min. 6 knots	Min. 6 knots	Min. 6 knots
Version	Tank / Cargo	Tank / Cargo	Tank / Cargo
Standard release system	Hydraulic	Hydraulic	Hydraulic
Optional release system	Mechanical hook	N/A	N/A
Davit load (max capacity) MSC272	20.500kg	26.500kg	28.850kg

GES50 MKIII

GES 30

GES 40

Lifeboatbuilder since 1903

NORSAFE Totally Enclosed Lifeboats (TELBs) CONVENTIONAL safe and protected

Norsafe TELBs are designed and manufactured according to SOLAS, Classification Society and National Authority requirements. All equipment has been approved and Wheel Marked in accordance with the EC Marine Equipment Directive.

SAFE IN A TOTALLY ENCLOSED SHELL

The boats are double skinned, with foam buoyancy injected into the space between the inner and outer elements. The boats also have dedicated buoyancy tanks. This means that the boats are unsinkable, even if damaged and in a fully flooded condition. The craft has a positive stability up to 180° and is self-righting, both when intact and in a flooded condition. The steering rudder nozzle has been specially designed to give maximum thrust from the propeller. The lifeboat system is robust and can easily withstand the powerful winds and high waves associated with extreme weather conditions.

The boat is equipped with on-load lifting hooks which are controlled from a release handle mounted at the steering position. Hooks will release simultaneously when the craft is fully waterborne. All Norsafe conventional lifeboats can be delivered with Norsafe's new TOR MK2 release system.

FIRE PROTECTING SYSTEM

The fire protecting spray system pump takes sea water from the lowest possible location under the boat. The spray system provides water over the entire surface of the craft (1200 l/min). The compressed air system has a sufficient capacity to provide air for a minimum of 10 minutes. The over pressure inside the craft prevents the intake of toxic fumes or gas. Provisions have been made to recharge the air system from the ship's compressed air system.

FIRE TEST

When Norsafe carried out a fire test in cooperation with the Norwegian technical laboratory, SINTEF, a lifeboat was placed inside an oil boom, filled with 4,000 litres of kerosene in a 10 cm thick layer on the water. The kerosene was lit, so that the boat was completely enclosed in flames for 11½ minutes. SINTEF measured temperatures up to 1,200°C within 10cm from the lifeboat hull. Inside the boat, the temperature was measured at 27°C and the air quality inside was normal during the entire test. The boats can withstand these temperatures because of the deluge system, covering the entire boat surface in seawater, in combination with fire retardant glassfibre reinforced polyester construction. Air bottles supply both the engine and passengers with fresh air for a minimum of 10 minutes.

Miriam 8,5

TOR MK2 On-Load Release Hook

Miriam 8,5

Maggie 10,7

JYN 115

Lifeboatbuilder since 1903

TECHNICAL DATA	JYN50	JYN57	JYN65	MKV40 73	JYN74
Dimesions LxBxH (m)	5,0x2,20x3,10	5,70x2,20x3,10	6,50x2,30x3,10	7,3x2,25x2,75	7,35x2,68x3,10
Weight with equipment	2.435kg	2.705kg	2.930kg	3.120kg	3.410kg
Capacity	22 persons	26 persons	36 persons	40 persons	52 persons
Standard Engine	Inboard diesel	Inboard diesel	Inboard diesel	Inboard diesel	Inboard diesel
Standard Drive	Shaft propeller	Shaft propeller	Shaft propeller	Shaft propeller	Shaft propeller
Speed (with 3 persons)	Min. 6 knots	Min. 6 knots	Min. 6 knots	Min. 6 knots	Min. 6 knots
Lifting arrangement	On-Load release hooks	On-Load release hooks	On-Load release hooks	On-Load release hooks	On-Load release hooks
Davit load (max capacity) MSC272	4.250kg	4.850kg	5.900kg	6.420kg	7.700kg

	JYN80	MIRIAM 8,5	JYN85	JYN100	JYN115
	8,0x2,85x3,10	8,5x3,25x3,55	8,5x3,15x3,30	10,16x3,25x3,40	11,5x3,80x3,54
	3.802kg	4.703kg	4.600kg	5.855kg	8.080kg
	63 persons	73 persons	80 persons	106 persons	136 persons
	Inboard diesel	Inboard diesel	Inboard diesel	Inboard diesel	Inboard diesel
	Shaft propeller	Shaft propeller	Shaft propeller	Shaft propeller	Shaft propeller
	Min. 6 knots	Min. 6 knots	Min. 6 knots	Min. 6 knots	Min. 6 knots
	On-Load release hooks	On-Load release hooks	On-Load release hooks	On-Load release hooks	On-Load release hooks
	9.000kg	10.725kg	11.200kg	14.600kg	19.300kg

Typical general specification. Data is subject to change without prior notice.

STABILITY TEST

Hatecke GmbH Lifeboats and Davit Systems

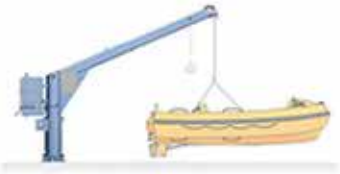
Hatecke GmbH is currently one of the leading manufacturers of lifeboats and davit systems. All boats and davit systems are developed in-house and conform with LSA regulations laid down by the International Maritime Organisation. The current Hatecke GmbH portfolio of lifeboats covers a whole range of different models:

- Freefall lifeboats including tanker versions
- Conventional lifeboats including tanker versions
- Semi-enclosed lifeboats
- Tender boats

All lifeboats and rescue boats are delivered with their own inbuilt launching system, as a “ready-to-assemble” package. This helps minimise shipyard installation costs. Survival at sea should not be left to chance. We create life-saving solutions you can depend on, tried and tested even in the worst possible conditions: on heavy seas, under arctic frost, in burning oil. The end-product of know-how and innovation is a well-made, durable, individual solution. Simple to use, with low maintenance needs.

CHOOSING THE RIGHT ONE: DAVIT

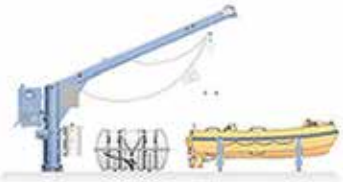
Marine Consultants (Trinidad) Ltd. offers a wide variety of davit and crane products for the commercial marine and offshore sectors. This product range is renowned for easy installation, operation and cost-effectiveness. We recommend you consult the Sales Department to discuss all particular aspects of your application for considerations and a product recommendation.



Rescue Boat Slewing

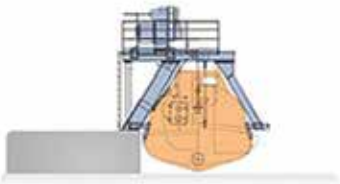
Fast Rescue Boat

Liferaft



Combi Rescue Boat/Liferaft

Daughter Craft/Workboat



Offshore

Lifeboat

Free-Fall

Fender

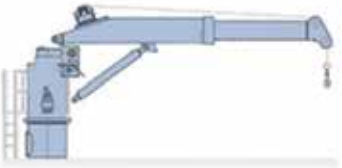
Overhead Telescopic

Yachting

Accessories

Fixed Boom

Knuckle Boom



Telescopic Boom

GLOBAL DAVIT

GLOBAL DAVIT GMBH OFFERS THE COMPLETE RANGE OF SYSTEMS, SUCH AS:

- Rescue boat cranes
- Rescue boat davit systems
- Liferaft cranes
- Combined rescue boat / liferaft / store handling cranes
- Fast rescue boat davit systems
- Lifeboat pivot davit systems
- Offshore gravity davits
- Fender davit systems
- Free-fall lifeboat handling cranes
- Store / hose handling cranes
- Winches

Incorporating customer demands in standard solutions, while realizing the optimum combination between costs and delivery time on a high quality level.

Furthermore Global Davit GmbH is able to design and manufacture “special” cranes or life saving equipment according to costumer requirements.

Additionally to the complete systems Global Davit GmbH also offers the full scalar of winches and a wide range of accessories suitable for your deck.

VIKING Rescue and Fast Rescue Boat Davit, PRHE30 A-frame Davit

- Freestanding, deck mounted davit with a base frame, davit arm, cylinders, electric winch and hydraulic power pack unit
- Hydraulic pivoting davit
- Optional hydro-pneumatic shock absorber
- Electric controls: motor starter built onto the base frame
- For use when quick hoisting is required 18 m per min.
- SWL: 30 kN. Lowering height can be advised at order. Standard is approx. 25 m
- Launched from inside the rescue boat
- Remote control parts: stainless steel wires, hand grips, sheaves, wire rope clips and shackles
- Galvanised ladder

VIKING Rescue and Fast Rescue Boat Davit, Ferries RO-RO etc. PRH20 A-frame Davit

- Freestanding, deck mounted davit with a base frame, davit arm, cylinders, winch and hydraulic power pack unit
- Hydraulic pivoting davit with constant tensioning system and hydro-pneumatic shock absorber
- SWL: 20 kN
- Lowering height can be advised at order. Standard is approx. 25 m
- Can be launched from the control stand or from inside the rescue boat
- Remote control parts: stainless steel wires, hand grips, sheaves, wire rope clips and shackles
- Galvanised ladder

Steel Cradle for VIKING GRP1 470 MOB Boat

- Galvanized cradle for GRP MOB boat, complete with lashings.

VIKING Liferaft Davit

- SWL range: 1400-3300
- Manual slewing
- Outreach: 3.5-4 m

VIKING Combi Davit

- SWL range: 1200-3300
- Manual or hydraulic slewing
- Outreach: 3.5-4 m

VIKING Rescue Boat Davit

- SWL range: 1000-1200
- Manual or hydraulic slewing
- Outreach: 3.5-4 m

VIKING Davit Pedestal

- Davit foundation for liferaft, rescue boat or combi davit
- 400 mm pedestal

Deck Cradle for Semi-rigid MOB Boat

- Galvanized cradle for semi-rigid MOB boat, complete with lashings.

Lifeboatbuilder since 1903

Norsafe Merlin 615 Outboard

Fast rescue boat designed and manufactured according to latest SOLAS Classification Society and National Authority requirements.

The rescue boat has excellent reliability, manoeuvrability, and seakeeping abilities in order to fulfil its prime function - to provide an effective means of search and recovery for persons missing at sea. Design and construction fulfil the need for reliable, low maintenance standby and operation. When installed with an approved davit, the boat fulfils the requirements for fast rescue boats and is fully compliant with latest requirements for Ro-Ro ships.

The lay out and performance of the boat allow it to perform other roles including, dive support, inspection, patrol, survey and work boat duties.

TECHNICAL DATA:

Length overall:	6,25m
Beam:	2,45m
Height:	2,40m
Height keel to liftingpoint:	1,95m
Capacity:	15 persons
Weight boat with equipment:	1.150 kgs
Weight with equipment and 15 persons (SOLAS):	2.388 kgs
Lifting arrangement:	Off Load Release Hook
Engine type:	Outboard petrol
Standard engine size:	60Hp
Propulsion:	Propeller
Speed with 3 persons:	21 knots

Lifeboatbuilder since 1903

Norsafe Magnum 750 Jet

Fast rescue boat designed and manufactured according to latest SOLAS Classification Society and National Authority requirements.

The rescue boat has excellent reliability, manoeuvrability, and seakeeping abilities in order to fulfil its prime function - to provide an effective means of search and recovery for persons missing at sea. Design and construction fulfil the need for reliable, low maintenance standby and operation. When installed with an approved davit, the boat fulfils the requirements for fast rescue boats on offshore installations and standby vessels, and is fully compliant with latest requirements for Ro-Ro ships.

The lay out and performance of the boat allow it to perform other roles including, dive support, inspection, patrol, survey and work boat duties.

TECHNICAL DATA:

Length overall:	7,50m
Beam:	2,90m
Height:	2,28m
Height keel to liftingpoint:	1,90m
Maximum capacity:	15 persons
Weight boat with equipment:	2.150 kgs
Weight with equipment and 15 persons (SOLAS):	3.388 kgs
Lifting arrangement:	Off Load Release Hook
Engine type:	Inboard Diesel
Standard engine size:	230Hp
Propulsion:	Waterjet
Speed with 3 persons:	Approx. 28 knots

Option: Engines from 230 hp up to 315 hp inboard diesel can be installed
Weight and speed may wary with different engine / propulsion.

Rescue Crafts

Rescue Boats and Cranes

Hatecke manufactures different types of rescue boats:

- Rescue boats rigid type 4-6 metres in length, with outboard engine, covering speeds of 6-20 knots.
- Rigid inflatable rescue boats, 3,8 - 5,2 m long, with outboard engine or water-jet, reaching speeds of up to 35 knots.

All rescue boats come with launching crane, davit system or special launching system complete with shock-absorption and wave compensation system.

Fast Rescue Boats and Davit Systems

Hatecke manufactures several types of fast rescue boats:

- For example fast rescue boats, 6m long, with outboard engine or inboard diesel engine reaching speeds of more than 20 knots.

All fast rescue boats come with launching crane, davit system or special launching system complete with shock-absorption and wave compensation system.

SURVITEC ZODIAC
SOLAS LIFERAFTS

SOLAS Fast Rescue Boat

- 7.15m Aluminium Fast Rescue Boat
- Approx. speed of 30 knots
- Seats up to 15 persons

ZODIAC Rigid Inflatable Boats

- All SurvitecZodiac Rescue Boats are SOLAS approved.
- The RIBO 450 is a 4.5m six person boat can be launched using a 4 point sling and approved release hook – SWL > 950kg & < 1.5 tonne.
- The FRB 600 is distinguished from the RIBO 600 by the addition of a single point lifting frame. It is delivered supplied with a 70hp SOLAS approved outboard motor as standard and is further fitted with two 70 liter fuel tanks.

FRB 600E

ZODIAC RIBO 450

Available with 25, 30 or 40 hp engine, all SOLAS approved .

Available in orange, red or white. Comes with full SOLAS compliance MED and USCG. Comes with lifting sling and all SOLAS equipment

Zodiac SOLAS has introduced a new addition to its successful range of rescue boats with the arrival of the RIBO 450N. With an overall length of 4.5m, it replaces the Zodiac RIB 420 and provides ship owners with a high quality RIB that is fully compliant with the revised IMO MSC 81 (70) SOLAS requirements that came into force on 1 July.

The new RIBO 450 is slightly longer than its predecessor and it now includes the ability to accommodate a standard SOLAS specified stretcher. The tubes have also been upgraded and are manufactured from top specification neoprene/hypalon. The entire boat tubes and hull has greater fire retardant capabilities. This new RIB offers improved handling at sea and can provide a full performance rescue capacity whilst carrying 6 people. This vessel can be powered by a 25 or 40 HP outboard and is capable of operation in extreme sea conditions. With a maximum overall weight of 90 1kg with passengers and 40 hp engine the RIBO 450 can be launched from a single pointhoisting sling anchored to 4 lifting points on the boat. The ease of deployment enables the new RIB to be in the water and en route to rescue extremely quickly.

ZODIAC RIBO 450 Rescue Boat 6 Persons

Rescue Boat Ribo 450 Rigid Inflatable Rescue Boat 6 persons Solas MED approved. Rescue boat is complete with Equipment and comes with certificate of conformity. The Ribo 450 is approved with a 25 or 40 HP Solas approved outboard engine. Safe Working load 10K.

RIBO 450

Rescue Crafts

ZODIAC Milpro

Well known throughout the world as the definitive Special Forces boat, the FC range is used by more elite soldiers and sailors than any other craft worldwide. It is the only craft of its type that has actually been used in combat in different theatres and comes thru with flying colors. This is a result of its unique patented hull shape and various floor systems that allows it to carry combatants in a variety of missions. The hull shape is especially important as it can get a large load on the plane as well as give the driver unsurpassed maneuverability in different and often dangerous conditions. Continually being updated for its everchanging roles, the FC range is Zodiac Milpro most recognizable military boat.

DSB 420 IRB

These DSB boats have been developed and tested in accordance with the latest SOLAS/IMO regulations and are approved by the German See-Berufsgenossenschaft, the British Department of Transport as well as by other leading shipping authorities as Rescue Boats for the purpose of Schedule 2, Part III of the Merchant Shipping(Life saving appliances) Regulations 1986 and hence Chapter III, Regulation 47 of the 1983 Amendments to the International convention for the Safety of Life at Sea(SOLAS), 1974.

DSB Semi-rigid inflatable boat 4.3 SR - 4,30m <> 14'1"

Survitec's heavy-duty DSB 4.3 Semi-rigid Inflatable Boat is designed and built to offer commercial and defence end-users with a product that incorporates maximum durability, increased manoeuvrability and an extended life cycle. The DSB 4.3 Semi-rigid Inflatable Boat is built to the highest quality standards from marine-approved, environmentally friendly materials. Driven to consistently improve our customer offering, our range of Semi-Rigid Inflatable Rescue Boats meets and exceeds our customers' expectations and remains unchallenged in today's survival market.

	DSB 3.9 SR	DSB 4.3 SR	DSB 5.1 SR	DSB 6.5 SR*
Overall length3	.9m4	.30m	5.10m6	.50m
Length Inside	3.0m	3.40m4	.08m	5.30m
Beam Overall1	.95m	1.95m2	.05m	2.50m
Beam Inside	1.06m1	.05m	1.15m1	.40m
Boat Weight	131kg	195kg	250kg	310kg
Capacity	6 persons8	persons	13 persons	14 persons
Payload	600kg	1100kg	1300kg	2300kg
Tube Diameter	45cm	45cm	45cm	55cm
Air Compartments	5 pcs4	pcs5	pcs5	pcs
Fabric	Hypalon/ Neoprene (e)/ AluminiumH	ypalon/ Neoprene (e)/ AluminiumH	ypalon/ Neoprene (e)/ AluminiumH	ypalon/ Neoprene (e)/ Aluminium
Min Motorisation	11.2/15 kw/PS	11.2/15 kw/PS	11.2/15 kw/PS	11.25/15 kw/PS
Max Motorisation	33/45 kw/PS	33/45 kw/PS	55/75 kw/PS	60/80 kw/PS
Key Points	Long Shaft Engines	Long Shaft EnginesL	ong Shaft EnginesL	ong Shaft Engines

LIFEBOAT & RESCUE CRAFT SERVICE INFORMATION

The Lifeboat Team offers a total service, i.e. annual & 5-year inspection/maintenance/repairs & load testing of lifeboats, davits and rescue craft. We are available 24 hours x 7 days, on request.

We are official service partners for Norsafe, Hatecke & Global Davit. Our technicians undergo regular training and re-certification.

We are currently class approved for Det Norske Veritas (DNV), Lloyd's Register, Bureau Veritas (BV) and American Bureau of Shipping (ABS), in addition to the Trinidad and Tobago flag state.

SERVICE DEPARTMENT INFORMATION:
For more information on our services or to schedule a service, please call **1 (868) 235-5406** or send an email to **mcl@mcl.co.tt.**

Marine Safety Products

Pyrotechnics

PainsWessex

survitecgroup

RED HANDFLARE MK8

KEY BENEFITS:
- Approved to the latest Worldwide SOLAS specification
- Red hand held, short range distress signal used to pinpoint location by day or night
- Burns for 60 seconds at 15,000 candela
- Features a unique telescopic handle making it very compact and space saving when stowed in a liferaft
- Easily extended and pull wire operated

LINETHROWER 250

A self contained line throwing appliance consisting of a weatherproof plastic casing with end cap and 250m of line, twist grip trigger assembly and an integral striker mechanism plus a rocket.

KEY BENEFITS:
- SOLAS/MED and USCG compliant
- Throwing range of between 230m and 250m
- 9 year life

PARACHUTE RED ROCKET MK8A

KEY BENEFITS:
- Approved to the latest Worldwide SOLAS specification
- Performs reliably even after immersion in water
- Ejects a red flare on a parachute at 300m (1000ft)
- Burns for 40 seconds at 30,000 candela

MANOVERBOARD MK8

KEY BENEFITS:
- Combined light and smoke Man Overboard Lifebuoy marker
- Mounts on a ship's bridge wing attached to a 4Kg Lifebuoy
- Can be automatically or manually deployed
- Features a self-activated lighting system
- Produces 15 minutes of dense orange smoke
- Safe to use on petrol and oil covered water

BUOYSMOKE MK8

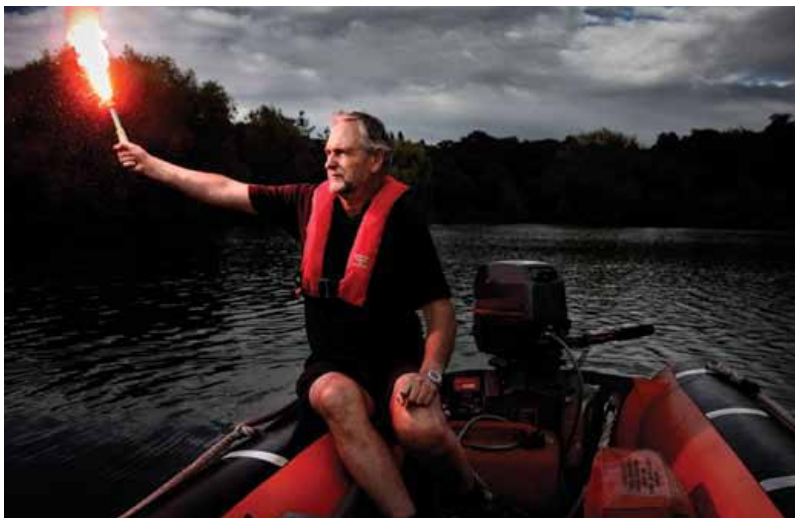
KEY BENEFITS:
- Produces 15 minutes of orange smoke
- Manoverboard day time lifebuoy marker
- This version is required for USA and Japanese flag vessels who require 15 hour lifebuoy lights (SOLAS only 2 hours)

POLY BOTTLES

KEY BENEFITS:
- 12 litre waterproof storage bottle for the Ships Bridge Set and Lifeboat Set
- 3 litre water resistant storage bottle for flares

LIFESMOKE MK9

KEY BENEFITS:
- Compact, flat-top day-time orange smoke distress signal
- Provides effective position marking or indication of wind direction during rescue operations
- Produces dense orange smoke for a minimum of 3 minutes
- Safe to use on petrol or oil covered water
- Has a pull wire ignitor with 2 seconds safety delay



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IMPERIAL

160RT and 161RT Basic Ferry Boat PFDs

The Imperial 160RT Basic Ferry Boat personal flotation device (PFD) is an inherently-buoyant, self-righting lifejacket designed to be worn by an adult for extended survival in rough, open water where superior flotation characteristics are necessary. The 160RT is available as an individual unit, or packed as a set of four in a 22"L x 12"W x 13"H hassock bag.

A smaller size is also available for children, the Imperial 161RT.

- Holds United States Coast Guard (USCG) Type I Approval
- Reversible yoke-style flotation device
- Stackable for easy storage
- 110 square inches of SOLAS-grade reflective tape
- Attachment loop on vest for optional light or whistle
- Fitted with a whistle and buddy line
- 160RT provides a minimum buoyancy of 22 lbs. for adult
- 161RT provides a minimum buoyancy of 11 lbs. for child

198RT and 199RT Basic Offshore PFD

The Imperial 198RT Basic Offshore personal flotation device (PFD) is an inherently-buoyant lifejacket recommended for use in offshore or rough waters where rescue may be delayed. The 198RT has a unique reversible design, optimized for comfort and durability.

A smaller size is also available for children, the Imperial 199RT.

- Holds United States Coast Guard (USCG) Type I Approval
- The most comfortable Type I PFD on the market
- Reversible design
- Weather and fade-resistant polyester fabric
- Strongest stainless-steel hardware available
- 126 square inches of SOLAS-grade reflective tape
- Light loop and whistle attachment over shoulder
- 198RT provides a minimum buoyancy of 22 lbs. for adult
- 199RT provides a minimum buoyancy of 11 lbs. for child

230RT Deluxe Offshore PFD

The Imperial 230RT Deluxe Offshore personal flotation device (PFD) is an inherently buoyant lifejacket designed for blue water vessels.

- Holds United States Coast Guard (USCG)
- Type I Approval
- Holds Safety of Life at Sea (SOLAS) Approval
- Foldable and stackable for easy storage
- 110 square inches of SOLAS-grade reflective tape
- Fitted with a whistle and buddy line
- 230RT provides a minimum buoyancy of 22 lbs. for adults

320RT, 320RT-4, 321RT and 321RT-4 Industrial Economy Vest

The Imperial 320RT Industrial Economy Vest is an inherently-buoyant personal flotation device (PFD), available with or without 4 front gussetted pockets. The lifejacket is tough and designed so that the front of the belts are protected, making it perfect for commercial and industrial applications with snag-hazard environments.

A smaller size of each configuration is also available, the Imperial 321RT.

- Holds United States Coast Guard (USCG) Type III Approval
- Large armholes and open sides
- Side adjustment tabs
- 33.75 square inches of SOLAS-grade reflective tape
- No body belts
- 320RT, 320RT-4, 321RT and 321RT-4 each provide a minimum buoyancy of 15.5 lbs. for adults

775RT and 778RT General Purpose Industrial Vest

The Imperial 775RT General Purpose Industrial Vest personal flotation device (PFD) is manufactured with a durable, oil-resistant polyester shell that protects against the deterioration caused by exposure to ultra-violet (UV) light. This makes the lifejacket great for natural disaster relief or similar environmental incidents.

A larger size is also available, the Imperial 778RT.

- Holds United States Coast Guard (USCG)
- Type III Approval
- Large armholes and open sides for maximum comfort
- 20 square inches of SOLAS-grade reflective tape
- Two encircling 1½-inch body belts and one 1-inch chest strap
- 775RT and 778RT provide a minimum buoyancy of 15.5 lbs. for adults

370ERV Emergency Response Vest

The Imperial 370ERV Emergency Response Vest is an inherently buoyant personal flotation device (PFD) designed specifically for swift water first responders and public safety officers. The robust vest is impact-tested to speeds of up to 100MPH for belt and fabric integrity. An abundance of reflective stripping at several locations on the vest ensure increased visibility in emergency situations.

Three sizes are available.

- Holds United States Coast Guard (USCG)
- Type III Approval
- Two gusseted storage pockets with day
- Glow along top edges and center
- Flotation-filled comfort collar with day glow along bottom edge
- SOLAS-grade reflective stripping
- One-inch adjustable leg straps
- Chest strap with snag-resistant buckles
- 370ERV provides a minimum buoyancy of 15.5 lbs. for adults

300RT and 305RT Versatile Workvest

The Imperial 300RT Versatile Workvest is an inherently buoyant personal flotation device (PFD) manufactured with a polyethylene flotation foam filling that is useful for a multitude of diverse commercial applications.

A larger size is also available, the Imperial 305RT.

- Holds United States Coast Guard (USCG)
- Type III/V Approval
- Collar design protects workers' shoulders while carrying equipment
- Fully closed sides
- 31.5 sq. inches of SOLAS-grade reflective tape
- Heavy-duty, snag-resistant Type V buckles
- Two one-inch body belts and one chest strap
- 300RT and 305RT provide a minimum buoyancy of 19.75 lbs. for adults

310RT and 315RT Deluxe Workvest

The Imperial 310RT Versatile Workvest is an inherently buoyant personal flotation device (PFD) manufactured with a polyethylene flotation foam filling that is useful for a multitude of diverse commercial applications.

A larger size is also available, the Imperial 315RT.

- Holds United States Coast Guard
- (USCG) Type III/V Approval
- Collar design protects workers' shoulders while carrying equipment
- Fully closed sides
- 31.5 square inches of SOLAS-grade reflective tape
- Heavy-duty, snag-resistant Type V buckles
- Two one-inch body belts and one chest strap
- Four gusseted pockets reduce entanglement by hiding body belts
- 310RT and 315RT provide a minimum buoyancy of 19.75 lbs. for adults

Premier 2010 Deluxe Offshore PFD

Fitted with a whistle and buddy line
Foldable and stackable for easy storage
Self-rights a wearer at an average speed of 1.7 seconds
Expands chest size with optional belt extender
Available with optional lights

Crewsaver®
Safer By Design®

Force™ II Life Vest

Help keep yourself safe during a challenging day offshore with the Stearns® Force™ II Life Vest. You'll be prepared to tackle the job ahead with this rugged-wear US Coast Guard-approved PFD created with Aquafoam™ Flotation Foam that retains buoyancy, even when punctured. Featuring 3M™ Scotchlite™ SOLAS-grade reflective strips that enhance visibility, two encircling belts with snag-free Delrin™ buckles and an easy-to-clean PVC coat, this vest is ready for whatever the day may bring. Added safety features of this PFD include compatibility with most types of fall protection harnesses and a self-extinguishing ASTM1692-74 design. For the best all-around industrial-use PFD, get a Stearns® Force™ II Life Vest.

- US Coast Guard-approved
- Aquafoam™ Flotation Foam retains buoyancy, even when punctured
- 3M™ Scotchlite™ SOLAS-grade reflective strips on the front and back improve visibility
- Compatible with most types of fall protection harnesses for added safety
- Self-extinguishing construction reduces fire danger risks
- Universal size, for adults with chest sizes 30 in.-52 in. (76 cm-132 cm)
- Dual encircling belts with snag-resistant buckles securely adhere to the body
- Delrin™ snap buckles and D-ring for added convenience
- 17.5 lbs. (78 Newtons) of buoyancy
- USCG Type V Vest
- I223 The Force II - USCG Approval

Kru Commodore - 180N

A traditional style lifejacket, using Riverseal technology, to offer a stronger and more durable jacket. The 3D collar, lightweight design, lateral tapered bladder and fully adjustable mechanisms, ensures your comfort and safety whilst out on the water.

- 180N buoyancy for quick in water turning speeds
- Twin lifting brackets/ buddy handles
- Replaceable cover
- Quick burst zip
- Attachment point for Aquaspec light
- UML inflation system
- 316 Stainless steel D-Rings for added strength when attaching a safety line
- Lateral tapered bladder for better in water positioning
- R10 AIS Ready

OCEAN SAFETY®

Stearns I222 Universal USCG Type III/V

The finest work vest available! Includes soft, comfortable closed-cell foam and encircling body belt with snag resistant buckle for quick adjustment. Maximum comfort in a vest.

- 1222 The Work Master Adult
- Universal USCG Type III/V
- Buoyancy: 17 1/2 lb.
- Belt tunnel to reduce snag hazard
- Hinged back panel
- Heavy duty nylon shell
- Marine mesh inner lining for breathability
- Flotation collar for added protection
- 62 sq. in. retro reflective tape on panel and collar

Stearns I422 Life Jacket

Zip into quality, four-pocket flotation when you wear a Stearns® First Mate™ Life Vest. It's designed with adjustable side tabs that slide quickly for a customizable, contoured fit. There's plenty of room to fit tools inside the hook-and-loop pockets or clip gear to one of two D-rings. 3M™ Scotchlite™ Reflective Material SOLAS-grade 6755 panel patches make it easier to see you in the water or on the boat. With soft yet tough flotation foam, a 200D nylon shell and a sturdy Vislon® zipper, you'll find all-day comfort in this durable life vest.

- US Coast Guard-approved
- Four hook-and-loop pockets to keep tools close
- Two sturdy D-rings to hang gear
- Contoured design and side-adjustment tabs for quick, customized fit
- Minimum 15.5 lbs. (69 Newtons) buoyancy
- USCG Type III vest

K2 Ship's Wheel Twin Chamber - 275N

The K2 Twin is approved to meet the daily demands of the global shipping and Offshore markets. The 308N buoyancy is one of the highest in its class ensuring speedy self-righting even in the most arduous of conditions.

- Up to 308N High performance
- AQ40 light 3 times brighter and 5 times (40hrs) longer
- Tailored neck for high comfort
- 175cm chest girth for all sizes
- Rivertex fabric giving 25% more abrasion resistance
- High Viz buoyancy colour
- Offers a wide range of light fitting options
- UML Inflation systems
- Globally available service & spares

OCEAN SAFETY®

Chests

Helicrash Rescue Equipment Chest

FIREBIRD JB22

- Uniquely Lloyds Register Type Test Approved
- American Bureau of Shipping Approved
- 25 years proven track record
- IP56 rated for excellent weather protection
- Engineered to your specification
- Lloyds Register Type Test Approved
- American Bureau of Shipping Approved
- Height x width x depth: 605 x 935 x 480
- Aperture mm: 874W x 354D
- Internal depth mm: 549
- Weight Kg: 16.5

Lifejacket/Survival Suit Chest

FIREBIRD JB73

- Uniquely Lloyds Register Type Test Approved
- American Bureau of Shipping Approved
- 25 years proven track record
- IP56 rated for excellent weather protection
- Engineered to your specification
- Storage of Lifejackets/Survival Suits (24 lifejackets or 12
- Immersion Suits quantity depending on type)
- Lloyds Register Type Test Approved
- American Bureau of Shipping Approved
- Height x width x depth: 875 x 1480 x 1050
- Aperture mm: 840D x 1382W
- Internal depth mm: 840
- Weight Kg: 39

Lifebuoy Package, 2.5 kg

PRODUCTS	
1022623	Lifebuoy, 2.5 kg, VIKING
1022628	Floating line for lifebuoy 30 m
1001213	Lifebuoy light L9 0
1006513	Bracket for lifebuoy light L9 0
1034664	Bracket for lifebuoy, stainless steel

Lifebuoy Package, 4.3 kg

PRODUCTS	
1022624	Lifebuoy, 4.3 kg, VIKING
1038349	Quick release for MOB system, stainless steel
1008636	MOB signal and bracket
1022628	Floating line for lifebuoy 30 m
1010967	Lifeline per m (up to 200 m)

Lifebuoy Package, 2.5 kg

- Outer diameter: 72 cm
- Reflective tape
- Grab line

VARIANTS	
1036588	Lifebuoy 2.5 kg, 75 cm, Redding
RELATED PRODUCTS	
1022628	Floating line for lifebuo y, 30m
1050970	Lifebuoy light including bracket
1011252	Storage cabinet for lifebuoy

Lifebuoy Package, 4.3 kg

- Outer diameter: 72 cm
- Reflective tape
- Grab line

VARIANTS	
1036590	Lifebuoy 4.5 kg, 75cm, Redding
RELATED PRODUCTS	
1008636	Light smoke signal c/w bracket
1038349	Quick release for lifebuoys,st. steel

Lifebuoy Bracket

- Stainless steel
- Quick release case

VARIANTS	
1043428	Quick release, material GR P
1043429	Mounting set for GRP quick releas e
RELATED PRODUCTS	
1036590	Lifebuoy 4.5 kg, 75 cm, Redding
1022624	Lifebuoy 4.3 kg, VIKING

Lifebuoy Accesories

Floating Line for Lifebuoy

- Diameter: 8 mm
- Length: 30 m

VARIANTS	
1057947	Floating line for lifebuoy 30 m in plastic tube for lifebuoy
1010967	Floating line for lifebuoy per m (up to 200 m)
1039669	Floating line for lifebuoy 45 m
1039670	Floating line for lifebuoy 60 m
RELATED PRODUCTS	
1022623	Lifebuo y, 2.5 kg, VIKING
1022624	Lifebuo y, 2.5 kg, Redding
1036588	Lifebuo y, 4.3 kg, VIKING
1036590	Lifebuo y, 4.3 kg, Redding

Lifebuoy Bracket

- For 72 cm lifebuoy
- Stainless steel (type SS 316)

VARIANTS	
1022625	Lifebuoy bracket for 75 cm, stainless steel
1009246	Lifebuoy bracket for 72-75 cm, stainless steel
RELATED PRODUCTS	
1022623	Lifebuo y, 2.5 kg, VIKING
1036588	Lifebuo y, 2.5 kg, Redding
1022624	Lifebuo y, 4.3 kg, VIKING
1036590	Lifebuo y, 4.3 kg, Redding

Explosion Proof Lifebuoy Light

- Intrinsically safe lifebuoy light for use in explosive environments
- Five year storage life
- Drop height of 76 m
- Five year storage life without maintenance

VARIANTS	
1036947	Lifebuoy light L163, approved according to MED, ATEX, IECEx, UCSG and ETL liste d
RELATED PRODUCTS	
1022623	Lifebuo y, 2.5 kg, VIKING
1036588	Lifebuoy 2.5 kg, 75 cm, Redding

Storage Cabinet For Lifebuoy

- Model Jo Bird JB15
- Dimensions: H 1150 x W 1060 x D 200 mm
- For lifebuoys with a diameter of up to 762 mm
- Approved rain and dust protection according to IP 56

VARIANTS	
-	-
RELATED PRODUCTS	
1022623	Lifebuo y, 2.5 kg, VIKING
1036588	Lifebuo y, 2.5 kg, Redding
1022624	Lifebuo y, 4.3 kg, VIKING
1036590	Lifebuo y, 4.3 kg, Redding

Explosion Proof Lifebuoy Light

- Batteries included
- Bracket ordered separately
- Drop height of 60 m

VARIANTS	
1050970	Lifebuoy light with bracket and batteries, MED approved
1036722	Lifebuoy light L162, MED and USCG approved
1036945	Lifebuoy light L160, MED approved
RELATED PRODUCTS	
1004258	Batteries for lifebuoy light L90
1003219	Bulb for lifebouy light L90
1037632	Dome for lifebuoy light L90
1048302	Sealing ring for lifebuoy light L90
1022623	Lifebuoy 2.5 kg, VIKING
1036588	Lifebuoy 2.5 kg, 75 cm, Redding

DATREX
Life Saving Products

L160 SOLAS/MED

- Self-activating LED lifebuoy light
- >2 hours / >2 cd
- Bracket included
- Completely sealed non hazmat lithium battery
- 5 years shelf-life
- Drop tested up to 76 meters

L161 SOLAS/MED/ATEX/ IECEX

- Intrinsically Safe, Self-activating LED lifebuoy light
- >2 hours / >2 cd
- Bracket Included
- Completely sealed non-hazmat lithium battery
- 5 years shelf-life
- Drop tested up to 76 meters

L162 USCG-UL1196/SOLAS/ MED

- Self-activating LED lifebuoy light
- >15 hours / >2 cd
- Bracket Included
- Completely sealed non-hazmat lithium battery
- 5 years shelf-life
- Drop tested up to 76 meters

L163 USCG/SOLAS/MED/ATEX/ IECEX

- Intrinsically Safe, Self-activating LED lifebuoy light
- >15 hours / >2 cd
- Bracket Included
- Completely sealed non-hazmat lithium battery
- 5 years shelf-life
- Drop tested up to 76 meters

L90 SOLAS/MED

- >2 hours / >2 cd
- Bracket Included
- Uses 5 D-cell Alkaline batteries
- D-Cell replacement battery

SM-2 MARKER LIGHT USCG/SOLAS/MED

- Self–activating Xenon Strobe
- Operates up to 60 hours
- Uses 6-volt lantern battery, (not included)
- Bracket included
- Drop tested up to 30 meters
- 6V Screw top replacement battery

Immersion Suits

VIKING PU Coated Nylon Immersion Suit

A premium immersion suit based on a multi-layer system with double thermal insulation to protect in the harshest conditions. Built-in buoyancy provides superior freeboard. Therefore, no lifejacket is required, which ensures the fastest donning time in an emergency.

- SOLAS approved multi-layer system
- Built-in buoyancy foam
- Extra thermal insulating liner
- Interior braces for adjustable sizing
- Detachable gloves for easy donning
- Lifting becket, buddy line and emergency light
- Air tight packing optional
- Weight 5 kg
- Dimensions: H 67 x W 50 x D 24 cm (packed)

Approved without a lifejacket

VARIANTS	
PS5019	Premium VIKING immersion suit. One size with built in buoyanc y, lifting becket, buddy line, whistle and emergency lin e -
RELATED PRODUCTS	
-	-

VIKING Offshore Immersion Suit - Self-righting, 275N

- Integrated 275N buoyancy superior self-righting capabilities
- Interior braces for adjustable sizing
- Lifting becket, buddy line and emergency light
- Detachable gloves
- Easy donning and adjustment
- Sizes: Universal 140-200 cm & Over-size 190-210 cm
- Weight: 5.18 kg
- Dimensions: H 67 x W 50 x D 24 cm (packed)
- Air-tight packing optional

Fulfills NMD requirements

NMD approved, self-righting

VIKING Neoprene Immersion Suit

- 6-hour SOLAS approval
- Zip-placement on side for a tight seal and better safety
- Extended zipper for easy donning
- Standard model, must be worn with an approved lifejacket
- Detachable gloves
- Optional emergency light, buddy line and lifting becket
- Sizes:
  One-size 140-200 cm
  Over-size 170-210 cm

VARIANTS	
-	-
RELATED PRODUCTS	
PV9320	Inflatable lifejacket, symmetrical 180N, configurabl e
PV9360	Inflatable lifejacket, symmetrical 275N, configurabl e
PV9361	Inflatable lifejacket, asymmetrical 275N, configurabl e
PV9520	VIKING SOLAS solid lifejacket

VIKING Neoprene Immersion Suit

- Standard model, must be worn with an approved lifejacket
- 6-hour SOLAS approval
- Detachable gloves
- Sizes: Universal 140-200 cm & Over-size 170-210 cm
- Included in the VIKING Shipowner
- Agreement for fixed fee service exchange

VIKING SHIPOWNER AGREEMENT

VARIANTS	
-	-
RELATED PRODUCTS	
PV9320	Inflatable lifejacket, symmetrical 180N, configurabl e
PV9360	Inflatable lifejacket, symmetrical 275N, configurabl e
PV9361	Inflatable lifejacket, asymmetrical 275N, configurabl e
PV9520	VIKING SOLAS solid lifejacket

Immersion Suits

VIKING Immersion Suit, SOLAS Immersion Rescue II

- Neoprene suit with buoyancy head support
- 6-hour SOLAS approval and USCG approval
- Fixed gloves with straps for easy adjustment
- Optional emergency light
- Lifting strap and buddy line included
- Sizes:
  Small 140-170 cm
  Universal 150-200 cm
  Jumbo 170-220 cm

USCG approved

VIKING Immersion Suit, SOLAS Immersion Rescue II

- Top of the line, multi-layer immersion suit for increased thermal protection
- Must be worn with lifejacket
- Optional lifting becket, buddy line, whistle and emergency light
- Interior braces for adjustable sizing
- Fabric selection ensures long lifespan of the suit
- Weight 3.16 kg
- Dimensions: H 70 x W 50 x D 15 cm (packed)
- Air-tight packing optional
- Included in the VIKING Shipowner
- Agreement for fixed fee service exchange

VARIANTS	
PS5019	Top of the line VIKING immersion suit with extra durability and extended protection

RELATED PRODUCTS	
PV9520	VIKING SOLAS solid lifejacket
PV9320	Inflatable lifejacket, symmetrical 180N, configurabl e
PV9360	Inflatable lifejacket, symmetrical 275N, configurabl e
PV9361	Inflatable lifejacket, asymmetrical 275N, configurabl e
1038974	Personal Locator Beacon (PLB)

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IMPERIAL

IMMERSION SUIT (TC/SOLAS)

In production since 1969, the Imperial Immersion Suit is meticulously crafted and pressure-tested upon completion, and is in fact the very first immersion suit available for the maritime market. This version is available in three different sizes.

TC/SOLAS Immersion Suit - available sizes:

(Size - Adult Universal)
(Size - Intermediate)
(Size - Jumbo)

AVAILABLE ACCESSORIES:

Replacement High Rider Rings
(Size - Adult Universal)
(Size - Intermediate)
(Size - Jumbo)

Replacement Storage Bags
(Size - Adult Universal)
(Size - Intermediate)
(Size - Jumbo)

Optional Personal Survival Pocket
Optional PLB Pocket
Maintenance Kit
Beeswax Bar

TECHNICAL INFORMATION:

- Holds Transport Canada (TC) Approval
- Holds Safety of Life at Sea (SOLAS) Approval
- 1-piece, sealed construction made of inherently buoyant 5mm neoprene
- True to size with dual-zipper pull tabs
- Wide shoulders and legs for quick donning
- Three-fingered mitt for increased hand warmth and palm grip studs for improved grasping
- Equipped with whistle
- Snug-fitting face seal helps keep water out
- SOLAS-grade reflective tape provides extra visibility of wearer to rescue team
- Weighs 14-16 lbs., depending on suit size
- Dual-zipper pull tabs
- Comes in sturdy storage bag with two handles for quick retrieval and donning of suit
- Inflatable high-rider ring for additional freeboard and buoyancy
- Custom suits available upon request
- Optional personal survival kit pocket
- Optional PFD light
- Custom stenciling with organization name available upon request

IMMERSION SUITS & LIFEJACKETS SERVICE INFORMATION

"WILL YOUR LIFE SAVING EQUIPMENT SAVE YOUR LIFE?"

Our Service Team offers a turnkey service, i.e. collection, inspection/repairs/re-certification and return of equipment to your vessel.

All repairs are carried out in a controlled environment by certified, factory-trained technicians who undergo regular training and re-certification. Our Service Station undergoes annual inspection by Classification Societies such as Lloyds Register of Shipping, The United States Coast Guard (USCG), Det Norske Veritas (DNV), Bureau Veritas (BV) and American Bureau of Shipping (ABS). We are recognised and approved by our local maritime authority, Maritime Service Division.

We are certified to service Viking and Survitec Imperial Immersion Suits and Viking, Remploy and Mullion inflatable lifejackets.

SERVICE DEPARTMENT INFORMATION:
For more information on our services or to schedule a service, please call **1 (868) 235-5406** or send an email to **mcl@mcl.co.tt.**

First Aid Kits

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VIKING LIFE-SAVING EQUIPMENT

Lifeboat First Aid Kit

The Lifeboat First Aid Kit is United States Coast Guard (USCG) approved and supplied in a heavy-duty plastic container with a watertight O-ring.

Unit Approximate Specifications:
Depth: 10.5 inches, Width: 10.5 inches, Height: 3.5 inches

Product Features

- USCG Approval 160.054/9/1
- Comes in heavy-duty container with a water-tight o-ring
- Adhesive bandages
- Large gauze compress
- 4” gauze bandage
- 4” bandage compress
- Burn creams
- 2” bandage compress
- Eye washes
- Triangular bandage
- Ammonia inhalants
- Eye dressing packs
- Povidone-Iodine swabs
- Tourniquet
- Wire splint
- Aspirin tablets

Liferaft First Aid Kit

The Liferaft First Aid Kit comes in a transparent zip pouch and is United States Coast Guard (USCG) Approved.

Product Features

- Case dimensions: 7” x 9”
- Adhesive bandages
- Gauze compresses x 4
- Gauze bandages x 4
- Bandage compress
- Ammonia inhalants
- Eye dressing packs
- Washes
- Wire splint
- Aspirin tablets x 2
- Bandage compresses
- Triangular bandage eye washes
- Tourniquet

SOLAS First Aid Kit I & Kit II

- Complete medical outfitting for lifeboats
- Both Kit I (1056105: medication only) and Kit II (1056106: equipment only) required to be fully compliant

SOLAS and Lloyd’s Register approved

First Aid Kit

- For use in workplaces with 1-50 persons.
- An extra kit is needed for each additional 50 persons
- Includes wall bracket
- Compliant with HSE 1981, ACOP 1997 (UK)

VARIANTS	
1043822	First aid kit DIN13157 incl. bracket
RELATED PRODUCTS	
-	-

Emergency Ration

- Weighs 500 g per box

Emergency Drinking Water

- Weighs 500 g per box

Datrex Emergency Food Rations and Drinking Water have a 5 year shelf life and are approved globally for use in liferafts, lifeboats and in any other emergency situations such as earthquakes, flooding and hurricanes where food and water supply can be at stake. The high energy ration is tabletized /subpackaged and ready to eat. It is compact and not thirst provoking. Only natural ingredients are used, (no preservatives or nuts), Wheat

DATREX Life Saving Products

DATREX White Ration

- 5 year shelf life
- 10,000 kj
- 2,400 kcal /package
- 500 g
- USCG approved to SOLAS
- BV-SOLAS certified
- CA-TC approved
- 30 packs per case
- 30.5 lbs per case (13.8 kg)

DATREX Blue Ration

- 5 year shelf life
- 15,075 kj
- 3,600 kcal /package
- 750 g
- USCG approved
- 20 packs per case
- 30.5 lbs per case (13.8 kg)

DATREX Aviation Ration

- 1,000 kcal /package
- 6.8 oz each
- 70 packs per case
- Case Dimension: 8”x14”x10”
- 30.5 lbs per case (13.8kg)

LOAD CHART	DX1000W	DX100EW	DX2400F	DX3600F
Contents	64 sachets per case	96 sachets per case	30 packs per case	20 packs per case
Case Weight	20.5 lbs (9.2 kg)	30.75 lbs (13.7 kg)	30.5 lbs (13.8 kg)	30.5 lbs (13.8 kg)
Case Dimension	10”x13”x7”	12”x9”x14”	8”x14”x10”	8”x14”x10”
Pallet Load	98 cases per pallet	68 cases per pallet	70 cases per pallet	70 cases per pallet
Pallet Weight	2,010 lbs (913 kg)	2,090 lbs (950 kg)	2,200 lbs (999 kg)	2,200 lbs (999 kg)
Pallet Dimension	40”X48”X55”	40”X48”X59”	40”X48”X54”	40”X48”X54”
Pallet Volume	1.56 m3	1.85 m3	1.70 m3	1.70 m3

DATREX Emergency Drinking Water

- DX1000W
- Purified water for immediate use
- Superior package material/durable
- Easy to dispense
- 5 year shelf life
- 125 ml (4.227 oz.) / sachet
- 64 sachets / case
- 8 litres / case
- USCG approved to SOLAS
- BV-SOLAS certified
- CA-TC approved
- 20.5 lbs. per case (9.15 kg)

DATREX Emergency Drinking Water

- 1.5 litre overwrap package
- 8 packages /case
- 12 litres / case
- Approvals as the DX1000W
- 30.75 lbs per case (13.74 kg)

Stretchers

Basket Stretcher

- Rigid one piece stretcher
- 4 restraining straps
- Lifting bridles (1008915) must be ordered separately
- Weight: 13.5 kg
- Dimensions: W 2150 x D 185 x L 2070 mm

VARIANTS	
1008910	Twin shell basket stretcher
RELATED PRODUCTS	
1008914	Floating device for basket stretcher
1008915	Lifting bridles for basket stretcher
1008913	Carrying case
1029757	Resistant belt for basket stretcher
1057095	Wa ll fixing kit
1031026	Cabinet for basket stretcher or spine board
1043851	Basket stretcher, RESCUEFORM® Type 5035, includes special equipment

Floating Device for Basket Stretcher

- Two buoyancy tubes that can be attached to a basket stretcher or twin shell basket stretcher

VARIANTS	
-	-
RELATED PRODUCTS	
1008912	Basket stretcher
1008910	Twin shell basket stretcher

Spine Board Stretcher

- Immobilising stretcher
- Model: B-bak pin
- Made of high density completely recyclable polyethylene
- X-Ray compatible

VARIANTS	
1008916	Spine board stretcher (Model: Rock), floatable
RELATED PRODUCTS	
1008917	Rock straps
1008919	Head immobiliser, blue
1031026	Cabinet for basket stretcher or spine board
1025303	Fracture kit, flexible neoprene splints with alumbar inlay for arms and legs (5 pcs)

Spine Board Stretcher

- Immobilising stretcher
- Model: B-bak pin
- Made of high density completely recyclable polyethylene
- X-Ray compatible

VARIANTS	
-	-
RELATED PRODUCTS	
1008919	Head immobiliser, blue
1059354	Head immobiliser, orange
1025303	Fracture kit, flexible neoprene splints with alumbar inlay for arms and legs (5 pcs)

Stretcher, Neil Robertson type

- Immobilising stretcher
- For hoisting in confined spaces
- Wood strips

VARIANTS	
1020724	Stretcher , Neil Robertson type, UK version Bamboo wood
RELATED PRODUCTS	
1011284	Cabinet for Stretcher , Neil Robertson type

Stretcher, Rock Straps System

- Designed to provide “full body” immobilization.
- For use with spine board stretchers.
- The system is compatible with all full-length back boards with 8 or more hand/strap slots.

Head Immobilizer For Spine Board

- Complete Super Blue includes immobilizer base, two foam blocks and head straps.
- Two blue vinyl coated foam blocks, with ear cut-out, provide firm head support with minimal displacement during application.

Paraguard Stretcher

- Immobilising stretcher
- Compact for versatility (foldable and can be packed into a bag)
- Can be used for helicopter rescue with lifting eyes and the optional lifting harness
- Weight: 14 kg
- Dimensions: W 320 x D 210 x L 1000 mm (folded)

VARIANTS	
-	-
RELATED PRODUCTS	
1020727	Lifting harness for paraguard stretcher
1053410	Shoulder harness for paraguard stretcher
1053208	Carrying handles for paraguard stretcher
1053407	Foul weather sheet for paraguard stretcher

Lifting Bridles For Basket Stretcher

- Usable for horizontal and vertical lifting situations.
- Constructed from durable woven nylon with sound steel attachment hardware and brass locking mechanisms.

Personnel Transfer Net

X-904 Offshore Personnel Transfer Net

Billy Pugh Company's 4 to 12 person transfer device is used to quickly and effectively transport personnel on and off of platforms. All models are equipped with quick release safety lanyards to provide safety and give the rider confidence while in transit. X-904's are made of a sturdy and very durable aluminum skeleton that encompasses the rider to protect them from falling objects and any side impact that may occur.

PRODUCT INFORMATION:

- ABS certificate available
- Collapsible for storage & shipping
- Overhead protection
- Refurbishment program
- Shock absorbing bottom
- Non-slip floor Lightweight aluminum frame construction
- Double braid polydacron rope coated in urethane with stainless wire rope center
- Comes standard with 20ft. stabilizer & load line
- Training DVD
- Stretcher space provided
- Designated storage space

Automatic Survivor Locator Light

The choice of cruise lines worldwide, the ACR Auto HemiLight™3 flashing survival light attaches to almost any style life jacket to safely meet USCG, MED and SOLAS requirements.

Smaller than other approved lights, the HemiLight™3 features rounded edges to maintain the integrity of inflatable life jackets. Attachment loops accommodate up to 5 cm (2 in) wide webbing, and the marine tough design ensures years of useful service.

The high-intensity flashing LED light automatically activates for 20+ hours when it comes in contact with salt or fresh water, and can be deactivated simply by pushing the red button. Installation is quick and easy (the HemiLight™ 3 can be retrofitted to almost any style life jacket in a matter of seconds).

Available in two configurations: the HemiLight™3 offers a basic strobe mode which can be activated either manually or automatically. The HemiLight™3+ offers you the ability to switch between the strobe light, SOS mode or a steady-on.

FEATURES

- Size 2.44 x 1.19 x 1.13" (6.19 x 3.02 x 2.87 cm)
- Weight 0.98 oz (28 g)
- Battery Non-hazardous lithium
- 5 year life (non-replaceable)
- Meets DOT and IATA rules for safe transport.
- Material Polycarbonate Activation Automatic when in contact with water (fresh or salt), deactivate via manual off button.
- Waterproof Water tight to 10 ft. (3 m)
- Meets IMO standard

AMERIGLO 6" Light Sticks

Our most popular item! AmeriGlo's 6" light stick is always individually foil wrapped to insure bright and dependable light when needed.

Used by military, law enforcement, paramedics, campers, hikers, scouts, utility companies, hotels, schools, boaters, and well-prepared individuals. Emergency personnel and troops alike prefer AmeriGlo light sticks for its versatility in the field, using this special locking hook.

Yellow is the 2nd brightest color in the 12-hour product category. The 6" yellow light stick is ideal for illumination, marking, and signaling.

Green is the brightest color in the 12-hour product category. The 6" green light stick provides adequate light for a standard-sized hotel room (or household bedroom) for 12 hours.

Red is often used in training exercises when many colors are needed. Red is also a 'stop/warning' indicator.

Flashlights

1820 Pocket Sabre™

The Pocket Sabre 1820 flashlight descended from Pelican's famous SabreLite 2000. Built to last, the unbreakable ABS body resists chemicals, water and corrosion. The polycarbonate lens and focused Xenon lamp module produce a tight white beam that penetrates any hazardous condition. All these features and safety approvals, too. It comes with a twist-on shroud, is submersible, and powered by 2 C alkaline cells.

2000 SabreLite™

This powerful flashlight was designed with one thing in mind: SAFETY. It carries a variety of approvals, allowing safe use in many different hazardous environments and conditions. The SabreLite is o-ring sealed with a twist-on shroud and comes with a polarity battery guard tray that safeguards against dangerous "outgassing" of hydrogen from an accidentally reversed cell. It is powered by 3 C alkaline cells, submersible, and has an ABS resin body which resists chemicals, corrosion, and extreme temperatures. Unlike ordinary flashlights that produce a yellow beam, the SabreLite's incredibly bright Xenon lamp produces a powerful collimated white beam. Pelican's SabreLite is the leader in quality and performance.

2000PL SabreLite™

Same features as the SabreLite™ 2000 Flashlight but outfitted with a lens ring that emits a bright glow in the dark. The new generation photoluminescent material in the plastic absorbs the energy from any light source - fluorescent lights, the sun, or even the flashlight's own beam. No more fumbling in the dark for your flashlight. It is powered by 3 C alkaline cells, submersible, and has an ABS resin body which resists chemicals, corrosion, and extreme temperatures

2010 SabreLite™

The SabreLite 2010 LED is Pelican's flagship LED flashlight. LED technology produces a white collimated beam that's as bright as an incandescent flashlight and provides 10,000 hours of lamp life and extended battery burn time. The rugged, light weight ABS resin body is submersible and a twist on/off lens shroud eliminates accidental discharge. It is powered by 3 C alkaline cells. The SabreLite 2010 Flashlight is the future of LEDs.

2010PL SabreLite™

Same features as the SabreLite 2010 LED Flashlight, but outfitted with a lens ring that emits a bright glow in the dark. The new generation photoluminescent material in the plastic absorbs the energy from any light source - fluorescent lights, the sun, or even the flashlight's own beam. No more fumbling in the dark for your flashlight.

2020 SabreLite™ Recoil™

Similar to the SabreLite 2010 LED Flashlight, but with a voltage regulated LED that extends peak brightness. Recoil LED Technology results in a true collimated beam that cuts through thick smoke, fog, and dust. It is powered by 3 C alkaline cells.

PELICAN™

Miscellaneous Items

SPYDERCO Pacific Salt Black FRN ~ C91BK (H-1 WILL NOT RUST!)

A big myth in the knife world is that out there somewhere is a knife that seriously cuts but cannot rust. Knives claiming these super powers are usually made with steels that are unable to hold a cutting edge for any measurable amount of time. Finally a steel foundry in Japan called Myodo Foundry makes this myth a reality with the introduction of a new steel called H1. H1 steel is a PH steel, meaning it is a precipitation-hardened steel. “Huh” you ask? Utilizing .1% nitrogen instead of carbon to harden the steel, it reaches a Rockwell hardness of 57-58rc. Spyderco uses H1 on its new C91 Pacific Salt model.

SPYDERCO Atlantic Salt Yellow FRN ~ C89YL

(H-1 WILL NOT RUST!)

It’s been speculated the sheepfoot shaped blade originated with mariners who found the rounded tip especially beneficial when the knife was accidentally dropped (think working on a ship in pitching seas) as it couldn’t stab the foot when hitting the deck. It’s also been hypothesized that commanding officers on these ships preferred rambunctious hardworking sailors carry knives without pointed tips, especially while in port blowing off steam after months at sea.

NAUTICAL / FF23-CP

SATIN / SHEEPSFOOT / PARTIALLY SERRATED

The Nautical is not just a knife it’s a precision instrument with many parts working together in synchronicity. A marlin-spike is especially useful in marine applications to untie knots but we were surprised to find out how many other uses they have. Use it as an awl, a scribe, for digging, prying, scraping, or ... you get the idea. What you might not see at first glance though is that the liners are crafted from super strong and lightweight titanium and mated to tough G10 handles. The big half serrated blade opens and closes as fast as you can say ‘red on right return’.

Tank Dipping Tapes of Stainless Steel in Brass Frame

ACCURACY ACCORDING EC STANDARD:
Standard type in accuracy class II,
+/- a + bL (a = 0,3 mm; b = 0,2 mm; L = length in m)
Accuracy class I,
+/- a + bL (a = 0,1 mm; b = 0,1 mm; L = length in m) at extra cost.

TECHNICAL DATA: hardened tape steel width: 13,0mm thickness: 0,2mm
Graduation: raised markings and figures in bright natural steel color on a dark etched background. Graduation on one or both sides.
TENSION: the tension force of the tape is in accordance with the weight of the dip weight (indicate when ordering for which dip weight the tapes should be used).
BRASS FRAME: strong frame of brass with oblique handle of laquered hardwood, strong foldable winding arm of brass protects the tape from unwinding when not in use, winding drum of metal. Tape rolls out near the handle (if not wanted, please specify in the order)
SPECIAL EQUIPMENT: Earthing of the brass frame (at extra cost)
Refills also available

Tank Dipping Tape Paste

Water indication paste, tube 70 g

Gasoline findertube 60 g

RICHTER
Deformationsmesstechnik GmbH

Reflexite® Marine Material

Microprismatic Conspicuity Material

Product benefits include:

- High performance polyester film
- Thin & flexible
- Weather resistant
- Maintains reflectivity after impact
- Long-Distance Visibility
- UV-stabilized
- SOLAS approved

Signalling Mirror with Lanyard

- USCG
- DX1502M

Whistle with Lanyard - USCG/SOLAS/MED/ISO

- Orange whistle with clip and lanyard.
- Accepted by USCG/SOLAS/MED/ISO for lifejackets and immersion suits.
- Weight: 12 grams
- Individually packed in plastic bag
- 100 pcs per box

Photoluminescent Signage Posters and Tapes

Datrex manufactures a vast variety of photoluminescent sheet material for use onboard ships and in public/commercial buildings. All our grades exceed the Din standard and are approved by Bureau Veritas.

FOR THE MARITIME INDUSTRY

- IMO-signage and posters
- Fire Control Signs
- Evacuation Routing Signs
- Emergency Equipment Signs
- Fire-Fighting Equipment Signs
- Personnel Protection Signs
- Hazard Signs
- Flexible tapes
- Rigid strips incl. aluminum tracks
- Cabin Placards

FOR BUILDINGS

- EXIT SIGNS to UL924
- NFPA 170 Signage
- Egress pathway systems
- LAW 26 (New York City) Glow materials
- TAPES
- RIGID materials for signs and egress
- ALUMINUM mounting tracks

GPS Heading
336°M
GPS Position
N 25.75616°
W080.07573°
SOS
Mark
Menu
H-UP

Aids to Navigation

COASTAL AND PORT BUOYS

SB-2200

SB-285P

WHY USE TIDELAND SIGNAL POLYETHYLENE BUOYS?

Naturally we are always in competition with different companies but there are many good technical reasons why Tideland Signal is very successful. Any product can be made at a lower cost but at what cost to long term reliability and performance? We wish to draw you attention to some of the very important aspects of our rotationally molded polyethylene buoys:

STABILITY

The SB138P and the SB285P are both designed for rough, open sea use and are exceptionally stable. Just a quick glance at the profile will show you that there is a weighted base way below the water level. This ensures efficient stability in the roughest of water. We are only too pleased to show you the extensive stability calculations and site test reports.Some designs do not have this and some are even flat. They will not be stable, especially in the rough, high seas.

POLYETHYLENE

The Tideland Signal buoys are manufactured from UV stabilized polyethylene. The color pigment is throughout the thickness. The hull section is a minimum of 9mm. UV protection is rated at 15 years. Even after this period the color will take years to fade. Life expectancy is well in excess of 20 years. A way to reduce manufacturing costs is to use thinner materials and also use a lower cost UV protection that maybe will last for 8 years. A 6mm section and a UV rating of 8 years can reduce the cost by over 35%. In addition, some even paint the polyethylene taking all the advantages away.

POLYSTYRENE FOAM FILLING

Tideland Signal fills the hull sections with expanded polystyrene foam. Polystyrene beads are poured into the hull and then steam is injected to expand the polystyrene beads into a solid block of foam. This will not allow water in and if damaged will almost certainly not sink. An alternative is to use"polyurethane foam" but this is a twopack system. Two chemicals are poured in and react creating foam. This type of foam degrades over time and can also act like a sponge. It is certainly not a "closed cell foam" and cannot be compared to expanded polystyrene. This type of foam costs over 60% less than expanded polystyrene foam.

INTERNAL CROSS BRACING

The SB138P utilizes internal cross bracing between the mooring and lifting eyes adding strength and ensuring integrity.Without this type of strengthening it is almost certain that at some stage the mooring or lifting eyes will fail causing a tear in the structure.

TIDELAND

PORT AND RIVER BUOYS

SB-2.2

SB-1800

SB-1500

LIFTING & MOORING EYES
The Tideland Signal buoys utilize stainless steel bushes for both. The mooring eye bushes are a wear item. These can be simply replaced by the removal of three stainless steel bolts. To reduce cost it is possible to not provide replacement mooring eyes. It is a very expensive operation to replace these, as they are an integral part of the buoy construction.

STAINLESS STEEL
All fixtures and fittings on the Tideland Signal buoys are manufactured from a marine grade stainless steel. This ensures long and trouble free operation. If steel or galvanized fixtures and fittings are used it takes away all the maintenance advantages of using a low maintenance polyethylene. Some designs even use steel or cast iron on the outside for ballast. This increases maintenance and consequently negates the reason for using Polyethylene.

WIRING HARNESS
The Tideland Signal Buoys utilize a molded cable harness with gold plated contacts. This ensures trouble free operation. A less costly alternative is to use standard wiring with junction boxes and open connections. This is a haven for corrosion and future maintenance problems.

NON SLIP SURFACE
The top of the hulls are manufactured to provide a slip resistant surface to assist the maintenance engineer when changing lamps or cleaning a lens. The rotational moulds would be far less expensive if this facility was not provided.

ALUMINIUM DOOR
The battery access chamber is provided with a strong aluminum door with a positive gasket and secure lock. This ensures security and also prevents ingress of water. Lower cost alternatives utilize a nonmetallic door that warps which allows water in and also is not as secure. Lower cost maybe but again, the integrity of the buoy suffers.

MODULAR CONSTRUCTION
The buoys are of modular construction that allows replacement of parts if damaged. A complete structure requires complete replacement if any area suffers damage.

BATTERY BOX LOCATION
The batter box is located above the water line. This ensures protection from water especially during maintenance operations.

IALA
Tideland Signal is a member of the International Association of Lighthouse Authorities and assists in producing the IALA recommendations.

SRM 2 - Satellite Remote Monitoring

Tideland's Signal has developed a Satellite Monitoring System that provides remote monitoring information of important aids to marine navigation (AtoN). A small satellite radio is installed on the AtoN which utilises the Inmarsat 12 and 13 satellites via the IsatM2M. Information such as GPS position, light go/no go, battery voltage and additional data is displayed on any web browser. Warnings are automatically sent if preset values are exceeded.

SRM-2 with Nova-65SC

The Nova-65 SC features unique and proprietary optics which provide a 360° beam at 5°, 10°, 20° or 30° vertical divergence. Utilizing a highly efficient compact lens, the Nova-65 SC is engineered to utilize the advanced and cost-effective technology of LEDs.

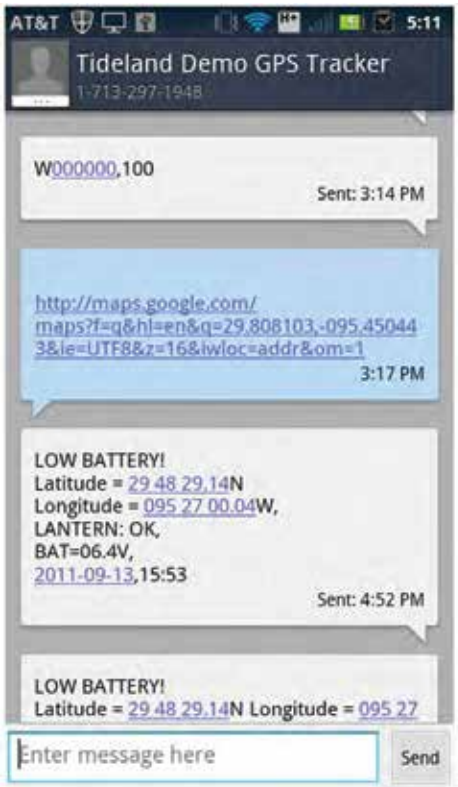
Solar modules and high-grade batteries are housed in a compact self-contained marine lantern, designed for low maintenance with a projected service life of 10 years before any significant maintenance is needed. The 5° and 10° divergence lenses are ideal for fixed or floating aids to navigation while the 20° or 30° lens provides exceptional performance on buoys. The 5° lens can be used to meet specific needs that require a much longer range while still using a minimal amount of power.

GSM MONITORING

Tideland's GSM monitoring system comprises a Quad Band GSM/GPRS modem, which is fitted into the equipment. Conditions such as position, battery voltage and, go/no go are monitored together with auxiliary contacts. Commands can also be sent to change power level or flash character if required.

Monitoring data is sent via SMS to designated mobile telephones. Google map positions can also be viewed.

Options include a full web based system that records data and displays it on Google maps or Google Earth.



TIDELAND

LED SERIES - Medium Range

NOVA-65

Tideland's Nova-65 features unique and proprietary optics which provide a 360° beam at 3°, 5°, 10°, 20° or 30° vertical divergence.

The 10° divergence lens is ideal for fixed or floating aids to navigation while the 20° and 30° lens provides exceptional performance on buoys.

The 3° and 5° lens can be used to meet specific needs that require a much longer range while still using a minimal amount of power.

Computer designed optics provide ranges up to 8Nm, 7Nm, 6Nm and 5Nm with 5°, 10°, 20° and 30° lenses, respectively, while using only 10W of power. A white 3° version is available at 10Nm.

Two options of housings are available: standard general marine use and a ruggedized metal version. IP-66 and IP-68 make the Nova-65 the choice of professionals. The Nova-65 power efficiency provides superior performance in fixed or floating aids to navigation applications.

FEATURES:

- User Selectable Power Settings
- User Selectable Flash Characters
- Full Monitor and Control Capability
- Optional GPS Synchronisation Module (or Hardwire)

NOVA - 65

MLED -140

MLED-3 00

MLED-140/155/300

Tideland has merged its patented and proven MaxLumina® lens technology with 21st century LED technology to provide low maintenance, low power consumption and long-range, MLED-140 and MLED-300 navigational lanterns. The LED series provides trouble-free service in rigorous marine environments.

All can be fitted with the proven LED flasher, MaxiHALO-60 II, to provide an exceptionally efficient lantern. Existing lanterns can be retrofitted with MaxiHALO-60 II.

FEATURES:

- LED Temperature Compensation for Long LED Life
- Reverse Polarity Protection
- Optional GPS Synchronisation Module (or Hardwire)
- User Selected Flash Characters and Power Settings
- Hazardous Area
- OMNIBUS or Modbus Protocol Remote Monitoring

MLED SERIES

Tideland's MLED-150Ex and MLED-180-Hi-Ex are specifically designed for use in Zone 1 environments. The flasher assembly is housed in a rugged enclosure providing high reliability and low maintenance.

The MLED-150Ex provides an effective range of 10Nm while a bi-form arrangement of the MLED- 180-Hi-Ex provides over 15Nm.

FEATURES:

- User Selectable Power and Flash Characters
- Temperature Controlled LED Drive Circuits
- Full Monitoring and Control Capability
- Fail Terminal
- Optional GPS Synchronisation Module (or Hardwire)

MLED-180-Hi-Ex

MLED-180Ex

Nova-250 Long Range

Tideland's Nova-250 features unique proprietary optics engineered to project a 360o, horizontal, high-intensity, long range beam, in excess of 15Nm for Nova-250 and over 18Nm for Nova-250-3 at a transmissivity factor of 0.74. An efficient and compact lens provides a vertical divergence of 2.5 degrees making it the industry choice for a broad range of applications including offshore structures, land-based installations and lighthouse upgrades.

NOVA 250

FEATURES:

- User Selectable Power and Flash Character Settings
- Full Monitor and Control Capability
- Fail Terminal
- Optional GPS Synchronisation Module (or Hardwire)

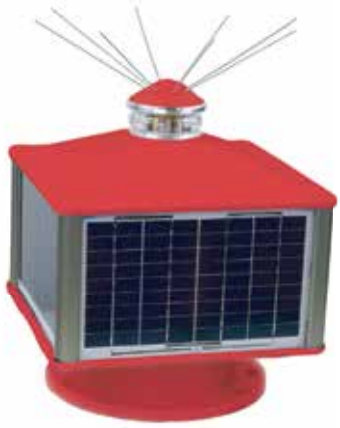
NOVA 250-2

TIDELAND

SELF CONTAINED LANTERNS

L-110, L120 & L-130

Tideland's L-110, 120 and 130 self-contained lantern options provide a cost effective solution for those requiring 1 to 3Nm lanterns. All lanterns are compact and provide a reliable and low maintenance solution. Ideal uses include small marker buoys, docks, marinas and aquaculture sites. These lanterns are available in all IALA colours.



SolaLED

Tideland's SolaLED is a high intensity, self-contained marine navigation lantern with its own solar power system and battery pack for 3 to 4 nautical mile ranges. It is available with two vertical divergences, narrow and wide up to 7°, making it one of the most sought after self-contained lanterns in the industry.

Nove-65 SC - 4 to 7Nm with AIS Options

Tideland's Nova-65 SC is a popular self-contained lantern with plenty of battery life for those areas with low sun. Nova-65 SC is ideal where there is a requirement for additional modules such as remote monitoring, AIS AtoN, satellite and GSM/GPRS.

FEATURES:

- Options of 3°, 5°, 10°, 20° and 30° Vertical Divergence
- User Selectable Power Settings for Visual Range
- User Selectable Flash Characters
- Optional GPS Synchronisation Module
- Optional GSM/GPRS, AIS or Satellite Monitoring

SolaNOVA 65

Tideland's SolaNOVA-65 is UL approved and has proven to be one of the leading self-contained lanterns available in the current market. It is used by numerous coast guard authorities and is also approved for use on offshore platforms.

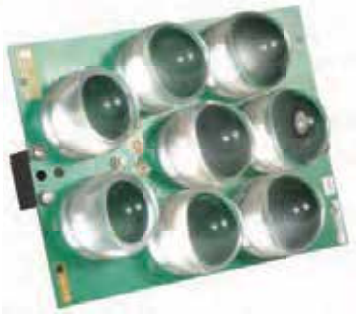
FEATURES:

- Options of 3° , 5°, 10°, 20° and 30° Vertical Divergence
- User Selectable Power Setting for Visual Range
- User Selectable Flash Characters
- Optional GPS Synchronisation Module
- Optional GSM/GPRS Monitoring
- Hazardous Area

SolaNOVA 65

RANGE LANTERNS

Tideland offers a versatile range lantern LED conversion kit to upgrade from existing incandescent lamp technology based equipment. This pre-focused assembly not only replaces traditional lampchangers, it also eliminates costly and hard to focus mirrors. The MasterRange is available with multiple numbers of LEDs, from 2 to 15, allowing for a wide range of effective intensities. A range of assembly sizes are available to fit most range lanterns currently on the market.



RL-355

RL-355 MaxLumina

Tideland's RL-355 range lantern was developed for the US Coast Guard as a high intensity range lantern and has earned its spot as our most popular range lantern.

Our new development, RLED-355, is an LED version of the original lantern. Featuring MasterRange, RLED-355 provides exceptional performance over traditional incandescent lamps.

FEATURES:

- Monitor and Control via: Hardwire, Radio, Cell
- Phone, or Satellite
- Optional GPS Synchronisation Module (or Hardwire)
- Available in All IALA Approved Colours
- 256 Flash Characters

TIDELAND

ILED Dorado Helideck Status Light

Fresnel Lens, Borosilicate Glass

IMT ILED Technology

Efficient

Cooling Fins

TECHNICAL DETAILS

MODEL	ILED DORADO STATUS LIGHT
Light source	LED
Luminous intensity	2 – 10° 700 cd min. 0 – 90° 176 cd min.
Luminous intensity dimmed	60 cd max.
Flash frequency	2 Hz
Average power	80 W
Light colour	Red
Ambient temperature	-40 °C up to +55 °C
Burning position	Base Down
(Re)ignition	Immediate
Voltage range	24 Vdc ± 10 %
IP Rating	IP66
Horizontal Emission	360°
IEC protection classes	Class 1
Lens	Toughened borosilicate glass
Housing	Marine Grade Aluminium Anodized
Weight of the light fitting	16 kg
Package weight per piece	17 kg
Package dimensions	400 x 400 x 380 mm LxWxH
Standard version	Ex e junction box with 3x M25 entries

Flashers

MaxiHALO-60 II LED Flasher

Tideland's MaxiHALO-60 II LED flasher assembly allows for an easy upgrade to LED technology without having to replace existing lanterns. MaxiHALO-60 II is used in the MLED-140, 155 and 300 lanterns and is compatible with most competitors' lanterns. It can also be retrofitted into existing ML-140/155/300 lanterns. MaxiHALO-60 II has become recognised as one of the most efficient flashers available.

FEATURES:

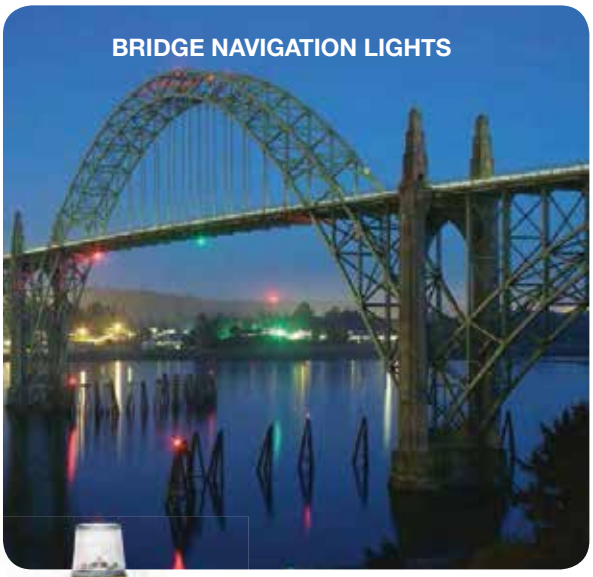
- User Selectable Power Settings
- 7W or 19W Ratings
- 9V to 36V Input
- Full Monitor and Control Access
- Optional GPS Synchronisation Module (or Hardwire)

TF-3B Omnibus II Incandescent Flasher

Tideland's TF-3B is a completely automatic solid-state flasher and six-place lampchanger for use in Tideland marine signal lanterns. It is compatible with other manufacturers' marine signal lanterns, as a direct replacement flasher/lampchanger.

FEATURES:

- A Moisture Protected Stepper Motor
- 9 to 36V DC
- Full Monitor and Control Options
- Optional GPS Synchronisation Module (or Hardwire)



Tideland offers marine navigation light options to mark bridges, fenders and piers worldwide. Tideland lanterns are available in AC and DC powered versions utilising LEDs for the most efficient operation. Traditional six-place lampchangers using incandescent lamps are also available.

TIDELAND

ROTATING BEACONS

Tideland offers powerful rotating beacons that produce unprecedented intensities using low wattage marine lamps and LED reducing power requirements.

TRB-400

Tideland's TRB-400 is a stand alone, major lighthouse beacon equipped with uniquely designed injection moulded acrylic lenses. It is AC or DC powered and lends itself to a DC solar power system due to its unique efficiency. With an AC version, ranges of up to 24Nm are possible. Models are also available which use modern LED technology and ranges of 15Nm can be exceeded with very low power consumption.

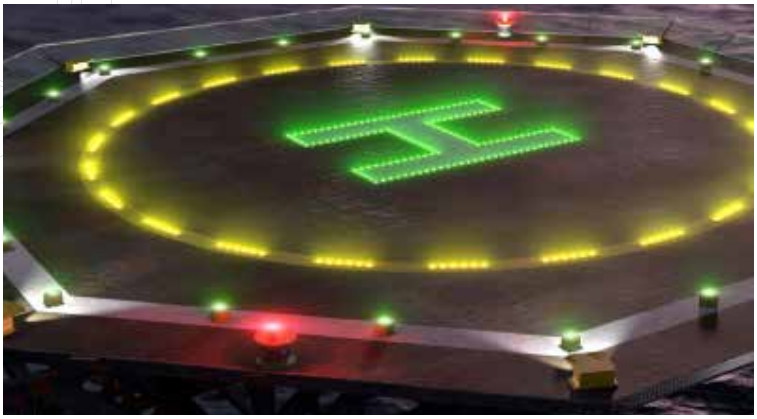
TRB-220

Tideland's TRB-220 is a smaller version of the industry leading TRB-400. Its range is up to 20Nm and it can also be fitted with LEDs to provide over 12Nm.

FEATURES:

- 25 Year Design Life
- 6 or 8 Lens Option for the TRB-400
- Brushless DC Drive Motor
- Over 16 Pre-Programmed Rotation Speeds
- Accepts Omnibus II and LED Flashers or LC-70
- Capable of Auto Switchover to Standby Lantern
- Remote Monitoring Capability
- IP-65 Housing
- Options of HP, Halogen, Metal Halide or Xenon Lamps

Offshore Platform Systems



Tideland offers world-class offshore platform products made to withstand the harshest of environments. Our offshore platform systems comply with the latest IALA Recommendation O-139 on the Marking of Man-Made Offshore Structures and include the option of a 15Nm navigational light, which is often required by regional authorities. For USA waters, Tideland offshore platform systems are fully compliant with US Coast Guard requirements for Class A, B and C structures.

Tideland products are certified to Class I, Division 2, ATEX Category 2 and 3, and IECEX where applicable. Helideck landing and warning light systems are also available as part of Tideland's integrated engineered systems.

15-10 Nm

Fog Signal

Fog Detector

Helideck

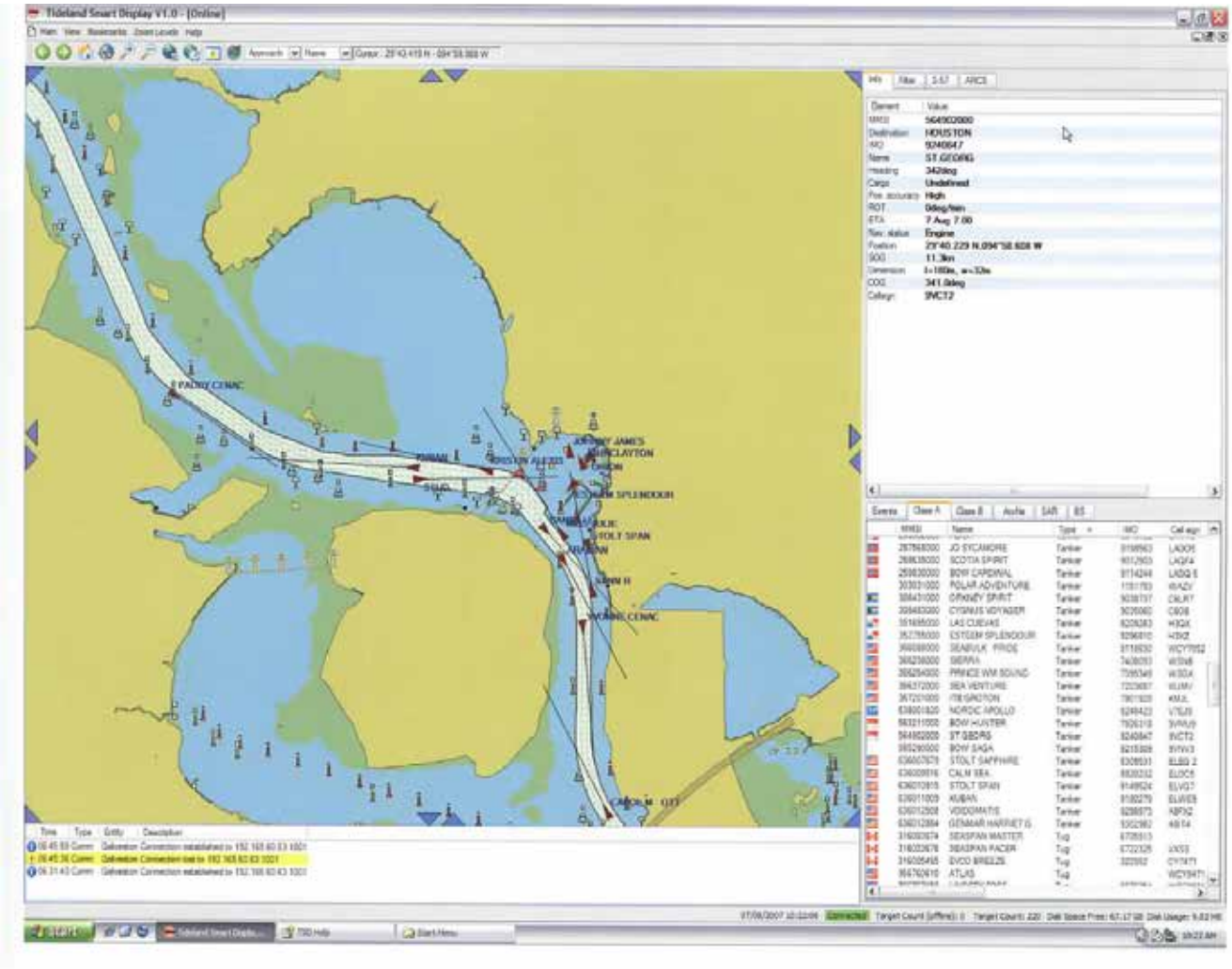
Racon

AIS AtoN - Ex

Status Light

TIDELAND

TIDELAND SMART DISPLAY (TSD)
The Most Popular AIS Display For Situational Awareness



The most popular AIS display For Situational Awareness.

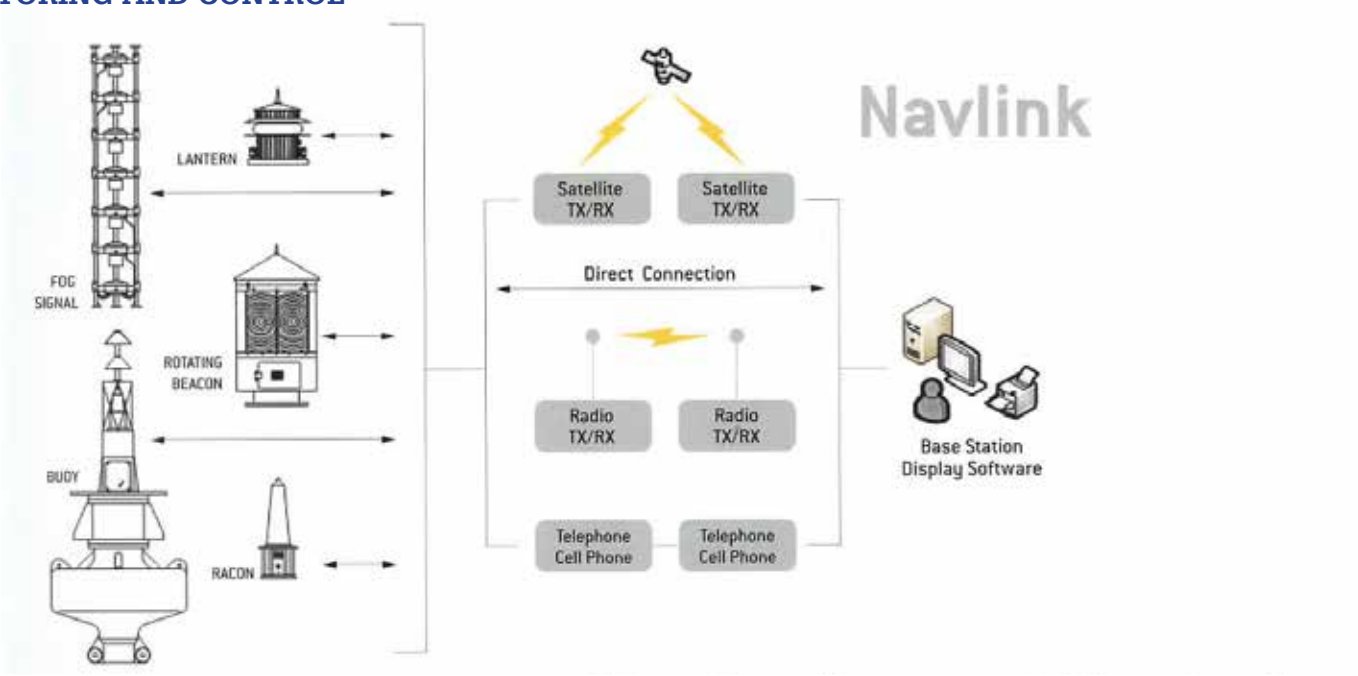
Tideland Smart Display (TSD) is a powerful AIS display system that allows the viewing of AIS data transmitted from vessels and also AIS fitted AtoNs. TSD is compliant with ITU-RM 1371-3 standards and has such features as record and replay, warning areas and AIS target filtering. TSD offers a unique concept by allowing the operator to view AIS vessel traffic with the option of integrating and viewing AtoNs via AIS message 21. TSD is compliant with Tideland's NavLink remote monitoring and control system. In addition to these robust features, TSD is also able to display radar tracks from an NMEA compliant radar system.

FEATURES:

- Efficient display of real-time AIS data.
- Powerful filtering system (see only what you want).
- Advanced replay feature viewing replay and online data simultaneously.
- Display of historical tracks for one or all vessels, with timestamp indication.
- Custom warning areas can be set for ships entering/leaving a sensitive zone.
- Full message 21 support and compatibility with NavLink monitoring system.
- Customisable screen views and colours.
- Vessel database with filtering.

Navigational Link Systems

MONITORING AND CONTROL



FEATURES:

- Communication media - NavLink communications support any number of mediums: VHF/UHF, dial-up modem, IP, direct, cell phone, satellite or AIS information systems.
- Communications Health Monitoring - NavLink continuously monitors the primary network communication medium for disruptions for of RTU data signal routing between RTUs and monitoring location is implemented.
- AtoN monitoring - NavLink interfaces with any combination of AtoNs: lanterns, fog signals, racons, buoys, meteorological monitoring devices and custom-designed aids to navigation.
- Electronic charting - NavTerm utilises Electronic Navigational Charts (ENC-IHO/IMO Standard 5-57) or CAMP for AtoN topology.
- Database - Comprehensive database and reporting system.
- Alarms - Configurable warning alarm settings.
- AIS - Can be integrated with the powerful ISD AIS monitoring system.

Since its introduction in the early 1990s, NavLink has consistently proved to be a reliable monitoring and control management system, with the capacity to handle many aids to navigation (AtoN) data point connections and means to remotely monitor and control the functionality of AtoNs.

AIDS TO NAVIGATION SERVICE INFORMATION

Our Aids to Navigation team sells, installs, services and repairs navigational equipment.

Marine Consultants (Trinidad) Limited is sole authorized Tideland Signal Corporation Sales & Service partner in Trinidad and Tobago.

We service and supply all major Trinidad & Tobago Ports, Harbors, Lighthouse Authorities, Private Ports and Marinas with Aids to Navigation equipment such as Buoys, Lights, Photocells, Solar Panels & Batteries. In addition, we supply Trinidad based Offshore Installations with the latest AIS Informer, RACON and Foghorn systems.

SERVICE DEPARTMENT INFORMATION:
For more information on our services or to schedule a service, please call **1 (868) 235-5406** or send an email to **mcl@mcl.co.tt.**

Marine Electronics

Emergency Position Indicating Radio Beacon (EPIRB)

survitecgroup

SMARTFIND

Available with a manual bracket or an automatic deployment housing, the Smartfi nd range meets the demands of recreational boaters and all classes of Commercial vessels alike. This stylish unit is available as a standard 406 MHz EPIRB or, for enhanced position location, with a built in high accuracy GPS.

KEY FEATURES:

- Internationally Approved
- Transmits on 406 and 121.5 MHz
- Integrated GPS (G5 PLUS version)
- Non hazardous battery for safe and easy transportation
- Unique CARRYSAFE bracket available for safe transportation
- High brightness LED fl ashing locator light
- 60 comprehensive diagnostic and self-tests during battery life
- Once activated, will transmit for a minimum of 48 hours
- 5 year battery life
- 5 year warranty

mcmurdo
safety for professionals

The **SMARTFIND** Series consists of two models:

E5 SMARTFIND is a **406 MHz EPIRB** designed to operate with the COSPAS-SARSAT international search and rescue system. Once removed from its CARRYSAFE mounting bracket the unit can be activated automatically by immersion in water, or manually by following the activation instructions printed on the unit.

The **G5 SMARTFIND PLUS** has all the advanced features of the standard **E5 SMARTFIND** with the addition of an integral multi-channel GPS receiver. The addition of a GPS receiver ensures that an accurate position of a casualty is relayed to the rescue services. This can in turn improve the speed of recovery by updating the position of the beacon at regular intervals.

A fl oat free automatic housing is available for both versions of the SMARTFIND.

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Search and Rescue Transponder (SART)

S4 RESCUE SART

The S4 Rescue Radar SART is a 9GHz X-band radar transponder which offers proven reliability. Extremely simple to use, the S4 Rescue can be operated even with gloved or wet hands. Its compact design makes it suitable for packing in liferafts or as a carry off device.

When a radar signal is received from a ship or aircraft, the S4 Rescue automatically transmits a response signal, which clearly identifies the survival craft on the radar screen by means of a stream of 12 in-line dots. Once activated, the S4 will remain in standby mode for over 96 hours.

The S4 Rescue has been designed for reliable operation in the toughest of marine environments.

KEY FEATURES:

- Ship or survival craft options
- Waterproof to 10m
- Buoyant
- Compact and lightweight
- Replaceable, 5 year battery pack
- Audio/visual indication of operation
- Built-in test facility
- Integral lanyard
- Mounting options - internal/external

Tron 40S MkII

The Tron 40S MkII is a GMDSS float free satellite, EPIRB. It is compact and designed with flexible mounting for fast and easy service and maintenance.

- Operates on the COSPAS SARSAT frequency (406 MHz).
- Identification and positioning via satellite. Also transmits on the air traffic emergency frequency (121,5 MHz) for homing.
- Uses a non hazardous battery.
- Optional brackets, either a float free bracket with protective cover or a float free bracket with heating.
- 5 year warranty.
- Complies with IMO/SOLAS/GMDSS regulations and is Anatel, CCS, FCC, IC,

Tron AIS-SART

Tron AIS-SART is a GMDSS search and rescue transmitter. It is designed for use during search and rescue operations, providing exact location specifics with GPS precision.

- Position updating (per minute).
- VHF signals are transmitted on AIS Channel A and B.
- Uses a non hazardous battery.
- 5 year warranty.
- Complies with IMO/SOLAS/GMDSS regulations and is Anatel, CCS, FCC and MED approved.
- Service stations worldwide.

Tron SART20

Tron SART20 is a GMDSS radar transponder (9 GHz). It is designed for use during search and rescue operations, supplying the exact location based on a distress level appearing on the radar X-band display of nearby ships, SAR vessels and aircrafts.

- Uses a non hazardous battery.
- 5 year warranty.
- Complies with IMO/SOLAS/GMDSS regulations and is Anatel, CCS, FCC, IC, MED, RMRS and RRR approved.
- Service stations worldwide.

Tron 60S/GPS

The Tron 60S/GPS is a GMDSS EPIRB (emergency position-indicating radio beacon). It is small, compact and sealed. Optimal visibility is achieved with high intensity LED, located at the top of the antenna.

- Operates on the COSPAS SARSAT frequency (406 MHz). Identification and positioning via satellite. Also transmits on the air traffic emergency frequency (121,5 MHz) for homing.
- The EPIRB is supplied with either a manual or float free bracket.
- 5 year warranty.
- Complies with IMO and SOLAS regulations and is Anatel, CCS, FCC, MED and RMRS approved.
- Service stations worldwide.

Personal Locator Beacon (PLB)

mcmurdo
safety for professionals

ResQLink+ 406 GPS Buoyant PLB

WORLD'S SMALLEST BOUYANT PERSONAL LOCATOR BEACON

At 5.4 oz, the ResQLink+ weighs less than a couple of power bars. And topping out at just 4.5 inches, it's smaller than the cell phone in your pocket. Small and mighty, the ResQLink+ is a full-powered, GPS-enabled rescue beacon designed for boaters, pilots and water-bourne sportsmen. With three levels of integrated signal technology - GPS positioning, a powerful 406 MHz signal and 121.5 MHz homing capability - the ResQLink+ quickly and acurately relays your position to a worldwide network of search and rescue satellites. A built-in strobe light provides visibility during night rescues. Integrated lashing loops make securing the ResQLink+ to a PDF or backpack easy and convenient.

KEY FEATURES:

- **Bouyant**
- **Powerful 66-channel GPS**
- **Super-bright LED strobe light**
- **Small size, lightweight**
- **Self-test and GPS test features**
- **Typical performance of 30 hours**
- **Double-sided Velcro strap**

McMurdo PLB Range
Fast Find 220 PLB

The FAST FIND 220 PLB uses advanced technology packed into a simple, lightweight, palm sized unit. Using the dedicated 406MHz frequency, Fast Find 220 transmits your unique ID and precise GPS location to the global network of search and rescue satellites within minutes. Rescuers are alerted to your situation, and Fast Find 220 sends them regular updates on your position. Finally, emergency services can home in on your beacon's 121.5MHz transmission to fi nd you.

KEY FEATURES:

- Mini size, MIGHTY 406MHz emergency signal with GPS
- Minimum of 24 hours continous operation
- Simple design, easy to use
- 6 year battery life
- No subscription or call charges
- Floats with buoyancy pouch
- Waterproof to 10m
- SOS morse LED
- Safe-stow antenna
- Self test both the battery and GPS

Fast Find 220 with integral 50 channel GPS Flotation pouch, lanyard and universal pouch included.

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safety for professionals

AIS Beacon

An AIS beacon is a new, innovative personal safety device that incorporates both AIS (Automatic Identification System) and GPS technology. The AIS beacon has been designed to aid the speedy local retrieval of personnel/crew members who fi nd themselves in difficulty at sea.

An AIS beacon transmits target survival information, GPS position information and a serialised identity number. AIS beacon target information can be viewed using standard ships AIS equipment such as Class A and Class B transponders and a wide variety of receive only AIS units. AIS equipped vessels and land based VTS stations within the local vicinity will also have visibility of the AIS-beacon signal. Whether displayed on the AIS itself or on a companion plotter or ECDIS screen, the message will clearly indicate the exact location, distance and bearing to person(s) in need of assistance.

AIS equipment displays the icon (pictured above). Precise target survivor information becomes viewable when the chart plotter/ ECDIS* cursor is positioned over the alert icon.*

SMARTFIND S10 Personal AIS Beacon

The SMARTFIND S10 AIS Beacon transmits a message to all AIS enabled equipment within a 4 mile radius (typical). An inbuilt high precision GPS receiver provides accurate position information which is frequently updated to assist quick retrieval of persons in difficulty. The SMARTFIND S10 AIS Beacon is intended for carriage by divers, crew and anyone who carries out activities on water.

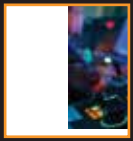
KEY FEATURES:

- Simple, manual activation
- Transmits GPS target tracking information over AIS
- Serialised TX ID
- Small and light for unobtrusive carriage
- Waterproof, buoyant and fully submersible to 60 m
- Flashing LED light
- Minimum 24 hour continuous operation
- 5 year battery storage life

RENISHAW
apply innovation™

Make quicker decisions

Intelligent systems make finding and locking onto the correct target simpler than ever, for speed and reliability of operation.



Improve operational safety

Intuitive software offers live confidence indicators, alarms, flexible filters and clear displays to support DPOs in the field.

Reduce downtime

Vast, experienced and expert global servicing network with product-on-shelf back up and rapid response.

RENISHAW
apply innovation™

Fanbeam pioneered the use of laser technology to support swift and accurate dynamic positioning.

FANBEAM 5 HAS MANY ADVANTAGES AS A LASER POSITION REFERENCE SENSOR

- Fanbeam 5 with new decalsHighly complementary to differential global positioining systems (DGPS), which can degrade when close to larger structures.
- Quick and easy to install and mobilise.
- Provides independent redundancy against other position reference systems.
- Cost effective, using passive, inexpensive targets, which can be permanently installed virtually anywhere.
- Used by major DP system integrators for over 20 years, and are recognised by classification bodies and international standards.
- Easy to operate, with thousands of dynamic positioning operators (DPOs) familiar with the system.

Fanbeam 5 is the laser system for dynamic positioning that:

- makes target acquisition and tracking more reliable
- gives DPOs clear and simple access to the data they need
- uses advanced algorithms to predict position, calculate confidence and suggestion solutions to difficulties encountered during operations
- offers service models that keep fleets working, wherever vessels are in the world

DESIGNED TO SUPPORT DPOS

It's the combined design of our targets, laser sensor, software and interface that make Fanbeam 5 the preferred laser-based reference position system.

Our range of data outputs and the experience of fleets of combining Fanbeam 5 with a range of other sensors and DP systems, make it ideal either for holding a vessel in station, or for moving a vessel with high levels of accuracy.

Fanbeam 5 has been designed and developed according to two key principles:

- Control: DPOs should be supported by intelligent, clear, quick-to-operate, pre-configurable software, which offers the peace of mind of automation, alerts and confidence indicators.

- Responsiveness: Since conditions at sea are unpredictable, and no two operations are the same, DPOs should have the ability to control laser tilt, target acquisition, filters and all other aspects of sensor control, quickly and simply.

The 20-year development programme behind Fanbeam has enabled us to deliver an intelligent system, which gives reliability and accuracy in a range of applications and environmental conditions.

DESIGNED TO SUPPORT LARGE FLEETS

We work regularly with fleets on upgrades, full-fleet and part-fleet installations and servicing schedules. We offer:

- plug-and-play upgrade options, at an attractive price
- attractive multi-vessel pricing options
- a fleet spare package, which minimises downtime for maintenance and servicing
- global service centres
- a Repair by Exchange model, which keeps fleets working

HOW AND WHERE FANBEAM IS USED

The accuracy, reliability and value offered by Fanbeam means it has been used on a wide range of projects, from bridge construction and windfarm installation through to platform supply.

The Fanbeam system has been used as a sole, primary or secondary reference position system by:

- construction and multi-purpose support vessels
- anchor-handling tug supply vessels
- dredging and rock-dumping vessels
- heavy-lift construction semi-subs and dive support vessels
- windfarm construction vessels
- emergency towing vessels
- well-stimulation vessels
- platform supply vessels and crew supply vessels
- accommodation floatels
- shuttle tankers

R5 GMDSS VHF Handheld Radio

The R5 is a fully featured GMDSS survival craft radio with user friendly design and features. It is built to meet the latest stringent IMO, GMDSS and ETSI standards. Reliable and easy to use, it is 100% waterproof and drop tested to cope with the toughest marine environments. The large tactile buttons can easily be operated with gloves without unintended activation of buttons. A ribbed design ensures a solid grip even in wet conditions.

KEY FEATURES:

- 23 GMDSS channels
- Easy to use, with large buttons
- Waterproof to 1/2 m for 1/2 hour
- Dimming and backlight control
- Battery indicator and battery saving function
- Quick channel select button
- Keypad lock
- Rotary volume control
- Dual-/Tri watch
- MED (Wheelmark) & FCC approved

mcmurdo
safety for professionals

SR203 VHF Handheld Survival Radio

The all ACR SR203 GMDSS VHF Handheld Survival Radio meets all the requirements of the IMO for carriage on SOLAS vessels. Built tough for all marine applications and easy to use in an emergency situation, the SR203 is the ideal choice for mandatory and voluntary carriage. The SR203 handheld VHF radio boasts exceptional battery life of over 16 hours.

KEY FEATURES:

- FCC & MED Approved
- Efficent transmitter
- Rugged design
- Primary Lithium battery exceeds GMDSS requirements
- Protective battery tab
- Non-hazardous batteries
- 16 hours typical operating life
- Optional rechargeable battery kit
- Laser etched control buttons
- High contrast/backlit digital display and keypad
- 21 Channels

GARMIN

GARMIN - GPSMAP® 78s

For boaters and watersports enthusiasts who want to run with the best, the rugged GPSMAP 78s features a 3-axis compass, barometric altimeter, crisp color mapping, high-sensitivity receiver, new molded rubber side grips, plus a microSD™ card slot for loading additional maps. And it floats!

EXPLORE - GPSMAP 78s comes with built-in worldwide basemap, so you can navigate anywhere with ease. And, like the rest of the 78-series, 78s is IPX7 waterproof and even floats in water.

GET YOUR BEARINGS - GPSMAP 78s has a built-in 3-axis tilt-compensated electronic compass, which shows your heading even when you're standing still, without holding it level. Its barometric altimeter tracks changes in pressure to pinpoint your precise altitude, and you can even use it to plot barometric pressure over time, which can help you keep an eye on changing weather conditions.

SHARE WIRELESSLY - With GPSMAP 78s you can share your waypoints, tracks, routes and geocaches wirelessly other compatible device users. Now you can send the location of your favorite fishing spot to a friend to find. Sharing data is easy. Just press "send" to transfer your information to similar units.

KEEP YOUR FIX - With its high-sensitivity, WAAS-enabled GPS receiver and HotFix™ satellite prediction, GPSMAP 78s locates your position quickly and precisely and maintains its GPS location even in heavy cover and deep canyons. The advantage is clear — whether you're in deep woods or just near tall buildings and trees, you can count on GPSMAP 78s to help you find your way when you need it the most.

ADD MAPS - Adding more maps is easy with our wide array of detailed marine, topographic and road maps, available on microSD card. Conveniently plug in BlueChart® g2 preloaded cards for a great day on the water or City Navigator NT® map data for turn-by-turn routing on roads (see maps tab for compatible maps). The card slot is located inside the waterproof battery compartment, so you don't have to worry about getting it wet. GPSMAP 78s also supports BirdsEye™ Satellite Imagery (subscription required), that lets you download satellite images to your device and integrate them with your maps. In addition, the 78s is compatible with Custom Maps, free software that transforms paper and electronic maps into downloadable maps for your device.

GET CONNECTED - You've been busy exploring and now you want to store and analyze your activities. With a simple connection to your computer and to the Internet, you can get a detailed analysis of your activities and send tracks to your outdoor device using Garmin Connect™. This one-stop site offers an activity table and allows you to view your activities on a map using Google™ Earth. Explore other routes uploaded by millions of Garmin Connect users and share your experiences on Twitter® and Facebook®. Getting started is easy, so get out there, explore and share.

MARINE ELECTRONICS SERVICE INFORMATION

Our Marine Electronics Team sells, installs, services and repairs all types and brands of marine electronic equipment.

We are available 24 hours / 7 days a week. Service requests can be carried out at any port in the Caribbean Region, including Panama, Cuba, Venezuela and Columbia.

Our Electronics Team has been trained and certified by all leading manufacturers including Furuno, Raytheon Anschutz, Simrad, JRC, Sea-Tel, KVH and others.

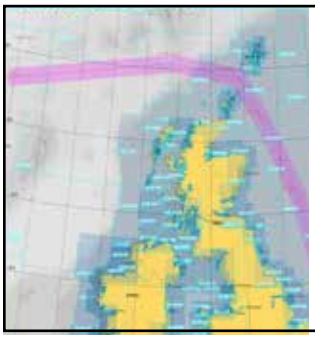
SERVICE DEPARTMENT INFORMATION:
For more information on our services or to schedule a service, please call **1 (868) 235-5406** or send an email to **mcl@mcl.co.tt.**

Charts Publications & Instruments

Charts & Publications

United Kingdom Hydrographic Office

We develop products and services that you can depend on for their accuracy, authority and simplicity. With every advance in technology and every updated tool we restate our commitment to keeping mariners safer at sea.



BESPOKE SERVICES

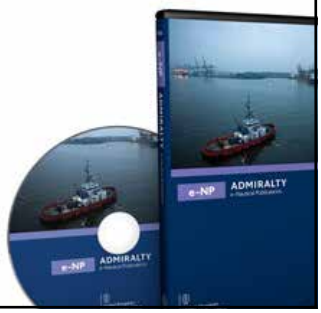
Please note that these bespoke services from the UKHO can now be found on our new corporate site on the www.GOV.uk website. Please follow the link below.

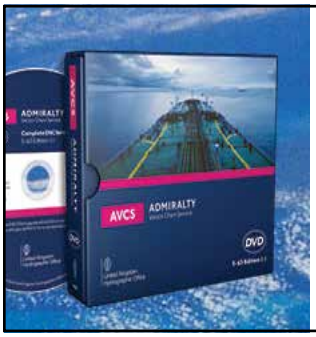
ADMIRALTY e-NAVIGATOR

ADMIRALTY e-Navigator brings world-leading ADMIRALTY Nautical Products & Services together in a single integrated system, making them easier to use and manage than ever before.

e-NAUTICAL PUBLICATIONS (e-NPS)

Bringing improved efficiency and accuracy to the planning process, our world-leading paper-based Nautical Publications are now available as easy to use e-books.





DIGITAL CHARTS

Our electronic charts are available in a selection of formats and combine established expertise with proven technology for peace of mind.

MARITIME SAFETY INFORMATION

The latest safety-critical navigational information is always available through our Notices to Mariners and Radio Navigational Warnings.

PAPER CHARTS

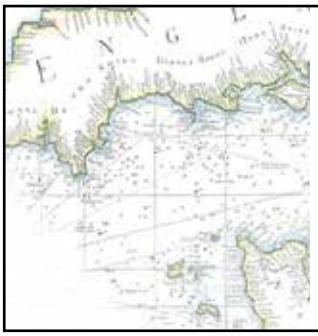
Admiralty paper charts are trusted by mariners worworldwide.

PAPER PUBLICATIONS

Information you can rely on. Our Nautical and Astronomical paper publications are internationally recognised for their accuracy and excellence.

DIGITAL PUBLICATIONS

We have created fully searchable software programs of our most popular publications. They save you time and offer greater functionality than a book.



ADMIRALTY COLLECTION

The Admiralty Collection® is a selection of decorative prints reproduced from original early maps and sea charts.

STEINER
Nothing Escapes You

Commander Global C 7x50

The Commander Global binocular upgrades marine-standard 7x magnification and 50mm objectives with Diamond Marine™ lens coating and high definition optics for astounding clarity, plus an integrated digital compass with electronic magnetic field measurement and automatic declination adjustment for precise readings anywhere in the world. Intuitive to use, easy to read, with a distance-to-object reticle, the Commander Global is the most capable binocular on the water.

The pinnacle of craftsmanship and the ultimate binocular/digital compass combination for confident navigation of high seas around the world.

Magnification 7x
Weight 40.5 oz
Width 8.3
Height 6.1

Commander 7x50

The military-grade, porro prism Commander Series is the marine binocular choice for anyone who makes their living on the water – fishing guides, ship captains, tug boat operators, marine patrol and law enforcement. These binoculars are also for those who live aboard or spend weeks on the water - yacht owners, blue water sailors and racers - who need the best in marine optics. The Commander Series has every feature and all the performance serious watermen demand, backed by Steiner's unrivaled reputation for total performance on land and sea.

Delivers top of the line image clarity, sharp edge-to-edge definition and contrast, and high light transmission for navigating in low light or fog

Magnification 7x
Weight 37.9 oz
Width 8.1

Commander 7x50c

The military-grade, porro prism Commander Series is the marine binocular choice for anyone who makes their living on the water – fishing guides, ship captains, tug boat operators, marine patrol and law enforcement. These binoculars are also for those who live aboard or spend weeks on the water - yacht owners, blue water sailors and racers - who need the best in marine optics. The Commander Series has every feature and all the performance serious watermen demand, backed by Steiner's unrivaled reputation for total performance on land and sea.

Integrates a fluid damped, HD stabilized illuminated compass with ranging reticle into the binoculars, creating one accurate and invaluable viewing/navigation tool

Magnification 7x
Weight 40.2 oz

Commander 7x30c

The military-grade, porro prism Commander XP Series is the marine binocular choice for anyone who makes their living on the water – fishing guides, ship captains, tug boat operators, marine patrol and law enforcement. These binoculars are also for those who live aboard or spend weeks on the water - yacht owners, blue water sailors and racers - who need the best in marine optics. The Commander XP Series has every feature and all the performance serious watermen demand, backed by Steiner's unrivaled reputation for total performance on land and sea.

Carries the illuminated, HD stabilized compass and ranging reticle for exceptional viewing and navigation performance in a more compact frame

Magnification 7x
Weight 19.6 oz
Width 6.5

STEINER
Nothing Escapes You

Navigator Pro 7x50c

The porro prism Navigator Pro Series is the choice for recreational boaters, weekend anglers and hobby sailors. It offers exceptional performance for the price with many of the features found on premium, world-famous Steiner marine binoculars. Although not built to military specification, they will provide a lifetime of use for most water enthusiasts.

Carries an HD fluid-damped, illuminated analog compass for easy-to-read navigation

Magnification 7x
Weight 39.6 oz
Width 8.1
Height 5.5

Navigator Pro 7x50

The porro prism Navigator Pro Series is the choice for recreational boaters, weekend anglers and hobby sailors. It offers exceptional performance for the price with many of the features found on premium, world-famous Steiner marine binoculars. Although not built to military specification, they will provide a lifetime of use for most water enthusiasts.

Delivers excellent image clarity, sharp definition and contrast, and oversized light-gathering objective for bright picture in low light

Magnification 7x
Weight 36.3 oz
Width 8.1
Height 5.5

Navigator Pro 7x30c

The porro prism Navigator Pro Series is the choice for recreational boaters, weekend anglers and hobby sailors. It offers exceptional performance for the price with many of the features found on premium, world-famous Steiner marine binoculars. Although not built to military specification, they will provide a lifetime of use for most water enthusiasts.

Equipped with an HD stablilized compass in a compact frame, for clear images and reliable headings in an easy-handling size

Magnification 7x
Weight 19.7 oz
Width 6.5
Height 4.2

Marine 7x50

The perfect, first pair of quality, water-going binoculars for enthusiasts who want the most performance for their money

Magnification 7x
Weight 36.3 oz
Width 8.1
Height 5.5

C.PLATH
HAMBURG

BN50
weems
PRO
7x50

The Weems PRO binoculars are loaded with features for discriminating professional sailors and mariners. Built to exceed military specifications for superior optical performance and durability, they show their true worth by providing high resolution and brightness at dusk and dawn. Featuring "flat field" lenses that result in excellent edge-to-edge sharpness and optimal eye relief, these exceptional binoculars provide superb image quality even when wearing glasses. Their tough rubber-armored exterior for a non-slip grip and their shock and water resistance make the Weems PRO binoculars the ideal companion when the going gets tough.

- Rubber-armored & fold-down eye cups
- Soft black case, padded neck strap, and lens covers included
- Two year warranty

Dims: 198x215x72mm (7.8x8.5x2.8 inches)

BN40
weems
CLASSIC
7x50

The Weems Classic binoculars are built to the same military specifications as our PRO binoculars and have the same low light capabilities and resolution but with classic optical design that is lighter and slightly smaller. These seaworthy companions are found on military and commercial ships and pleasure boats alike.

- Rubber-armored & fold-down eye cups
- Soft black case, padded neck strap, and lens covers included
- Two year warranty

Dims: 192x202x66mm (7.6x8.0x2.6 inches)

BN20C
weems
EXPLORER
7x50

An excellent value and popular choice for all, these Explorer binoculars float, are waterproof and have the added feature of an illuminated compass and range finder reticle. The ability to take accurate compass readings on the water makes these lightweight binoculars perfectly suited for safe navigation while racing or coastal cruising.

- Illuminated compass and range finder reticle
- Fold-down eye cups
- Soft black case, padded neck strap, and lens covers included
- Two year warranty

Dims: 150x200x68mm (5.9x7.9x2.7 inches)

BN10
weems
SPORT
7x50

Lightweight and easy to focus on objects near and far, our center focus Sport binoculars live up to their name as the perfect mate for boating, sporting events, bird watching, and sightseeing.

- Fold-down eye cups
- Soft black case, padded neck strap, and lens covers included
- Two year warranty

Dims: 180x198x64mm (7x7.8x2.5 inches)

BN29

weems

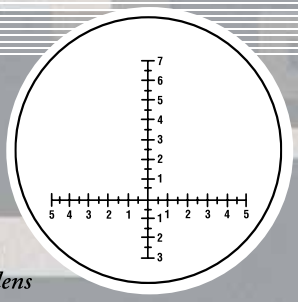
APACHE 7x28

Apache [mil spec binocular (M-24)]

Our pocket size binoculars with individual focus are built to exceed the US military M24 specification. These rugged binoculars are waterproof and shockproof making them suitable for use in the harshest environments. The Apache performs very well in lowlight conditions. The lens mil-scale range finding reticle for estimating range makes them ideal for hunting and outdoor sports where small, lightweight and high quality binocular are required.

- Rubber-armored & fold-down eye cups
- Neck strap and lens covers included
- Two Year Warranty

Dims: 129x118x38mm (5x4x1.5 inches)



Reticle scale as seen through left lens

Distance solution using reticle:

Formula using binocular reticle & Vectormaster (501v)

$$\frac{1000 \times \text{Object of Known Height (m)}}{\text{Reticle Scale Reading}} = \text{Distance in Meters}$$

(look above **10**)

Example: Charted 20m high lighthouse

$$\frac{1000 \times 20\ (m)}{16} = 1250m$$

The reticle reads 16 when viewing the lighthouse *(as shown below):*

Distance = 1000 x 20/16 = 1250m
or One and a quarter kilometres

C. PLATH HAMBURG

COMPASSES SINCE 1837

"Precision out of passion" is the motto of C-Plath, the renowned German manufacturer of magnetic compasses for 150 years. C-Plath Hamburg has set an industry standard of excellence for compasses that are unsurpassed in accuracy, reliability and durability in extreme physical conditions that include rough seas and punishing climates.

Built to function reliably in environments where strong vibrations, saltwater, heat, humidity and cold are the norm, these exceptional compasses are found on any boat where safety and performance are the top priority. Weems & Plath is the sole distrubutor of C-Plath compasses in North America.

C. PLATH MERKUR®

Features of the Merkur compass series:

120 mm (4.72 inches) apparent card diameter

For use on sailboats, motorboats and lifeboats

- Extremely shock-resistant
- Well suited for high speeds
- Strong glass dome - blocks UV rays
- Various mounting options
- Two year warranty on compass
- Lifetime warranty on dome
- Certified by GL (Notified Body 0098) according to the requirement 96/98/EC in accordance with module B and D (Wheelmark).

Technical data:

- 12-V or 24-V lighting, red, glare free
- Compass weight: 1.6 kg/3.5 lbs
- Deviation error ≤ 1°
- Friction error ≤ 1°
- Lag error ≤ 2°
- Oscillation period ≥ 4.7 seconds
- Temperature range: -30°C to 60°C (-22°F to 140°F)
- Cut-out diameter: Ø 139 mm (5.5 inches)
- Pitch diameter of flange: 155.5 mm (6.1 inches)
- Installation depth: 72 mm (2.8 inches)

Accessories: (for Merkur)
(not pictured)

73 115 bracket holder	**33 769** lamp holder
73 137 compensation capsule	**41 258** 12v compass bulb
73 212 black binnacle	**73 370** back covers

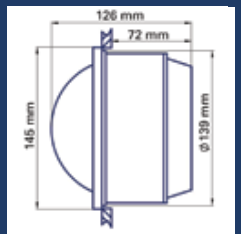
73 430

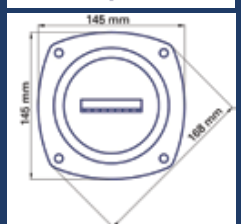
High Speed

Merkur VZ-E [Type: 2074]

Flush bulkhead mounting:

- double, clear 5° compass card with six lubber lines
- readable from top & front
- unlimited rolling freedom
- heel angle up to 45°
- pitch angle +/-60°



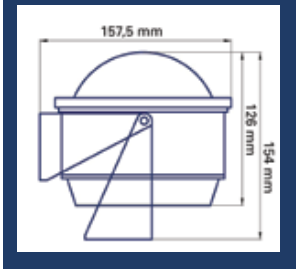


73 170

Merkur VZ-R [Type: 2069]

Universal compass for bulkhead, sliding hatch & overhead mounting:

- bracket mounting and quick-release fastener
- double, clear 5° compass card with six lubber lines
- readable from top & front
- unlimited rolling freedom
- heel angle up to 45°
- pitch angle +/-60°



73 319

NSN# 6605014410236

Merkur SR [Type: 4221]

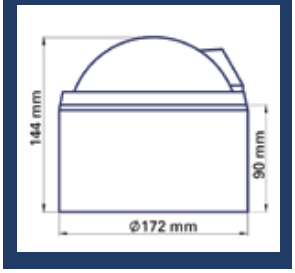
Lifeboat

Console compass:

- clear 5° compass card with three lubber lines

Two mounting types:

- table-top console Ø 172 mm (6.8 inches) for assembly on control panel
- bracket for bulkhead, binnacle or helm station
- round flange



73 318

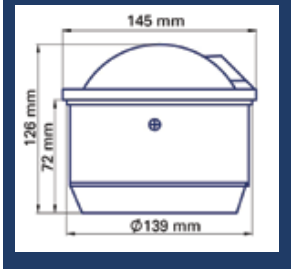
NSN# 6605013603847

Merkur SE [Type: 4220]

Lifeboat

Horizontal mounting compass:

- clear 5° compass card with three lubber lines
- high resistance to horizontal acceleration
- square flange



73 172

NEW

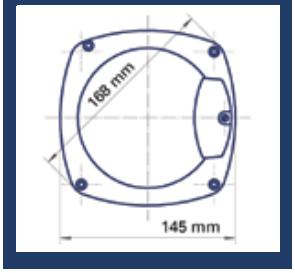
2° Card

Merkur R2° [Type: 2631]

Lifeboat

Lifeboat compass:

- horizontal mounting
- clear 2° compass card with one lubber line
- extreme vibration-resistance
- square flange



C. PLATH VENUS®

Features of the Venus Compass:

150 mm (5.75 inches) apparent card diameter

For use on larger motor and sailing yachts

- 6 lubber lines: 5 yellow lubber lines and 1 curved main lubber line
- 1 shadow pin for relative bearing
- Choice of 1° or 5° compass card for all magnetic zones North & South hemispheres
- Extremely durable due to aligned gimbal system
- Corrosion resistant aluminum, anodized, powder-coated case
- Strong glass dome - blocks UV rays
- Two year warranty on compass
- Lifetime warranty on dome
- Certified by GL (Notified Body 0098) according to the requirement 96/98/EC in accordance with module B and D (Wheelmark)

VENUS

15 cm
5.75 "

Technical data:

Venus console compass for flush mounting in cockpit floor, deck, helm station, or steering pedestal.

- 12-V or 24-V lighting, red, glare free
- Compass weight: 3.1 kg (6.8 lbs)
- Lubber line error ≤ 1°
- Deviation error ≤ 1°
- Friction error ≤ 1°
- Lag error ≤ 2°
- Oscillation period ≥ 4.7 seconds
- Temperature range: -30°C to 60°C (-22°F to 140°F)
- Cut-out diameter Ø 152 mm (6 inches)
- Pitch diameter of flange: 164 mm (6.5 inches)
- Installation depth: 100 mm (4 inches)
- Height with binnacle: 195 mm (7.7 inches)
- Binnacle diameter: 170 mm (6.7 inches)
- Weight of binnacle: 1.2 kg (2.6 lbs)

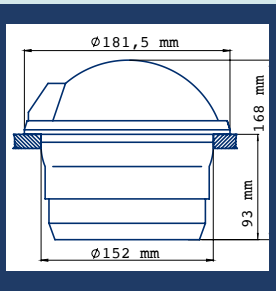
73 322
(1 degree card)

Venus H [type: 2795]

Compass for flush mounting in cockpit floor, helm station, deck, or steering pedestal.

73 245
(5 degree card)

Venus H [type: 2795]



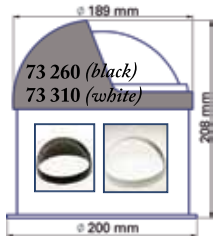
Accessories:
(for venus H)

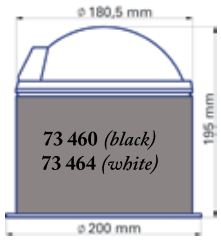
73 467
compensation capsule

Venus Binnacle

Venus Binnacle shown with Hood

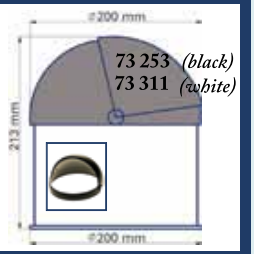
Hood





Binnacle
(for flush mounting on helm station or steering pedestal)

Hood & Visor



C.PLATH
HAMBURG

HAND BEARING COMPASS "HOCKEY PUCK"

NEW 2005

- To take bearing of a point, compass is held near eye and read down line of sight. Stable bearing appears in prism in perfect focus day or night
- For quick reference, a heading can be determined by looking straight down at compass and reading degree shown with magnifying lens
- Contrasting black and red numbers on compass card make it quick, clear and easy to read
- Compass features liquid-dampened card
- Accurate to within 1°
- Improved photoluminescent night lighting that quickly charges by placing compass momentarily under bright light. No batteries required.
- Colorful, sturdy rubber housing protects compass
- Includes an integral lanyard, which serves as convenient neck or wrist strap
- Includes directions for use

Dims: 1 ¼" x 3 ¼" diameter (30 x 81 mm)
Wt: 0.29 lb (132 g)

HELMSMAN FLUSH MOUNT COMBIDIAL

RITCHIE® NAVIGATION

HELMSMAN COMPASS FEATURES

- 3 3/4" CombiDamp Dial
- Easily Installed, Fits 4" (10.16 cm) Mounting Hole. Click here to view a template of the mounting hole (NOTE: Adobe versions may differ;download and print the template Actual size).
- Exclusive Built-in Green NiteVu Night Illumination
- Built-in Compensators to Easily Adjust for Deviation
- Scientifically Matched Sapphire Jewel and Hardened Steel Pivot Dial Movement
- Powerful DirectiveForce Magnets for Fast Heading Lock-on
- Movable Sun Shield
- 45 Degree Lubber Lines
- High Temperature Composite Construction for Extended Operating Range
- Adapter Rings Available. Sold separately. 6" (15.24). Retrofits Existing
- Mounting Hole for Model No. HF-73 order H-ABLK. For Model No. HF-73W order H-AWHT.
- 100% Repairable
- Exclusive 5-Year Ritchie Warranty

COMPASS SERVICE INFORMATION

Compass adjustments, service and repairs.

SERVICE DEPARTMENT INFORMATION:

For more information on our services or to schedule a service,
please call **1 (868) 235-5406**
or send an email to **mcl@mcl.co.tt.**

Chains, Rope & Rigging

Chains, Rope & Rigging

TYPE OF ROPE:	AVAILABLE SIZES:
NYLON	Ranging from ¼” to 5”
MEGA	2”, 3”, 4”
POLYPROPLYENE	Ranging from ¼” to 3”
ULTRABLUE	3 ¼”

NYLON ROPE

POLYPROPLYENE ROPE

NYLON ROPE WITH THIMBLE

MEGA ROPE

RIGGING

Our Company manufactures Pilot Ladders, Gangway nets and Knotted ropes to customers’ specifications. Please contact our **Sales Department** for more information.

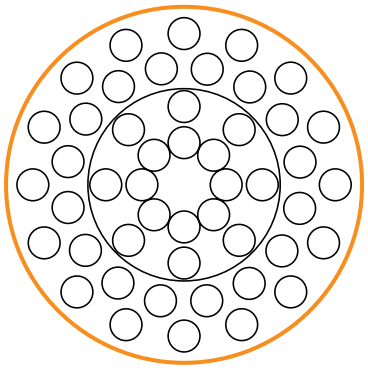
CHAIN

Our Company supplies grades U3, U2 and Grade 80 Stud Link chain. We also sell Kenter Links and shackles.

SHACKLES

Hawsers

SINGLE POINT MOORING (SPM) MOORING HAWSERS



Benefits

High strength efficiency
Low maintenance
Long service life

Viking Braidline Polyester

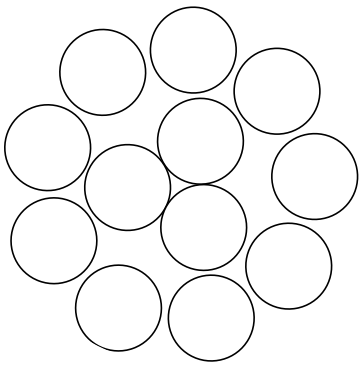
Viking Braidline Polyester is a torque balanced, flexible construction which distributes the weight and strength equally between the sheath and the braided core.

Viking Braidline offers a higher elongation than Superline constructions and is suitable for many shock load applications.

Technical data

Material:	High tenacity polyester
Construction:	Braidline torque balanced
Colour:	Natural white
Relative density:	1.38
Melting point:	256˚C
Water uptake:	Low
UV resistance:	Excellent
Abrasion resistance:	Very good

SINGLE POINT MOORING (SPM) PICK UP/MESSENGER ROPES



Benefits

Buoyant
Easy to handle
Low maintenance
Long service life

TQ12

The TQ12 is a torque balanced, flexible 12 strand rope construction. Manufactured using high tenacity polyolefin fibres, the TQ12 is ideal for Pick Up/Messenger applications.

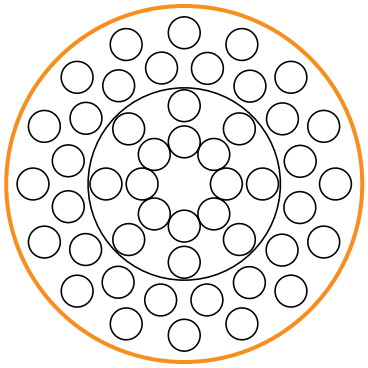
The full UV stablility and low water uptake are critical to good performance in CALM Buoy applications where the rope may remain immersed for prolonged periods.

Technical data

Material:	High tenacity poyolefin
Construction:	12 strand torque balanced
Colour:	Yellow
Relative density:	0.91
Melting point:	170˚C
Water uptake:	Low
UV resistance:	Fully UV stabilised
Abrasion resistance:	Moderate

BRIDON

SINGLE POINT MOORING (SPM) MOORING HAWSERS



Viking Braidline Nylon Super Hawser

Viking Braidline Nylon Super Hawser is a balanced, flexible construction which distributes the weight and strength equally between the sheath and the braided core.

Viking Braidline offers a higher elongation than Superline constructions and is suitable for many shock load applications.

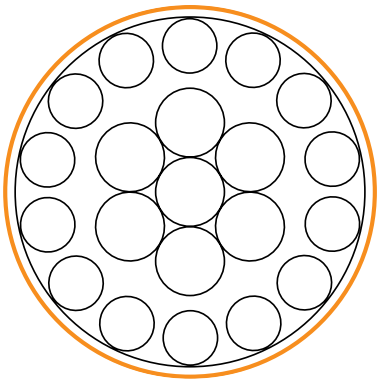
Benefits

- Easy to handle
- Low maintenance
- Long service life

Technical data

Material:	High tenacity nylon
Construction:	Braidline torque balanced
Colour:	Natural white
Relative density:	1.14
Melting point:	218˚C
Water uptake:	Up to 10%
UV resistance:	Good
Abrasion resistance:	Good

SINGLE POINT MOORING (SPM) MOORING HAWSERS



Superline Nylon OCIMF 2000

Bridon Superline is a torque balanced circular braided construction consisting of an outer protective braided jacket over a central group of parallel low twist cores.

In the as new condition Bridon Superline offers a slightly stiffer solution than the Viking Braidline Construction.

Benefits

- OCIMF 2000 Compliant
- High strength efficiency
- Low maintenance
- Long service life

Technical data

Material:	High tenacity nylon
Construction:	Superline torque balanced
Colour:	Natural white, blue marker
Relative density:	1.14
Melting point:	218˚C
Water uptake:	Up to 10%
UV resistance:	Good
Abrasion resistance:	Good

Fire Safety Products

CO2 SUPRESSION SYSTEM
Extinguishing with Carbon Dioxide

RELIABLE EXTINGUISHING

Quick and effective fire fighting is the strong point of carbon dioxide extinguishing systems. Extinguishing with carbon dioxide is achieved by displacing the oxygen from a fire source quickly - and thus starving the fire. The high heat binding capacity of the carbon dioxide causes the withdrawal of energy from the source of the fire, which enhances the extinguishing effect.

ONLY POSSIBLE WITH CARBON DIOXIDE

Carbon dioxide extinguishing systems are especially well-suited for high risk areas, where, in the event of a fire, it is necessary to keep the protected objects available and functioning:

- to minimize operational interruptions after a fire,
- to prevent reactions between the burnt material and the extinguishing agent,
- to prevent damage from the extinguishing agent itself and

APPLICATIONS

Due to its outstanding properties, the carbon dioxide extinguishing system is the ideal fire protection solution for many areas of application. Typical areas of application for the carbon dioxide extinguishing system are:

- rolling mills
- turbines
- transformers and substations
- warehouses for hazardous materials
- machine tools and special metal processing systems
- paint and varnish manufacturing and processing areas
- painting and powdercoating booths (ESTA)
- hydraulic systems
- false floors and cable shafts
- silos and dust filters
- printing machines
- engine test benches and ship engine compartments
- switching and control systems

NUMEROUS ADVANTAGES

- Suitable both for the protection of rooms and of free-standing objects.
- Carbon dioxide is a natural component of the ambient air and is therefore readily available.
- Extinguishes without residue and without affecting the protected objects.
- Chemical reactions as a result of extinguishing are practically impossible.
- The extinguishing agent is electrically non-conductive and is therefore suitable also for protecting electric system components.
- The homogeneous distribution of extinguishing agent and the fast concentration buildup provide for optimum effectiveness.
- After a fire, there is no extinguishing agent residue and therefore no cleanup expense.
- The extinguishing effect is ensured even at low ambient temperatures.
- Documented reliable extinguishing provides maximum protection of assets.
- The system technology for the components has been tried and tested for decades.
- The modular, multi-zone system can easily be adapted for nearly any renovation or expansion measures.
- Carbon dioxide extinguishing systems allow particularly space-saving extinguishing agent storage, especially with low-pressure vessels.
- After a fire, the extinguishing system is soon ready for operation again, at a low cost.
- Approvals by certified test authorities and the compliance of the design with national standards ensure acceptance by insurance companies and building authorities.
- If installed, insurance companies grant rebates on fire and fire business interruption insurance.

EVERSAFE

Stored Pressure Foam & Water Portable Fire Extinguishers -*BS EN3 Series & BS EN3 Series - Wheelmark (For Marine Use)*

The range of foam and water extinguishers is certified to BS EN 3 : 1996 and manufactured under an ISO 9001 approved quality system. The cylinders are deep drawn from cold rolled steel, centre welded and pressure tested to twice the extinguisher's working pressure. Cylinders are externally coated with epoxy polyester (with phosphate under treatment) for maximum corrosion resistance and have passed the 480-hour salt spray test. The internal of the extinguisher bodies are coated with "performance polymer alloy" to prevent corrosion. The hot forged brass valve is fitted with a pressure indicator and can be tested "in service" as required by BS EN 3 : 1996. These extinguishers have also passed the 35KV electrical conductivity test BS EN 3-2 : 1996 Clause 4 Annex A.

FOAM

Foam extinguisher, with aqueous film forming addictive (AFFF), offers improved fire extinguishing abilities over water based extinguisher . The foams forms an aqueous film which helps to prevent the release of fuel vapours while the foam blanket (from which the film forming liquid drains) excludes oxygen from the fuel surface, extinguishing the fire and preventing re-ignition. The water content of the foam provides a cooling effect. The film forming liquid, although heavier, floats on the surface of the fuel, due to it's surface tension. Effective on B class hydrocarbon fuel fires such as oil , petroleum, aviation fuel, and is particularly suitable where fast fire knockdown is essential. It is compatible with all dry powders. It's excellent wetting characteristics make it useful in combating Class A fire as well.

WATER

The most commonly used type of fire extinguishant for Class A fires involving carbonaceous materials such as wood, textiles by cooling the fire and removing the heat needed for combustion.

Cartridge Operated Type Dry Powder, water and Foam Portable Fire Extinguishers -*BS EN3 Series & BS EN3 Series - Wheelmark (For Marine Use)*

The range of portable cartridge operated type fire extinguishers is certified to BS EN 3: 1996 and manufactured under an ISO 9001 approved Quality System. Available in a variety of sizes for dry powder, foam and water models. The cylinders are deep drawn from cold rolled steel, centre welded and pressure tested to twice the extinguisher's working pressure. Cylinders are externally coated with epoxy polyester (with phosphate under treatment) for maximum corrosion resistance and have passed the 480-hour salt spray test . The water and foam extinguishers are internally coated with operating brass headcap is fitted with safety relief value.

DRY POWDER (ABC)

ABC dry powder extinguisher is one of the most versatile extinguishants and is effective on Class A (carbonaceous) fires, Class B (flammable liquid) fires, and Class C (flammable gas) fires. They are also suitable for use on live electrical fires.

WATER

The most commonly used type of fire extinguishant for Class A fires involving carbonaceous materials such as wood, textile by cooling the fire and removing the heat needed for combustion.

FOAM

Effective on B Class hydrocarbon fuel fires such as oil, petroleum, aviation fuels, and is particularly suitable where fast fire knockdown is essential. It is compatible with all dry powders. It's excellent wetting characteristics make it useful in combating Class A fire as well.

Carbon Dioxide Portable Fire Extinguishers -*BS EN3 Series & BS EN3 Series - Wheelmark (For Marine Use)*

The range of carbon dioxide extinguishers is certified to BS EN 3: 1996 and manufactured under an ISO 9001 approved Quality System. Available in both aluminium alloy (extremely light weight) and steel (Cromoly) cylinders. The extinguishers are designed to extinguish Class B fires, flammable liquid. CO_2 is non-toxic, non-conductive and non-corrosive inert gas which disperses without leaving any residue after discharge. CO_2 is safe to use on live electrical fires. CO_2 is extensively used throughout the food industry for it's cleanliness in application. CO_2 can burn the skin if the extinguisher is held incorrectly during discharging. We recommend that for safety and effectiveness, all personnel are trained in the operation of portable fire extinguisher.

Stored Pressure Dry Powder Portable Fire Extinguishers -*MS1539 Series - FD Series*

Eversafe stored Pressure Portable Dry Powder Fire Extinguishers is truly an effective combination of well designed and manufactured hardware with the rigid quality controlled dry chemical powder which makes it an economical investment for your fire protection.

ABC Dry Powder Fire Extinguisher are effective on all types of fires-class A, B, C. Our dry powder agents monoammonium phosphate and ammonium sulphate based, are non-conductors of electricity. When discharged, the heat from the fire is greatly reduced. Firstly, because a cloud of powder provides an effective heat-shield. Secondly, becuase there is an immediate knockdown of the flames. Hence, the flames are suffocated and any embers are extinguished by a layer of melted powder.

Premix Foam, Water and Carbon Dioxide Portable Fire Extinguishers - *MS1539 Series - FD Series*

Eversafe Portable Water and Premix Foam (AFFF) Fire Extinguishers are specially designed and manufactured for maximum fire killing ability with simplicity of operation and maintenance. The internal of the extinguishers are lined with models come with a squeeze grip controllable discharge brass headcap / valve with steel operating levers.

Aqueous Film Forming Foam (AFFF) extinguishers are suitable for use on Class B fires involving flammable liquids such as paint, oil and petrol. It can be also used on Class A fires. The foam forms a blanket over the burning liquid and seals it from oxygen thus eliminates burning and re-ignition.

Water extinguishers effectively extinguish Class A fires involving carbonaceous materials such as wood, paper, and textiles. Water spray provides better wetting action that penetrates underlaying burning material and assist in reducing heat.

Water should NOT be used on class B fires (flammable liquids) as its action is likely to spread and splash the burning liquid thus making the fire most dangerous.

Carbon dioxide gas is an efficient fire extinguishing agent which offers unique properties to the user. The colourless and odourless gas is heavier than air and works by smothering the flames and reducing the oxygen content of the air around the fire.

Carbon dioxide is the ideal agent for use on Class B (flammable liquides) and Class C (flammable gas) fire. It is non-conductive and therefore particularly effective against fires in electrical plant and equipment.

MS
SIRIM
MS 1539 : Part 1 : 2002

APPROVED BY :
- FIRE SERVICES DEPARTMENT
- SIRIM

Mobile Dry Powder Fire Extinguishers

Eversafe Mobile dry powder fire extinguishers are effective on all types of fire - Class A, B, C. Our dry powder agents - monoammonium phosphate and ammonium sulphate base - are non-conductors of electricity. When discharged, the heat from the fire is greatly reduced. Firstly, because a cloud of powder provides an effective heat-shield. Secondly, because there is an immediate knockdown of the flames. Hence, the flames are suffocated and any embers are extinguished by a layer of melted powder.

Mobile Foam Fire Extinguishers

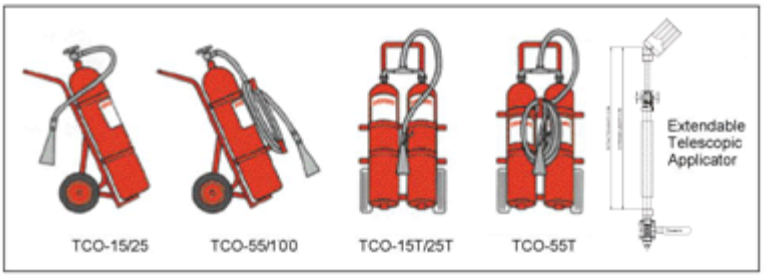
Eversafe Mobile Fire Extinguishers are produced specifically for use with Aqueous Film Forming Foam (AFFF 6%) which is remarkably effective when fighting Class B (flammable fuel) fires. The unique section of AFFF stems from it's ability to make water float on flammable fuels. The flame quenching foam blanket rapidly spreads over the surface of the fuel and the aqueous solution floats over the surface to provide a vapour seal. This aqueous film foaming action enhances the extinguishment and prevents reflash of the fuel.

Mobile Dry Powder Fire Extinguishers

Carbon dioxide gas is an efficient fire extinguishing agent which offers unique properties to user. The colourless and odourless gas is heavier than air and works by smothering the flames and reducing the oxygen content of the air around the fire. Carbon dioxide is the ideal agent for use on Class B (flammable liquids) and Class C (flammable gas) fires. It is non conductive and therefore particularly effective against fires in electrical plant and equipment. Carbon dioxide extinguishers are

used throughout industry as a protection against complex industrial fires when dangerous chemical and gasses are involved. Carbon dioxide does not deteriorate with storage or freeze in the container.

After use carbon dioxide disperses without leaving any contamination or corrosive residue but if used in a confined area normal ventilation procedures should be followed.



FIRETRACE®
AUTOMATIC FIRE SUPPRESSION SYSTEMS

PROTECTING YOUR MICROENVIRONMENT

THE FIRETRACE ADVANTAGE

The effectiveness of a genuine Firetrace system comes from our proprietary, polymer tubing that will rupture when exposed to a flame. This specialized Firetrace Detection Tubing combines leak resistance, flexibility, durability and precise temperature sensitivity, allowing it to react quickly when the heat from a fire is present. Our detection tubing connects to one of our custom engineered valves and a Firetrace cylinder that contains the best fire suppression agent for a particular hazard.

Designed for simple installation, often very near the source of a potential fire, Firetrace is a self-activating suppression system that reliably suppresses fires in seconds. We provide a low maintenance, cost-effective solution to the problem of "micro-environment" fire protection. Micro-environments are applications where the hazard is typically contained within a critical enclosure, such as equipment, machines, vehicles, or storage compartments. Firetrace systems can be installed in virtually any enclosed space where high-value assets are located or where an increased risk of fire could be mitigated by an automatic fire suppression system.

CHOOSING THE RIGHT AGENT

Firetrace's systems are compatible with most commercially available fire suppression agents, including:

- FM-200®
- HFC-23
- HFC-236ea
- HFC-125
- Foam
- CO_2
- 3M™ Novec™ 1230 Fluid
- Dry Chemical (ABC, BC, D)

FIRETRACE SYSTEMS

- Are the only systems of their type to carry major listings and approvals from UL, ULC, FM, CE and more than 20 other international agencies.
- Are totally self-contained, do not require any type of outside electrical source and will remain totally operational during unexpected power outages.
- Do not require an expensive control panel and are the most cost effective automatic fire suppression system available.
- Can be designed with most commercially available agents including clean agents, foam and dry chemical, to ensure the best agent is used fo an application.
- Simple design and application can normally be installed in a few hours, significantly reducing expensive labor costs.
- Feature reliable detection tubing that virtually eliminates false discharges and subsequent costly down time and expense.
- Flexible detection tubing can provide protection in difficult and hard to reach areas where other detection methods cannot be used.
- Rugged detection tubing can be used in harsh environments where other types of detection would quickly deteriorate and render the system inoperable.
- Are supported by a network of over 250 distributors worldwide to assure your system is maintained to the requirements of the manufacturer and the AHJ.

FIRETRACE®
AUTOMATIC FIRE SUPPRESSION SYSTEMS

CNC Machines

Enclosed automated milling machines; EDM machines; robotic welding machines; plastic injection molding machines

Electrical Cabinets and Controls

Computer racks; PLC & process automation control cabinets; critical data processing equipment; UPS cabinets; medical equipment; switchgears

Industrial Equipment

Forklifts; plant machinery engine protection; paper pulping machines; farming equipment

Fume Cabinets

Chemical storage; research and development labs; chemical production; pharmaceutical labs; university and school labs

On-Road Vehicles / Mass Transit

Buses; electric trains; school buses; paratransport vehicles; emergency vehicles; shredder trucks

Direct Release Systems

The Direct Release System utilizes the Firetrace Detection Tubing as both the fire detection device and the fire suppressant delivery system. The portion of the tube nearest the hottest point of the fire ruptures, forming an effective discharge “nozzle”. The pressure drop in the tube releases the entire contents of the cylinder through this nozzle.

Indirect Release Systems

With the Indirect Release System, the Firetrace Detection Tubing is used only as a detection device. The fire suppression agent is delivered via copper tubing, stainless steel tubing or braided hose. Once the tube “bursts”, the suppressant is discharged through strategically placed nozzles within the protected enclosure.

Filmfoam 913K - AFFF 3%

Filmfoam 913K is a superior quality synthetic Aqueous Film Forming Foam (AFFF) concentrate for extinguishing and securing flammable hydrocarbon liquid fires.

Filmfoam 913K is a unique combination of hydrocarbon and fluorochemical surface active agents. It produces a vapour sealing aqueous film that spreads rapidly over the fuel surface to provide rapid control and extinguishment.

- Film forming for fast flame knockdown and extinguishment.
- Burnback resistance and post fire security.
- Foam blanket reseals when ruptured by personnel or equipment.

APPLICATION

Filmfoam 913K is used in high risk situations where hydrocarbons (such as crude oil, gasoline, diesel fuel, and aviation kerosene) are stored, processed, or transported. It is used extensively on Rapid Intervention Vehicles (RIV) at major international airports and military bases where fast extinguishment with limited quantities of foam is essential for saving life. Other applications include hydrocarbon storage tanks, process areas, warehouses, road/rail loading racks, power stations, marine terminals and offshore platforms.

Filmfoam 913K provides a vapour suppressing foam blanket on unignited hydrocarbon spills.

Filmfoam 913K can also be used as a wetting agent in combating fires in Class A materials such as wood, paper and tyres.

PERFORMANCE

The fire performance of Filmfoam 913K is measuresd primarily against Underwriters Laboratories Standard UL 162 (7th Edition).

APPROVALS

- Filmfoam 913K is UL Listed.
- Independently tested and certified
- ICAO Level B

EQUIPMENT

Filmfoam 913K is intended for use at 3% (3 parts concentrate to 97 parts water). Filmfoam 913K is readily proportioned using conventional foam proportioning equipment such as portable and fixed (in-line) foam venturi proportioners, handline nozzles/branchpipes with pick-up tubes, balanced pressure variable flow proportioners, balanced pressure bladder tank proportioners, and around-the-pump proportioners.

Filmfoam 913K can be used with air aspirating discharge devices such as low expansion branchpipes, monitors, top pourer sets, rimseal foam pourers, foam/water sprinklers, and base (sub-surface) injection systems.

Filmfoam 913K can be used with non-aspirating discharge devices such as spray/fog branchpipes and nozzles, monitors, and spray/fog sprinklers.

However, non-aspirated application is not recommended as the primary method of attack for major fires where a stable foam cover is essential.

COMPATIBILITY

Filmfoam 913K is suitable for use in combination with:

- Soft or hard, fresh, brackish or sea water.
- Dry powder extinguishing agents either separately or as twin agent systems.
- Expanded protein based or synthetic foams for application to a fire in sequence or simultaneously.

CHEMEX

3F

Fluorosynthetic Foam AFFF

PHYSICAL DATA	CHEMEX 136		
Appearance /colour	Light yellow liquid		
Concentration of use	1 %3	%	6 %
Specific Gravity at 20°C	1.01	1.01	1.00
Viscosity at 20¡C (c Stokes)	12	22	
Freezing point	-21¡C-	10¡C-	5¡C
Ph at 20¡C8			
Sediments after ageing		0 %	
Surface tension (mN/m)		19	
Interfacial tension (mN/m)		2	
FOAM QUALITY			
Low Expansion		10	
Drainage Time 25% / 50%		3 min. / 5 min.	
Medium Expansion		70	

Foam Expansion values depend on the equipment

PERFORMANCE & WARRANTY

CHEMEX meets international requirements
EN 1568-3: Class IIID
Marine: BV

CHEMEX can be used with tap and sea water.

CHEMEX can be premixed for sprinklers, bladder tanks...

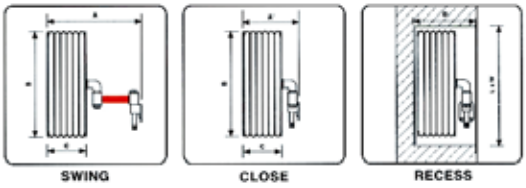
CHEMEX has a 10 years warranty in its original packaging and at storage temperatures 0¡C / +60¡C.

Fire Hose Reels

Manual Swing Type Fire Hose Reels

EH-25-SDM-12GI

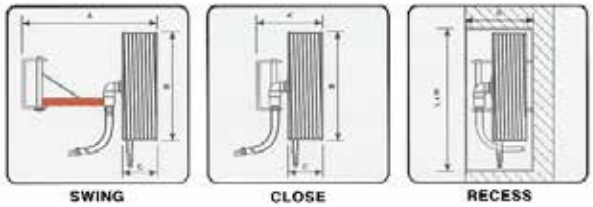
TECHNICAL DATA	DIE CAST
Ordering Code	EH25-SDM-12GI
Disc Dia	565
Hose	25 x 30m
Swing dim. A x B x C	600 x 565 x 190
Close dim. A' x B x C	400 x 565 x 190
Recess dim. L x W x D	760 x 760 x 320
Working / Test Pressure	12 bar / 18 bar
Minimum Flow Rate	34 L/min



Manual Swing Type Fire Hose Reels - *Hose Reel*

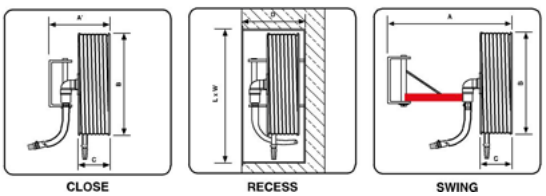
EH-25-SHM-09BR EH-25-SHL-12BR EH-19-SHM-09BR

TECHNICAL DATA	DIE CAST		
Ordering Code	EH25-SHM-09BR	EH25-SHL-12BR	EH19-SHM-09BR
Disc Dia	565	650	565
Inlet Hose Connection	25 x 1.0m	25 x 1.5m	25 x 1.0m
Hose	25 x 30m	25 x 30m	19 x 30m
Swing dim.A x B x C	575 x 565 x 190	635 x 650 x 160	550 x 565 x 160
Close dim.A' x B x C	290 x 565 x 190	295 x 650 x 160	270 x 565 x 160
Recess dim. L x W x D	700 x 700 x 290	760 x 760 x 250	700 x 700 x 250
Working / Test Pressure	12 bar / 18 bar	12 bar / 18 bar	12 bar / 18 bar
Minimum Flow Rate	34 L/ min	34 L/ min	28 L/ min



Automatic Swing Type Fire Hose Reels

EH-25-SAL-12BR EH-25-SAM-09BR



TECHNICAL DATA	DIE CAST	
Ordering Code	EH25-SAL-12BR	EH25-SAM-09BR
Disc Dia	650	565
Inlet Hose Connection	25 x 1.5m	25 x 1.0m
Hose	25 x 30m	25 x 30m
Swing Dim.A x B x C	635 x 650 x 160	570 x 565 x 190
Close Dim. A' x B x C	295 x 650 x 160	290 x 565 x 190
Recess Dim. L x W x D	760 x 760 x 250	700 x 700 x 290
Working / Test Pressure	12 bar / 18 bar	12 bar / 18 bar
Minimum Flow Rate	34 L/ min	34 L/ min

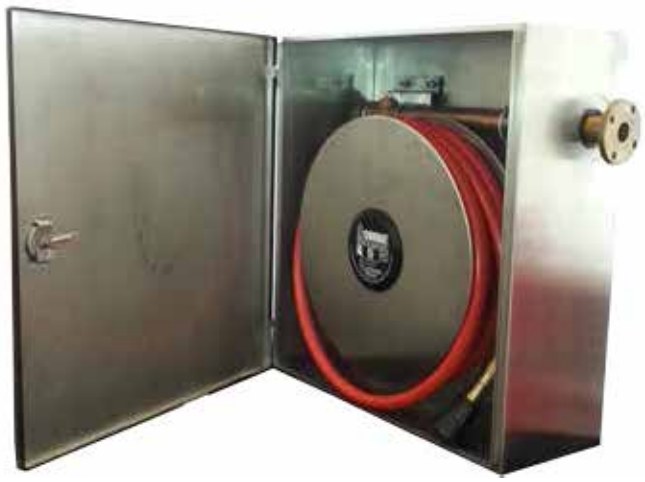
FIRE HOSE PACKAGES

A blanking cap protects the hydrant from dirt and salt water when not in use. A coupling spanner can be stored inside the cabinet to make connection and disconnection possible. A cabinet is needed to store the fire hose.

PRODUCT DESCRIPTION	HYDRANT	FLANKING CAP	FIRE HOSE STANDARD 20 METRE	DUAL PURPOSE NOZZLE
Brass Storz C1	025085 - 2″	1025102	1022684 - 2″	1011223
Aluminium storz C1	025084 - 2″	1025101	1021188 - 2″	1022676
Brass Storz 65	1034607 - 2.5″	1025104	1022690 - 2.5″	1022678
Aluminium Storz 65	1034608 - 2.5″	1025103	1045347 - 2.5″	1022677

Stainless Steel Firehose Box

- Cabinet of SUS316 stainless steel
- Fixed with a hydrant
- Fixed with a hose on a reel
- Fixed with a nozzle attached to the hose
- Mounted on wall by 2 x M8 screws (9mm hole)
- Certified to MED requirements
- Weight: 25 kg
- Dimensions: H 100 x D 40 cm



EVERSAFE

Emergency Escape Breathing Device (EEBD)

Scott's "grab and go" ELSA unit is designed to be put on and activated quickly. The clear polyurethane hood fits easily and securely over the head and provides 360-degree visibility. Since it fits over the entire head, not just the face, a proper fit is not affected by facial hair or glasses.

The elastomeric neck seal and positive pressure airflow ensure that the wearer will not be harmed by airborne contaminants. Fit testing is not required. A sturdy nylon strap allows the tank to be carried, or worn on the neck or shoulder. In hazardous or IDLH environments, ELSA provides 5, 10 or 15 minutes of constant ow emergency air at 40 lpm. Based on orderly egress at 4 mph, a 5-minute ELSA unit allows an individual to travel 1,760 feet. A 10-minute unit allows 3,520 feet. A 15-minute unit allows 5,280 feet.

It's a matter of space and time. When contamination occurs, you need to put space between you and danger. The ELSA Emergency Escape Breathing Device gives you the time to do that safely.

EASY TO FIND. EASY TO USE. EASY TO MAINTAIN.

- Assembled and stored as a contained unit
- Safety orange storage bag
- Detachable hood
- Rechargeable, compressed air cylinder
- See-at-a-glance pressure gauge
- Pictogram instructions

APPROVALS

- ELSA 5-Minute Emergency Escape Device – TC-13F-486
- ELSA 10-Minute Emergency Escape Device – TC-13F-487
- ELSA 15-Minute Emergency Escape Device – TC-13F-530

Scott Sigma 2 - Self-Contained Breathing Apparatus (SCBA)

Scott Safety have over 75 years experience in the design and manufacture of Respiratory Protection Equipment. Approved to EN137:2006 and AS/NZS 1716:2012Type2, the Scott Sigma 2 Type 2 Self Contained Breathing Apparatus combines the highest level of respiratory protection in a simple to operate, cost effective piece of equipment that meets the needs of Industrial and Marine firefighters. Sigma 2 Type 2's proven durability, reliability an appeal is confirmed by an extensive user base who demand a combination of maximum performance and true operational simplicity.

PRODUCT SPECICATIONS

Weight Single conguration (less cylinder) - 2.3kg
Single conguration & Face mask (less cylinder) - 3.0kg

Dimensions Length 600mm
Width 278mm
Depth (with 6.8 litre 300 bar Cylinder) 200mm

APPROVALS

- Certified to AS/NZS 1716:2012
- Approved to EN137:2006 (Type 2)
- MED Shipswheel

- Proven high performance pneumatic system
- Compact first breath activated demand valve with bypass
- Ergonomically designed lightweight backplate and type 2 harness
- Kevlar blend flame retardant webbing with Kevlar cylinder band
- Wide choice of face masks from the Vision 3
- Promask PP and Panaseal ranges
- Corrosion resistant Nickel plated components
- Simple operation for users
- Ideal for Marine, Industrial or Firefighting applications
- All components are user serviceable, low cost and easy to maintain
- Will accept wide range of 200 and 300 barcylinders
- Approved to the MED as a Type 2 set

FIRE EQUIPMENT SERVICE INFORMATION

Our Fire Service Team offers a turnkey service, i.e. pick-up, inspection, refilling, repair, Hydrostatic Testing, and re-certification of many types of fire extinguishers and cylinders for Industrial, Commercial and Marine markets in our DOT approved facility.

In addition, Inspection and Certification of all Marine FFE includes:

- **Suppression Systems (Carbon Dioxide, Dry Powder, Foam and Nitrogen)**
- **Self Contained Breathing Apparatus (S.C.B.A), Emergency Escape Breathing Devices (E.E.B.D) & Medical Cylinders**
- **Fire Extinguishers**

We carry high quality Eversafe Marine Fire Extinguishers in a range of sizes and types (Foam, CO2 and Dry Chemical Powder) of both Wheeled and Portables for On and Offshore use. We hold Manufacturer Certification for Minimax and Sea-Fire. Our facility is Lloyd's Registered, American Bureau Shipping Class Approved, Det Norske Veritas (DNV) and Bureau Veritas (BV).

SERVICE DEPARTMENT INFORMATION:

For more information on our services or to schedule a service, please call **1 (868) 235-5406** or send an email to **mcl@mcl.co.tt.**

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Marine Safety (Jamaica) Limited
Unit R1-3, Sagicor Industrial Complex
7-9 Norman Road
Kingston CSO
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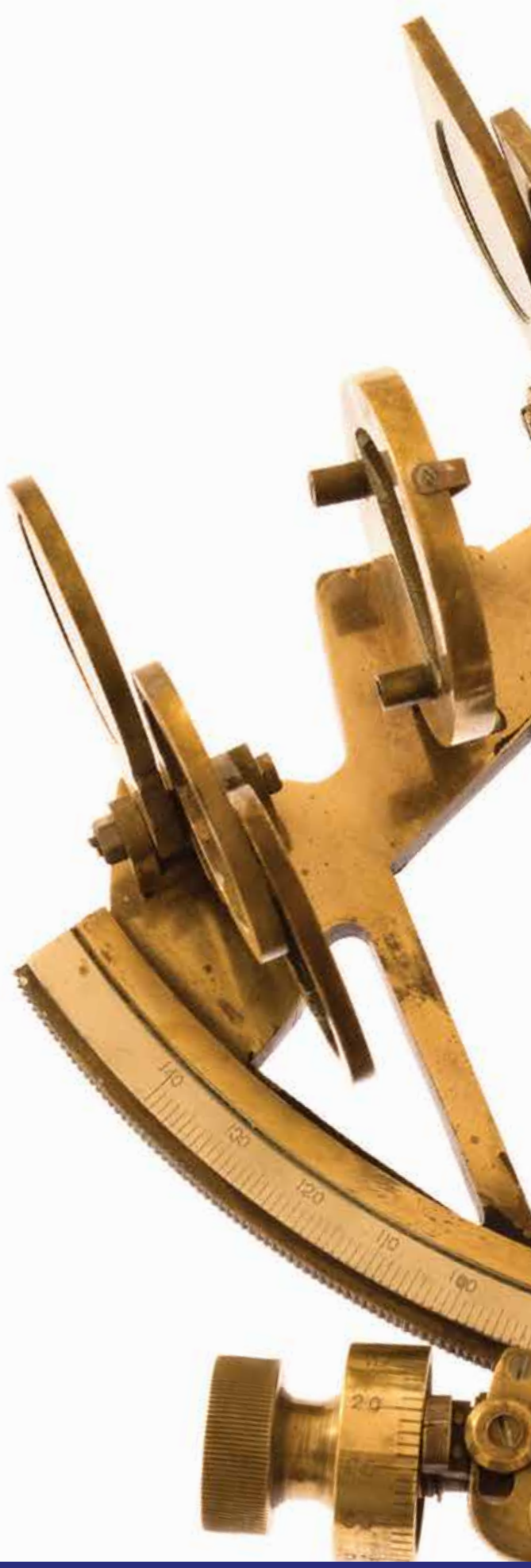
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