



MARIN ARK

Marine Evacuation
Systems



THE RFD MARIN ARK HAS CONTINUALLY EVOLVED IN LINE WITH MARKET DEMANDS AND ITS LATEST DEVELOPMENT ALLOWS THE RAPID & SAFE EVACUATION OF UP TO 860 PASSENGERS IN LESS THAN 30 MINUTES.



INTRODUCING

RFD MARIN ARK

The world's largest Marine Evacuation System



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MARIN ARK2



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MARIN ARK1



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**MARIN ARK
OVER-CAPACITY
LIFERAFT**

The RFD Marin Ark2 Marine Evacuation System, has been honoured with the prestigious Queen's Award for Enterprise 2012, specifically for 'Continuous Innovation and Development' within the Innovation category. The significance of the Queen's Award for Enterprise, announced every year on the Queen's Birthday, acknowledges only an extremely small number of the hundreds of thousands of business applicants. The RFD Marin Ark2 attracted the attention of the honour panel for its global commercial success, innovative design, responsiveness to regulations and most importantly, the need for improved passenger safety.



THE QUEEN'S AWARDS
FOR ENTERPRISE:
2012

WHEN ONLY THE BEST WILL DO

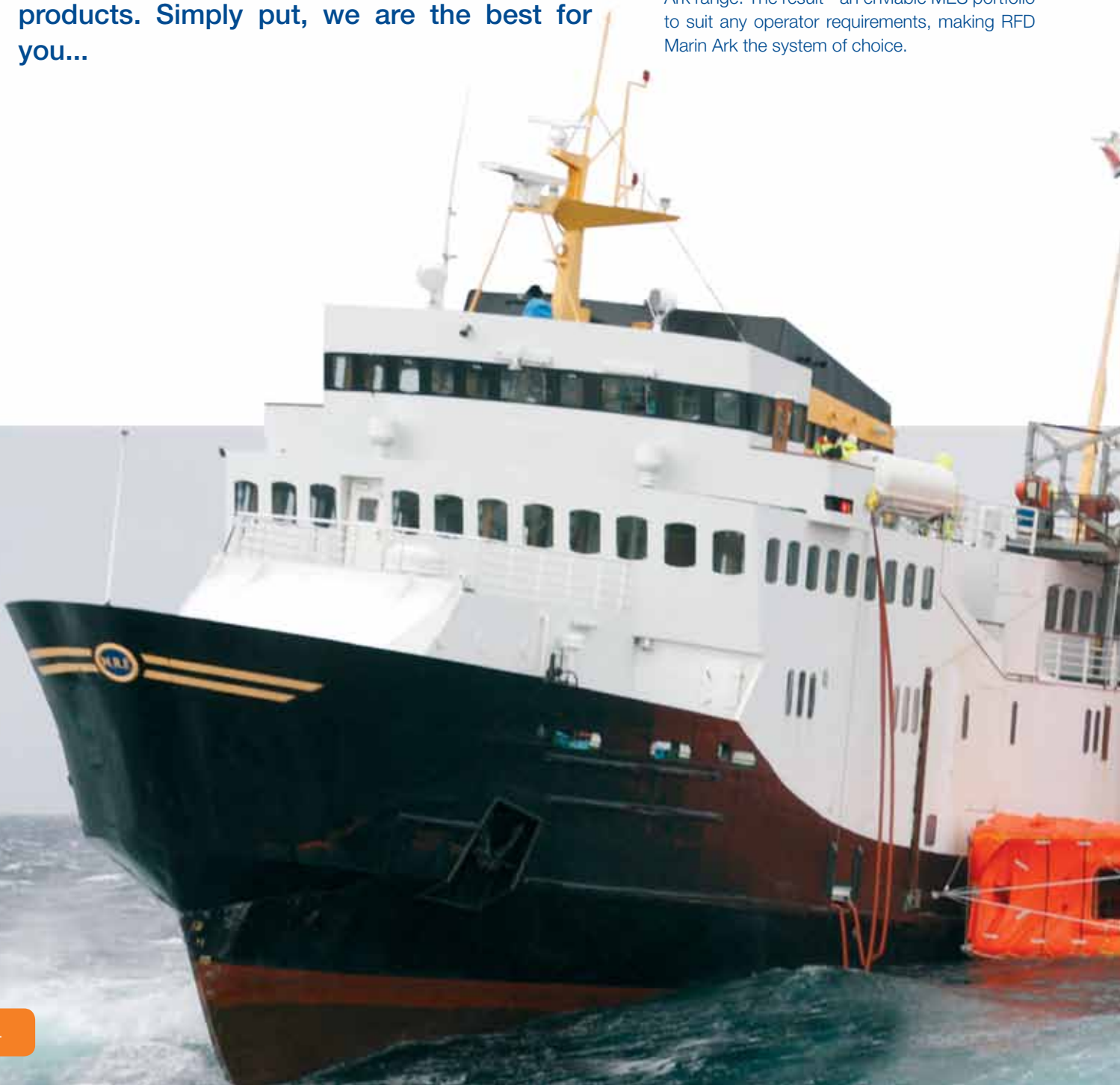
INTRODUCTION

When it comes to safety, the Survitec Group is uncompromising. From the conception of products through to delivery and installation, passenger safety is of paramount importance.

This philosophy has ensured that throughout our 160 years of industry experience, the Survitec Group remains the world's market leading manufacturer of safety and survival products. Simply put, we are the best for you...

RFD Marin Ark epitomises everything that the RFD brand stands for - a quality product, offering unparalleled safety coupled with real value for money. No other evacuation system in the world comes close to the superior design of RFD Marin Ark Marine Evacuation Systems (MES) - designed with fully reversible liferafts and fully enclosed evacuation slides all stowed in one complete unit on the vessel.

Since its conception in 1996, our Research and Development Team has worked tirelessly to continuously improve and extend the Marin Ark range. The result - an enviable MES portfolio to suit any operator requirements, making RFD Marin Ark the system of choice.



The RFD Marin Ark story

In 1979, after recognising the requirement for fast and efficient evacuation procedures on board large passenger vessels, Survitec Group developed the world's first Marine Evacuation System, taking passenger safety into completely new territory.

This MES consisted of twin track slides evacuating passengers on to a platform, from where they were transferred into canopied liferafts. Whilst revolutionary in that era, Survitec was convinced there was a better solution - and there was: the RFD Marin Ark.

When it was first introduced, the world of safety had seen nothing like it. RFD Marin Ark was immediately hailed as the ultimate Marine Evacuation System, and since then, no rival has come close to developing anything as safe or effective.

Since then, Survitec Group has worked in close partnership with our customers, totally committed to understanding the changes in the marine passenger vessel industry and finding new solutions to confront operator challenges.

In 2012, the RFD Marin Ark2 was recognised with a Queen's Award for 'Continuous Innovation and Development'. It was selected not only for its innovative design, responsiveness to regulations and the need for improved passenger safety, but also for its global commercial success.

Why is RFD Marin Ark unique?

- No other system in the world can rival the unique design features of RFD Marin Ark
- Up to six rafts for RFD Marin Ark2 860 Pax MES
- Reversible liferafts, ensures the system inflates upright each and every time
- Two fully enclosed evacuation chutes ensures no passenger is exposed to the elements at any time during evacuation
- Compact all-in-one stowage design requiring minimal deck footprint, maximising operator's space for passenger entertainment and comfort onboard
- Single action release for simple crew operation

**WHEN LIVES DEPEND
ON IT, YOU NEED TO
KNOW YOU CHOSE THE
BEST - RFD MARIN ARK.**



MARIN ARK2

Available in 860, 840, 790, 682, 632, 474, 316, 158 passenger capacities

RFD Marin Ark2 opens a brand new era for Marine Evacuation Systems, with the largest, safest and most cost-effective dry-shod MES in the world...

RFD Marin Ark2 is a completely new design: the liferafts, each with a total capacity of 158 passengers, feature a suspended floor ensuring maximum thermal protection and multiple buoyancy compartments to ensure utmost safety in the toughest sea conditions.

The innovative helical slide path integrates the benefits of a fully enclosed evacuation chute with the natural descent of a spiral slide - crew members can even ascend to assist other passengers if required.

One of the most dynamic design features of this new system is the integration of a service winch into the stowage unit which allows for the entire unit to be deposited onto a tug or truck during service periods thus in most cases eliminating the requirement for a crane during service.

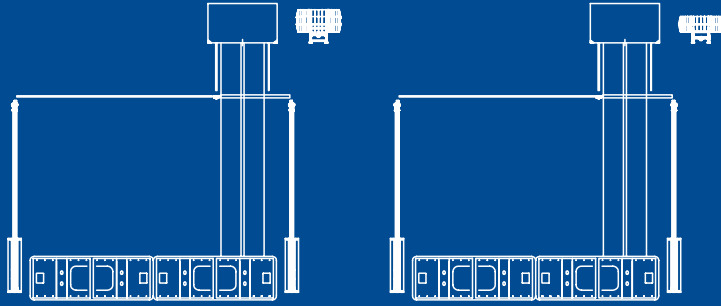
ALREADY ACCEPTED BY THE LEADING NAMES IN THE INDUSTRY, THIS SYSTEM SETS NEW STANDARDS FOR MARINE EVACUATION SYSTEMS.

Product features

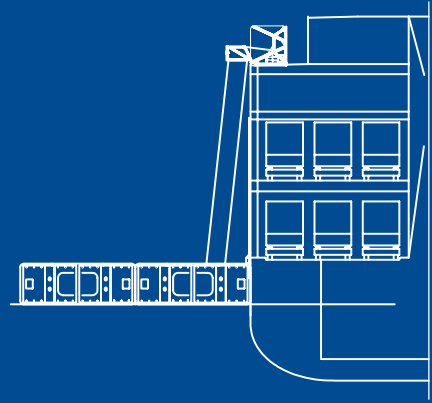
- Unique fully reversible 158 person liferaft design with suspended floor ensures maximum thermal protection for survivors
- Dual spiral slide path allows for safe, rapid and controlled descent
- Unique slide path design allows for crew ascent where necessary
- Integrated service winch eliminates the need for crane hire during MES installation and service removal
- Revolutionary bowing system and evacuation slide path designed to meet the challenges of the latest modern wide beam vessels
- Flexible design allows for installation on the widest range of vessel configurations
- Approved for open and between deck applications



PROFILE VIEW

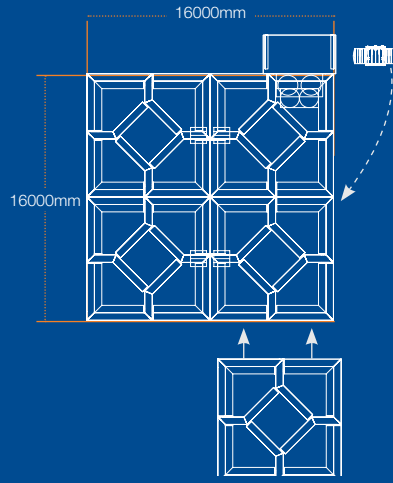
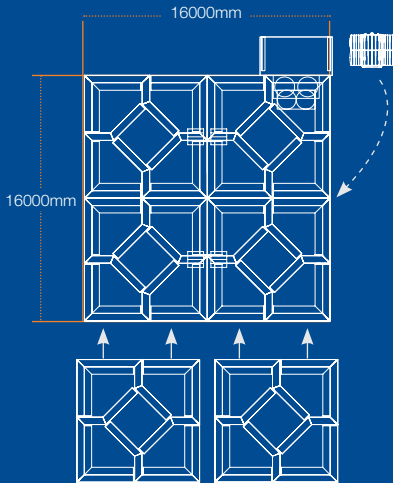


CROSS SECTION VIEW



SIX UNIT MODULE (632 + 228 LINK)
860 PASSENGER CAPACITY

FIVE UNIT MODULE (632 + 158 LINK)
790 PASSENGER CAPACITY



FOUR UNIT MODULE WEIGHTS

A Pack: 9398 Kg
B Pack: 8798Kg

LINK WEIGHTS

A Pack: 2 x 1200Kg
B Pack: 2 x 1040Kg

FOUR UNIT MODULE WEIGHTS

A Pack: 9398 Kg
B Pack: 8798Kg

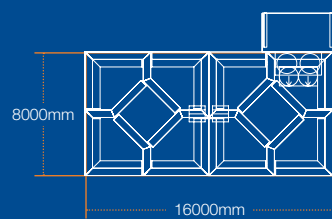
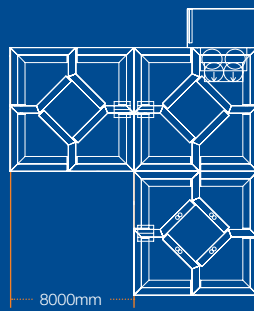
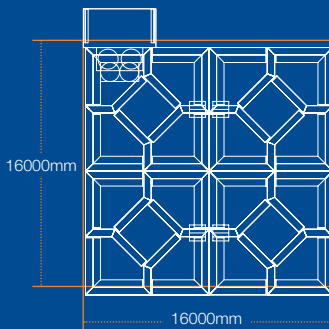
LINK WEIGHTS

A Pack: 1200Kg
B Pack: 1040Kg

FOUR UNIT MODULE - 632 PAX

THREE UNIT MODULE - 414 PAX

TWO UNIT MODULE - 316 PAX



FOUR UNIT MODULE WEIGHTS

A Pack: 9398Kg
B Pack: 8798Kg

THREE UNIT MODULE WEIGHTS

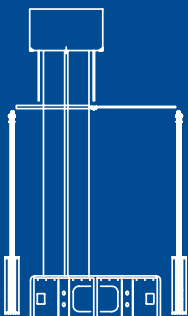
A Pack: 8248Kg
B Pack: 7798Kg

TWO UNIT MODULE WEIGHTS

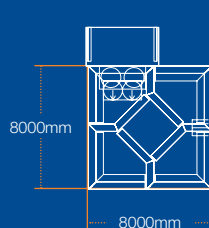
A Pack: 7098Kg
B Pack: 6798 Kg

NOTE: Weights differ slightly for Open Deck and Tween Deck variants.

PROFILE VIEW



ONE UNIT MODULE - 158 PAX



TWO UNIT MODULE WEIGHTS

A Pack: 5948Kg
B Pack: 5798 Kg

MARIN ARK1

Available in 430, 321 and 212 passenger capacities

Survitec Group has manufactured and installed over 1000 RFD Marin Ark1 liferafts across the globe. There is no doubt that RFD Marin Ark is now renowned as the system of choice for large passenger vessels...

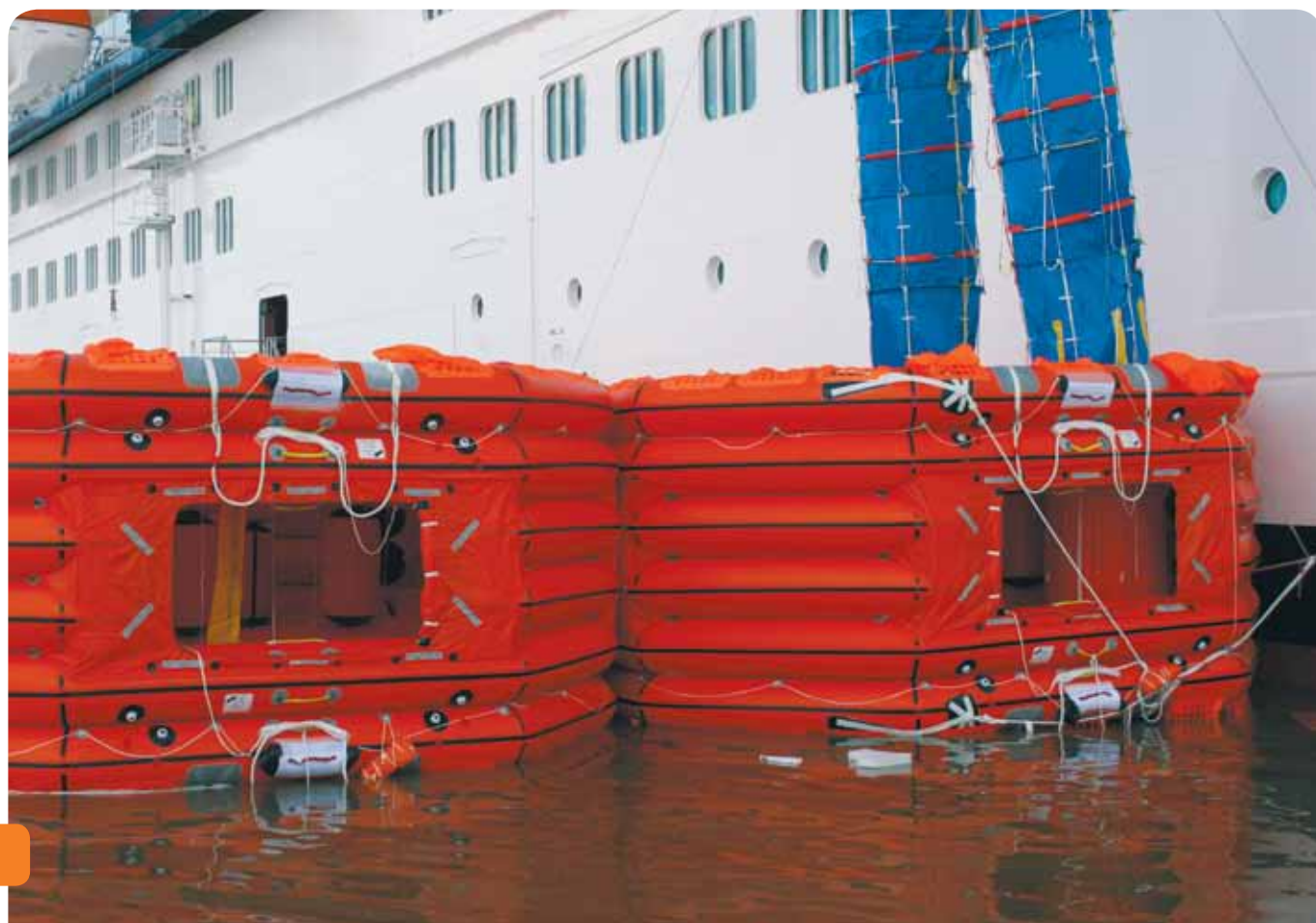
RFD Marin Ark1 is the world's safest and fastest method of transferring passengers and crew from the vessel into liferafts. In the case of an emergency, no other system is as efficient or effective. One simple release action activates the deployment of the system, which is fully inflated and operational within 90 seconds of deployment.

The liferafts are fully reversible, ensuring RFD Marin Ark1 inflates upright each and every time, and evacuation chutes are fully enclosed ensuring no passenger is exposed to the elements at any time during evacuation.

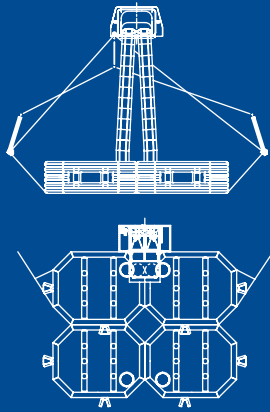
ONCE DEPLOYED THE SYSTEM IS UNIQUELY DESIGNED TO ENSURE UTMOST STABILITY IN EVEN THE TOUGHEST HEAVY SEA CONDITIONS.

Product features

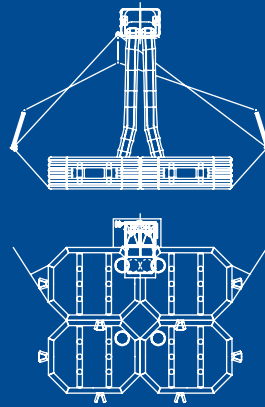
- Liferafts are fully reversible, ensuring the system inflates upright each and every time
- Evacuation chutes are fully enclosed ensuring no passenger is exposed to the elements at any time during evacuation
- Compact all-in-one stowage design requiring minimal deck footprint, maximising space for passenger entertainment and comfort onboard
- Stowage design allows for easy system 'swap-out' during service, meaning minimal vessel downtime
- No additional bousing required during deployment
- Available in symmetrical and asymmetrical options, enabling maximum design flexibility
- Tween deck and open deck stowage solutions also available



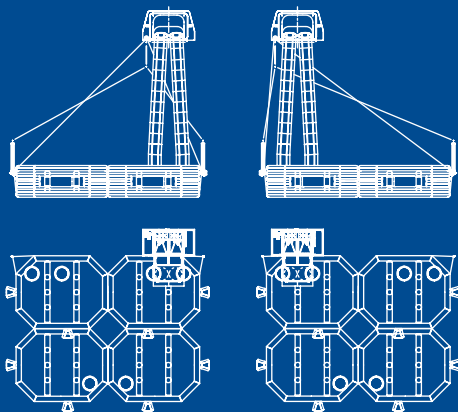
OPEN DECK - SYMMETRICAL MODULE



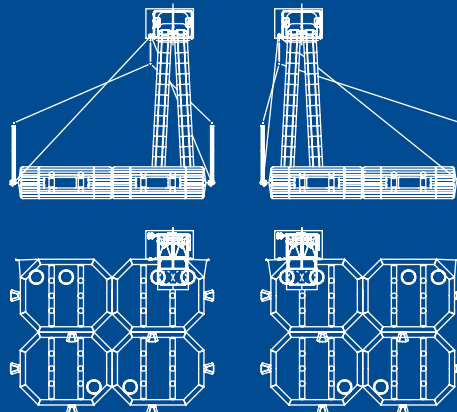
TWEEN DECK - SYMMETRICAL MODULE



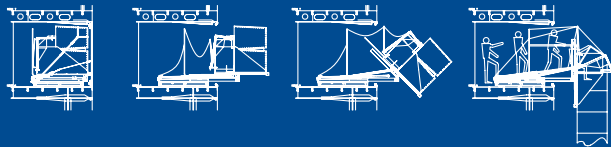
OPEN DECK - ASYMMETRICAL MODULE



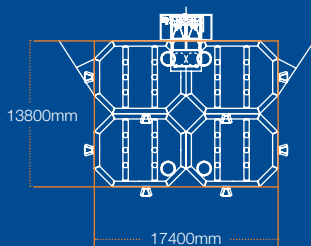
TWEEN DECK - ASYMMETRICAL MODULE



TYPICAL MES DEPLOYMENT SEQUENCE



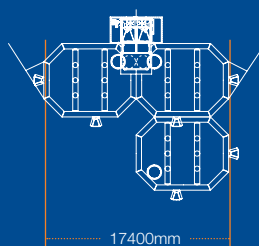
FOUR UNIT MODULE - 430 PAX



FOUR UNIT MODULE WEIGHTS

A Pack: 6700Kg
B Pack: 6220Kg

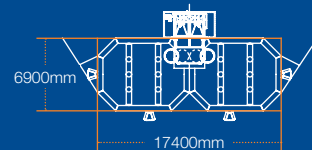
THREE UNIT MODULE - 321 PAX



THREE UNIT MODULE WEIGHTS

A Pack: 5700Kg
B Pack: 5340Kg

TWO UNIT MODULE - 212 PAX



TWO UNIT MODULE WEIGHTS

A Pack: 4700Kg
B Pack: 4460Kg

NOTE: Weights differ slightly for Open Deck and Tween Deck variants.

OPEN DECK MODULE - DETAIL



GRP Housing
Elevation

GRP Housing
End View

GRP Housing
Sectional View

TWEEN DECK MODULE - DETAIL



Door
Elevation

Door
Cut-Out

Section through
MES Compartment

MARIN ARK 109

109 passenger capacity

Smaller operators want the peace of mind of knowing they too have the safest and most effective evacuation system on board. Introducing RFD Marin Ark 109 - the logical choice for smaller numbers of passengers at lower freeboards...

Using one RFD Marin Ark liferaft together with a slide, the RFD Marin Ark 109 MES can be launched, inflated and bowsed in 145 seconds with a capacity to evacuate 109 passengers in 15 minutes.

No compromise has been made to the design already synonymous with the RFD Marin Ark. The RFD Marin Ark 109 uses the same fully reversible liferafts as the 430 system, putting it in a class of it's own as a safety solution for smaller passenger vessels. The versatility of the liferaft design allows for deployment without a slide for very low embarkation heights, or together with two alternative slide configurations for freeboard heights up to 7m.

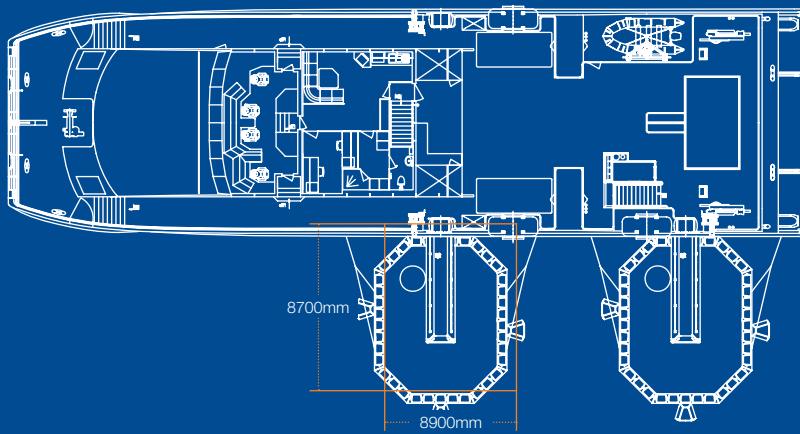
Product features

- Liferafts are fully reversible, ensuring the system inflates upright each and every time
- Multiple slide configurations available to suit lower freeboard heights
- Designed for open deck and between deck evacuations
- Suited to vessels with freeboard up to 7m

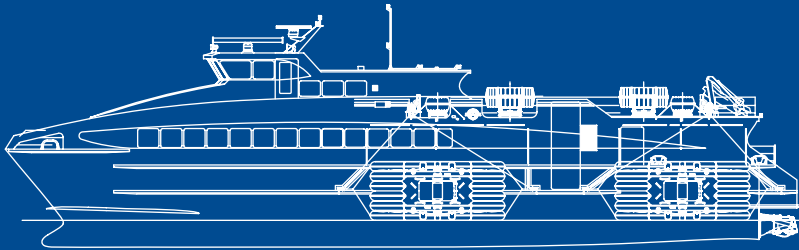
NOW SMALLER OPERATORS CAN BENEFIT FROM THE PEACE OF MIND OF KNOWING THEY HAVE THE ULTIMATE EVACUATION SYSTEM ON BOARD.



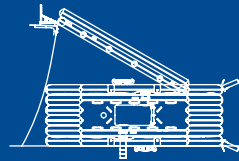
UPPER DECK VIEW



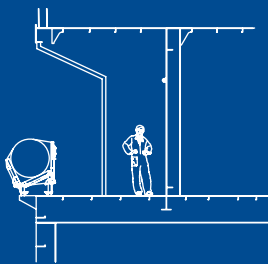
PROFILE VIEW



CROSS SECTION VIEW

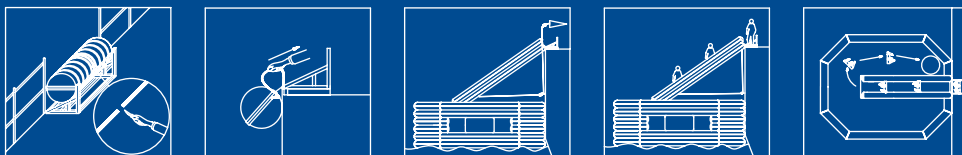


SINGLE RACK UNIT



SINGLE RACK UNIT DIMENSIONS AND WEIGHTS	
Length:	1560mm
Height:	661mm
Width:	995mm
Weight:	262Kg *

TYPICAL MES DEPLOYMENT SEQUENCE



MARIN ARK OVER-CAPACITY LIFERAFTS

Available in 50, 109 and 158 passenger capacities

To complement our range of Marin Ark Marine Evacuation Systems, Survitec Group offers a full range of Over-Capacity liferafts to suit any deck area...

Maintaining the same high standards already set by RFD Marin Ark, RFD Over-Capacity liferafts are fully reversible ensuring they inflate upright each and every time.

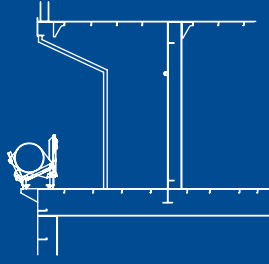
RFD Over-Capacity liferafts integrate fully with the RFD Marin Ark MES. The liferafts are deployed and then inflated alongside the primary RFD Marin Ark MES where they are easily and efficiently connected. This ensures passengers benefit from a quick and safe transfer from RFD Marin Ark into the Over-Capacity rafts.

Product features

- All RFD Over-Capacity liferafts are fully reversible
- RFD Over-Capacity rafts can be fully integrated with RFD Marin Ark
- Available in various sizes, 50P, 109P & 158P, dependant upon the RFD MES configuration
- Over-Capacity liferafts can be positioned on single, double, triple or quad launching racks



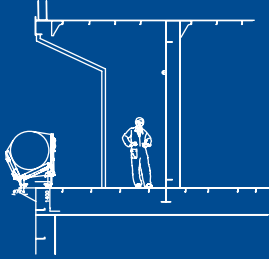
50 PERSON LIFERAFT



50 PERSON LIFERAFT WEIGHTS

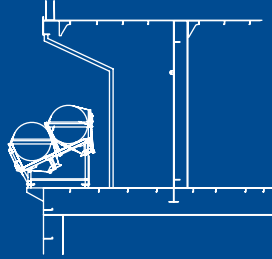
A Pack:	350Kg
B Pack:	260Kg
Rack:	240Kg

109 PERSON OVER-CAPACITY LIFERAFTS - VARIANTS



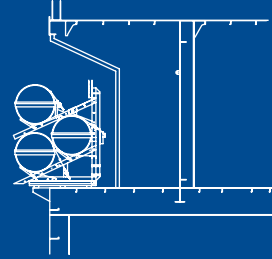
SINGLE RACK WEIGHTS

A Pack:	1025Kg
B Pack:	840Kg
Rack:	240Kg



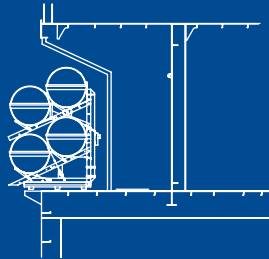
DOUBLE RACK WEIGHTS

A Pack:	2050Kg
B Pack:	1680Kg
Rack:	400Kg



TRIPLE RACK WEIGHTS

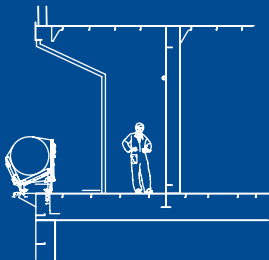
A Pack:	3075Kg
B Pack:	5250Kg
Rack:	200Kg



QUADRUPLE RACK

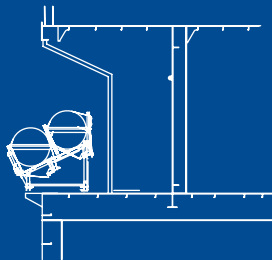
A Pack:	1025Kg
B Pack:	840Kg
Rack:	250Kg

158 PERSON OVER-CAPACITY LIFERAFTS - VARIANTS



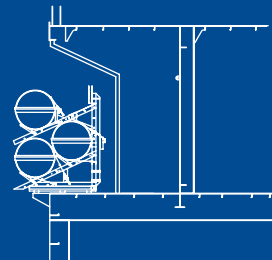
SINGLE RACK WEIGHTS

A Pack:	1200Kg
B Pack:	1040Kg
Rack:	240Kg



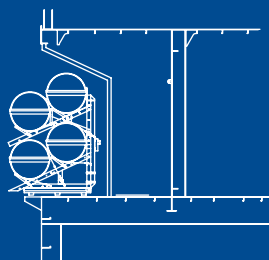
DOUBLE RACK WEIGHTS

A Pack:	2400Kg
B Pack:	2080Kg
Rack:	400Kg



TRIPLE RACK WEIGHTS

A Pack:	3600Kg
B Pack:	3120Kg
Rack:	200Kg



QUADRUPLE RACK

A Pack:	1200Kg
B Pack:	1040Kg
Rack:	250Kg

INSTALLATION & SERVICING

Installation & Service

Survitec Group offers the fastest and most cost-effective installation and servicing schedule in the industry. Our extensive, highly skilled team of engineers are available to work 24 hours a day, 365 days a year to meet your requirements. No time or location is a problem.

The sophisticated RFD Marin Ark design uses modular exchange units interchangeable within a fleet to ensure minimal vessel downtime during annual service periods, and our new RFD Marin Ark2 system has been designed with an integrated service winch, which in most cases eliminates the need for cranes during service.

RFD Marin Ark engineers are committed to ensuring the installation and service of your RFD Marin Ark Marine Evacuation System is the most efficient worldwide.

Training

Survitec Group's commitment to comprehensive RFD Marin Ark crew training is unrivalled. Training services we can provide include:

- Certified RFD crew training
- Classroom training
- Ship based deployment training
- Interactive crew training CD Rom
- Crew instruction manuals
- Learning aids - models
- Optional Training Unit - training on dry land or indoors

Approvals

RFD Marin Ark complies with the latest International Maritime Organisation (IMO)/ SOLAS Chapter III regulations.



0038/YY EC Marine Equipment Directive certificates with associated wheelmark.



OUR NETWORK



**INTERNATIONAL PRESENCE
IN 96 COUNTRIES**

**580+ ACCREDITED SERVICE
STATIONS**

**8 WORLD CLASS MANUFACTURING
FACILITIES**

**12 CONTRACTOR LOGISTICS
SUPPORT SITES FOR THE OFFSHORE
INDUSTRY**

2000 EMPLOYEES



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