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Old School House
 School Hill
 Shortlanesend
 Truro
 Cornwall
 TR4 9DU
 UK

Tel +44 (0) 1872 321155
Fax +44 (0) 1872 321166

info@reflexmarine.com
 www.reflexmarine.com



WE MAKE TRANSFERS SAFER

Reflex Marine has successfully provided the offshore and marine sectors with safe, high-quality, crew transfer solutions since the launch of our first product, the FROG in 1999. Our goal was always to revolutionise and professionalise this activity across the industry. We have partnered with asset operators, lifting specialists, and vessel operators around the world such as EnerMech, Seacor Marine and Sparrows Offshore in a bid to fulfil our goal.

Our main marine transfer products, the FROG, FROG-XT and the TORO, and our comprehensive support package including risk assessment, operational guidance and training, have set a new industry benchmark. We have established the most rigorous procedures for the design, testing and verification of our equipment, basing our approach on that used by the automotive industry to introduce new products. Our experienced team of engineers and support staff operating from offices in the UK, USA, Indonesia and Spain and our worldwide Partner Network ensure that we can support our clients across the globe.

20+ YEARS
 LEADING THE WAY
 IN SAFER ACCESS
 SOLUTIONS

800+ UNITS
 OPERATING IN
 TROPICAL TO ARCTIC
 CONDITIONS

1M+ TRANSFERS
 PERFORMED EACH
 YEAR

INTRODUCING THE FROG-XT RANGE

DESIGNED FOR THE MOST EXTREME SCENARIOS,
TESTED TO THE LIMIT AND VERIFIED IN FULL,
THE FROG-XT RANGE RAISES THE STANDARD
FOR CRANE TRANSFER SOLUTIONS

20 years' experience in offshore personnel transfer has gone into the design and development of the FROG-XT range. Subjected to the most rigorous testing ever and with many new and improved features, it takes crane transfer safety and performance to a new level.

The FROG-XT comes in 4, 6 and 10 person capacities to suit both low and high volume crew transfers. Whether you require a solution for your routine or emergency personnel transfer needs, we have a device to suit your operation.

XT

10,000
HOURS SPENT ON PRODUCT DEVELOPMENT

OUR LEARNINGS FROM OUR ORIGINAL FROG RANGE
HAVE ALLOWED US TO IMPROVE ALL ASPECTS OF
CAPSULE DESIGN TO BRING YOU:



AN IMPROVED OWNERSHIP EXPERIENCE

- ✓ OPTIMISED FOOTPRINT FOR LANDING, STORAGE & SHIPPING
- ✓ STANDARDISED COMPONENTS ACROSS THE RANGE
- ✓ EASIER TO INSPECT & MAINTAIN DUE TO GREATER VISIBILITY, ACCESSIBILITY AND STANDARDISED COMPONENTS ACROSS THE RANGE
- ✓ NEW AND IMPROVED SUPPORT PACKAGE



EXTREME PERFORMANCE

- ✓ GREATER AVERAGE PASSENGER WEIGHT
- ✓ INCREASED OPERATING ENVELOPE
- ✓ INCREASED PRODUCT LIFE SPAN



OUR SAFEST TRANSFER DEVICE EVER

- ✓ ADVANCED PASSENGER PROTECTION
 - STAINLESS STEEL FRAME AND POLYETHYLENE BUOYANCY PANELS
 - IMPACT ABSORBING HYBRID SEATS
 - MODIFIED SEATBELT DESIGN: EASIER TO GET ON AND OFF
 - OPTIMISED HYDRO-PNEUMATIC SPRING DAMPER SYSTEM
- ✓ NEW DESIGN FOR RAPID MEDEVAC PREPARATION
- ✓ ENHANCED RIGGING PROTECTION
- ✓ IMPROVED LOAD PATH



INTRODUCING THE FROG-XT4

SUBJECT TO THE MOST RIGOROUS TESTING EVER, FROG-XT TAKES CRANE TRANSFER PERFORMANCE TO A NEW LEVEL

4

4 or 1 +

TARE WEIGHT 500kg/ 1100lb	+	SWL 4 x 125kg/ 275lb	=	MAX GROSS 1000kg/ 2200lb
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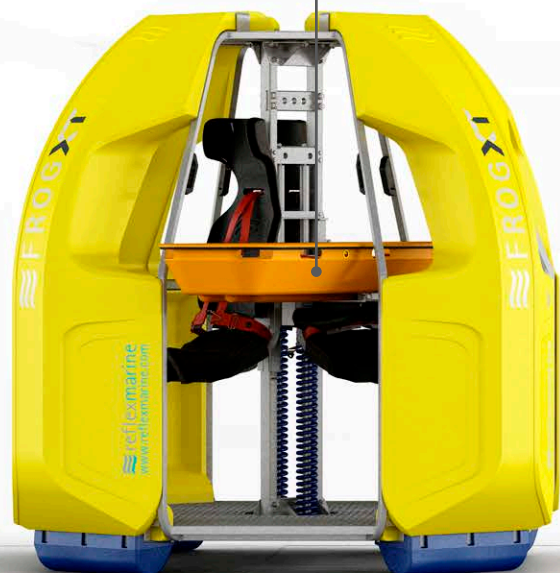
OPERATIONAL TEMPERATURE RANGE:
-40°C TO +50°C / -40°F TO +122° F
(ARCTIC FROG)

SMALL FOOTPRINT ENABLES IT TO
FIT IN A STANDARD SEA CONTAINER

OPERATIONAL WIND SPEED
RANGE UP TO 40 KNOTS

CE ABS Statement of Fact
(By request)

MEDEVAC STRETCHER
CAPACITY FOR
INJURED PERSONNEL



BUOYANCY
SELF-RIGHTS AND FLOATS
IN WATER. PROTECTS FROM
IMMERSION

QUICK RELEASE
3 POINT HARNESS
PROTECTS FROM FALLING
AND WHIPLASH

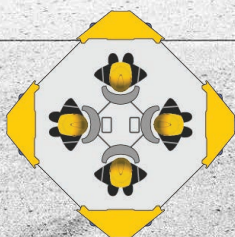
STAINLESS
STEEL FRAME
PROTECTS FROM
SIDE IMPACTS

LOAD PLATE
'EYE LEVEL' CONNECTION
FOR SLINGS AND PRE-
TRANSFER INSPECTION



SPRING SUSPENSION SYSTEM
HIGH PERFORMANCE DAMPED COIL SPRINGS

SHOCK ABSORBING FEET



width 1: 2110mm / 6ft 11" width 2: 2660mm / 8ft 9"

height: 280mm / 7ft 2"



STRETCHER CAPACITY

* ALL SPECIFICATIONS
TAKEN FROM FROG-XT4
USER MANUAL REV 2.2

INTRODUCING THE FROG-XT6

PROVIDING EXTENSIVE PROTECTION FROM THE 4 KEY RISKS OF PERSONNEL TRANSFER: FALLING, COLLISION, HEAVY LANDINGS AND IMMERSION

6

6 or 1 +

TARE WEIGHT 540kg / 1188lb + SWL 6 x 110kg / 242lb = MAX GROSS 1200kg / 2640lb

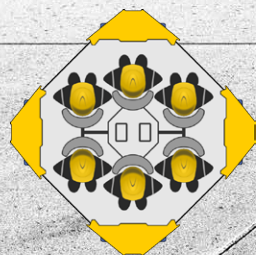
OPERATIONAL TEMPERATURE RANGE: -40°C TO +50°C / -40°F TO +122°F (ARCTIC FROG)

SMALL FOOTPRINT ENABLES IT TO FIT IN A STANDARD SEA CONTAINER

OPERATIONAL WIND SPEED RANGE UP TO 40 KNOTS

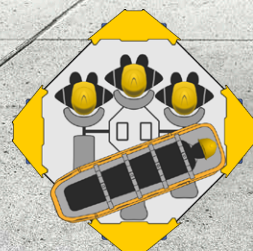
ABS Statement of Fact (By request)

MEDEVAC STRETCHER CAPACITY FOR INJURED PERSONNEL



width 1: 2110mm / 6ft 11" width 2: 2660mm / 8ft 9"

height: 2180mm / 7ft 2"



STRETCHER CAPACITY

* ALL SPECIFICATIONS TAKEN FROM FROG-XT6 USER MANUAL REV.0.2



BUOYANCY

SELF-RIGHTS AND FLOATS IN WATER. PROTECTS FROM IMMERSION

LOAD PLATE

'EYE LEVEL' CONNECTION FOR SLINGS AND PRE-TRANSFER INSPECTION

QUICK RELEASE 3 POINT HARNESS PROTECTS FROM FALLING AND WHIPLASH

STAINLESS STEEL FRAME PROTECTS FROM SIDE IMPACTS



SPRING SUSPENSION SYSTEM HIGH PERFORMANCE COIL SPRINGS

SHOCK ABSORBING FEET


INTRODUCING THE FROG-XT10

OUR HIGHEST CAPACITY DEVICE ENABLES HIGH VOLUME TRANSFERS WHILST STILL PROVIDING THE SAME GREAT LEVELS OF PROTECTION


10

10  or 2  + 2 

TARE WEIGHT 970kg/ 2134lb	+	SWL 10  x 115kg/ 253lb	=	MAX GROSS 2120kg/ 4664lb
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 OPERATIONAL TEMPERATURE RANGE:
-40°C TO +50°C / -40°F TO +122° F
(ARCTIC FROG)

 OPERATIONAL WIND SPEED
RANGE UP TO 40 KNOTS

 ABS Statement of Fact
(By request)

MEDEVAC STRETCHER
CAPACITY FOR TWO
INJURED PERSONNEL

BUOYANCY

SELF-RIGHTS AND FLOATS IN WATER.
PROTECTS FROM IMMERSION

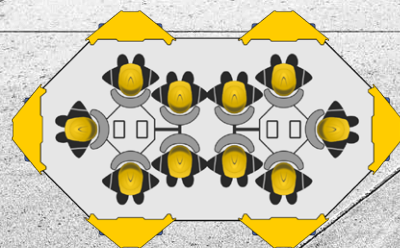
**QUICK RELEASE
3 POINT HARNESS**
PROTECTS FROM FALLING
AND WHIPLASH

LOAD PLATE

'EYE LEVEL' CONNECTION FOR SLINGS
AND PRE-TRANSFER INSPECTION

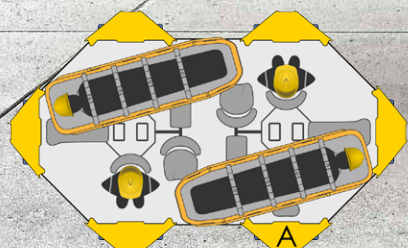
STAINLESS STEEL FRAME

PROTECTS FROM SIDE IMPACTS



width 1: 4090 mm / 13ft 5" width 2: 2660 mm / 8ft 9"

height: 2180 mm / 7ft 2"



STRETCHER CAPACITY

* ALL SPECIFICATIONS
TAKEN FROM FROG-XT10
USER MANUAL REV 0.2

SPRING SUSPENSION SYSTEM
HIGH PERFORMANCE COIL SPRINGS

SHOCK ABSORBING FEET

WHAT ABOUT THE ORIGINAL FROG RANGE?

FOR MORE THAN 20 YEARS THE FROG RANGE HAS PROVIDED EXTENSIVE PROTECTION FROM THE FOUR MAJOR RISKS OF PERSONNEL TRANSFER

800+
DEVICES
OPERATING
WORLDWIDE

With a proven track record in demanding environments from the Tropics to the Arctic, the FROG has demonstrated its reliability in challenging sea states and extreme weather conditions. There are over 800 FROGs in operation all over the world providing over 1 million safe crew transfers every year.

20+ YEARS
LEADING THE WAY
IN SAFER ACCESS
SOLUTIONS

Reflex Marine has over 20 years' experience in personnel transfer operations and this has allowed for an improvement in almost every aspect of the new FROG-XT capsule design, resulting in greater comfort to passengers, wider operating parameters and higher capacity transfers.



IF YOU WOULD LIKE TO FIND OUT MORE ABOUT YOUR TRANSFER OPTIONS THEN PLEASE CONTACT A MEMBER OF OUR SALES TEAM AT **INFO@REFLEXMARINE.COM** OR **TEL +44 (0) 1872 321155**

Reflex Marine will continue to fully support all FROG owners in every aspect of product ownership including the supply of replacement parts and accessories, servicing, training as well as operational support. This support will be available for the recommended life-span of your product which is stated in your product's user manual.

The original model of FROG-6 will continue to be supplied and fully supported for existing customers and those with special certification requirements such as to meet national certification requirements in Brazil* and Mexico**

*Brazil specification model FROG-6, complete with 30ft lifting assembly (steel ferrules), data-plate stating Certificado de Homologação No. 211.003/2014, Portuguese language pack, tool kit and user pack.

**Mexico specification model FROG-6, complete with 30ft lifting assembly, data-plate stating Merchant Marine's certification no. DGM-M-DAF-009, Spanish language pack, tool kit and user pack.

CHOOSE YOUR MODEL

FROGXT⁴

LOW VOLUME CREW TRANSFERS AND EMERGENCY USE

FROGXT⁶

MEDIUM VOLUME CREW TRANSFERS AND EMERGENCY USE

FROGXT¹⁰

HIGH VOLUME CREW TRANSFERS

TORO⁴

LOW VOLUME CREW TRANSFERS AND EMERGENCY USE

DIMENSIONS



height: 2180mm / 7ft 2"

width 1: 2110mm / 6ft 11" width 2: 2660mm / 8ft 9"



height: 2180mm / 7ft 2"

width 1: 2110mm / 6ft 11" width 2: 2660mm / 8ft 9"



height: 2180 mm / 7ft 2"

width 1: 4090 mm / 13ft 5" width 2: 2660 mm / 8ft 9"



height: 2089mm / 6ft 11"

width 1: 1988mm / 6ft 7" width 2: 2109mm / 6ft 11"

DIMENSIONS

OPERATIONAL LIMITS

UP TO 4M SIGNIFICANT WAVE HEIGHT

UP TO 4M SIGNIFICANT WAVE HEIGHT

UP TO 3.3M SIGNIFICANT WAVE HEIGHT

UP TO 2.5M SIGNIFICANT WAVE HEIGHT

OPERATIONAL LIMITS

PASSENGERS

4 or 1 +

6 or 1 +

10 or 2 + 2

4 or 2 +

PASSENGERS

CAPACITY

$$\begin{matrix} \text{TARE WEIGHT} \\ 500\text{kg} / \\ 1100\text{lbs} \end{matrix} + \begin{matrix} \text{SWL} \\ 4 \text{ } \times \\ 125\text{kg} / \\ 275\text{lb} \end{matrix} = \begin{matrix} \text{MAX GROSS} \\ 1000\text{kg} / \\ 2200\text{lb} \end{matrix}$$

$$\begin{matrix} \text{TARE WEIGHT} \\ 540\text{kg} / \\ 1188\text{lb} \end{matrix} + \begin{matrix} \text{SWL} \\ 6 \text{ } \times \\ 110\text{kg} / \\ 242\text{lb} \end{matrix} = \begin{matrix} \text{MAX GROSS} \\ 1200\text{kg} / \\ 2640\text{lb} \end{matrix}$$

$$\begin{matrix} \text{TARE WEIGHT} \\ 970\text{kg} / \\ 2134\text{lb} \end{matrix} + \begin{matrix} \text{SWL} \\ 10 \text{ } \times \\ 115\text{kg} / \\ 253\text{lb} \end{matrix} = \begin{matrix} \text{MAX GROSS} \\ 2120\text{kg} / \\ 4664\text{lb} \end{matrix}$$

$$\begin{matrix} \text{TARE WEIGHT} \\ 375\text{kg} / \\ 827\text{lb} \end{matrix} + \begin{matrix} \text{SWL} \\ 4 \text{ } \times \\ 110\text{kg} / \\ 243\text{lb} \end{matrix} = \begin{matrix} \text{MAX GROSS} \\ 815\text{kg} / \\ 1798\text{lb} \end{matrix}$$

CAPACITY

MEDEVAC



MEDEVAC

CERTIFICATION



ABS Statement of Fact (By request)



ABS Statement of Fact (By request)



ABS Statement of Fact (By request)



ABS Statement of Fact (By request)

CERTIFICATION

TEMPERATURE RANGE

-20°C TO +50°C / -4°F TO +122°F (STANDARD)
-40°C TO +50°C / -40°F TO +122°F (ARCTIC)

-20°C TO +50°C / -4°F TO +122°F (STANDARD)
-40°C TO +50°C / -40°F TO +122°F (ARCTIC)

-20°C TO +50°C / -4°F TO +122°F (STANDARD)
-40°C TO +50°C / -40°F TO +122°F (ARCTIC)

-20°C TO +50°C / -4°F TO +122°F (STANDARD)

TEMPERATURE RANGE



REFLEX MARINE SAFETY FIRST

THE DESIGN AND SAFETY FEATURES INCLUDED IN ALL OF OUR DEVICES ADDRESS THE HAZARDS OF THE TRADITIONAL METHOD OF TRANSFER.

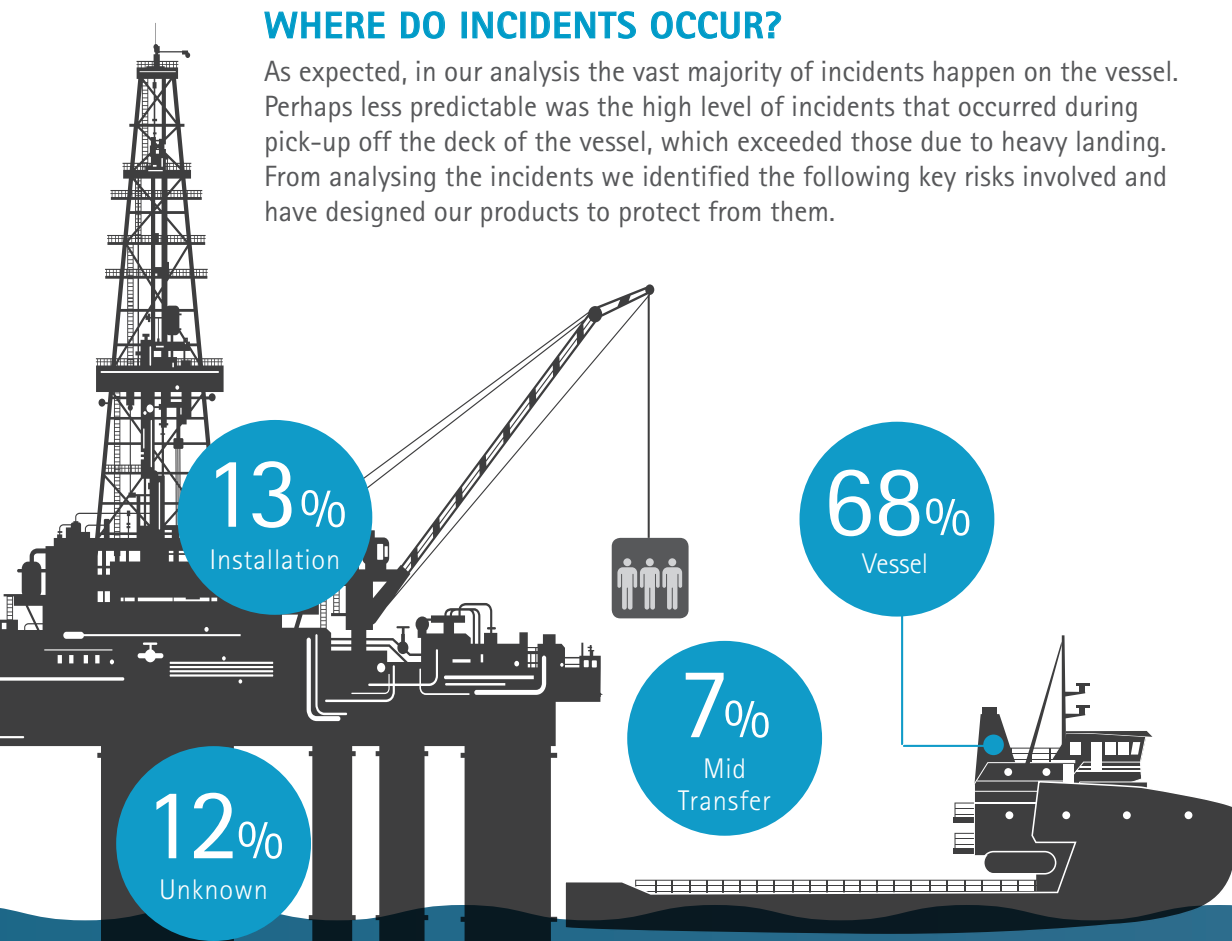
OUR TRANSFER DEVICES ARE DESIGNED FOR THE MOST DEMANDING OF SCENARIOS, TESTED TO THE LIMIT AND FULLY VERIFIED. WE KNOW EXACTLY WHAT OUR EQUIPMENT IS CAPABLE OF AND HOW TO USE IT.

TO UNDERSTAND THE RISKS INVOLVED IN MARINE PERSONNEL TRANSFER WE FIRST STARTED BY LOOKING AT PAST INCIDENTS.

We began compiling our own marine personnel transfer incident database as, unlike helicopters, there has been no centrally assembled database for marine transfers.

WHERE DO INCIDENTS OCCUR?

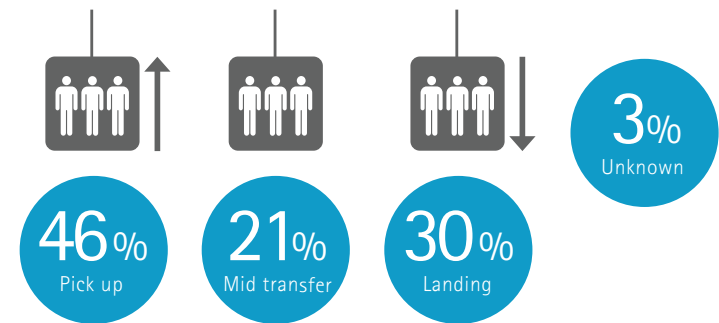
As expected, in our analysis the vast majority of incidents happen on the vessel. Perhaps less predictable was the high level of incidents that occurred during pick-up off the deck of the vessel, which exceeded those due to heavy landing. From analysing the incidents we identified the following key risks involved and have designed our products to protect from them.



* Statistics taken from Reflex Marine's Incident Database compiled from mostly publicly available data February 2014



WHEN DO INCIDENTS OCCUR?



LATERAL IMPACT

All our products have stainless steel frames and a buoyancy configuration which protects passengers from side impacts.

The effectiveness of the frame, surroundings and seating position in protecting passengers was verified by a series of lateral impact tests.



VERTICAL IMPACT

A spring loaded seat base and shock-absorbing landing feet provide protection against heavy landings -even in the harshest weather conditions.

A series of drop tests in the design stages allowed us to verify the effectiveness of the suspension systems, and the integrity of the carriers as a whole.



FALLING

Passengers are protected by the outer frame and buoyancy and are secured by a three-point harness which still allows for rapid egress.



IMMERSION

Statistically speaking, immersion is a less likely risk and occurs only in more extreme situations. We design all our transfer devices to float and self-right if immersed in water.

Immersion testing is carried out in the design phase for all our products and recordings are taken for different loading scenarios.



DECK CREW

We offer training to help deck crews have an appreciation of the risks and the best way to mitigate these. Our product user manuals contain recommendations on performing transfers safely.



TRIP ENTANGLEMENT

Our crane transfer devices are rigid capsules which naturally minimises the risk of trips or entanglements.

10 goldenrules

Together with Seacor Marine and Sparrows Offshore, we have created a set of 10 Golden Rules for the safe transit of personnel in the offshore oil and gas industry which we hope will become recognised as a global standard in transfer best practice.

These rules reflect what's been learnt from millions of transfers in varied conditions around the globe, with a focus on those few that go wrong. Crane transfer may seem a simple operation, but a wide range of variables are involved, and considering them carefully will help you to achieve a safe transfer every time.

www.reflexmarine.com/10goldenrules

MARINE TRANSFER FORUM

Reflex Marine are proud founding members for the Marine Transfer Forum along with other organisations showing leadership in this area.



The Marine Transfer Forum is a new industry initiative, which will be run by an independent steering group from organisations such as operators, lifting and transfer specialists, regulatory authorities, and trade bodies.

www.marinetransferforum.org



IT'S TIME TO BUY OR TRY

01

BUY FROM US

AN UNRIVALLED TRACK RECORD

Wherever you operate, however many people you need to transfer, whether you need a MedEvac capability or not, there's a crane transfer product that's right for you.

Major operators around the world have already placed their trust, and their crew's safety, in the FROG, FROG-XT and TORO ranges. Now with over 800 devices operating globally, and over a million safe transfers taking place each year, we have an unrivalled track record.

Manufactured in the UK, our products are stocked at our base in Aberdeen as well as regionally at our network of approved partners.

800+
DEVICES
OPERATING
WORLDWIDE



02

RENT FROM US

HELPING YOU CONTINUE OPERATIONS ALL YEAR ROUND

For projects and operations where a crane transfer device is only needed for a short period of time, such as during commissioning and decommissioning, or if you would simply like the opportunity to trial a device before purchasing, rental units are ideal.

Rental units can also be an important contingency when either your transfer device is being serviced or when unforeseen external factors, such as adverse weather, can prevent access using aviation methods.

We have transfer devices available for rental direct from our base in Aberdeen as well as being available from our network of approved distributors. Each unit is maintained to the highest standard and is inspected between each rental.

Rental Periods & Availability

Our rental periods start from 30 days and go up to yearly rentals. Units are sometimes available at short notice, however we advise advanced booking.

For your nearest stockist to buy or rent please visit

www.reflexmarine.com/contact



SUPPORTING YOU PARTS & ACCESSORIES FOR ALL PRODUCTS PAST & PRESENT

Replacement parts and accessories are available for all of our products, including our retired FROG range, direct from Reflex Marine or your local partner.

You can find information on exactly what is available in our product User Manuals which you can download from our website. Below is a list of some replacement parts, kits and accessories that we can supply:

- Critical Parts
- Foot Kits
- Harness Kits
- Backup & Handling Eye Kits
- Stretchers
- Protective Covers
- Strobe Lights
- Skid Trolleys

Holding a stock of replacement parts means your device is ready when you are, resulting in reduced lead times and down-time, lower packing and freight costs. It also simplifies the order process and having just one large order to clear customs, instead of multiple orders all being subject to delay throughout the year.

Please get in touch with us for a personalised stock holding as we can evaluate your fleet and determine the best items to hold in stock, dependent on the following factors:

- Number of Units
- Types of Units
- Usage Levels
- Usage Type
- Locations
- Order History

For a quote

Tel +44 (0) 1872 321155
support@reflexmarine.com

www.reflexmarine.com/support



REFLEX MARINE SPECIALIST TRAINING

YOU'VE BOUGHT ONE OF OUR WORLD-LEADING TRANSFER DEVICES, NOW WHAT? HELP IS ON HAND WITH OUR EXPERT TRAINING SERVICE TO HELP YOU OPERATE AND MAINTAIN YOUR TRANSFER DEVICE

01

OPERATIONAL COURSES

Our operational courses focus on how to use our equipment. These courses are suitable for both passengers and operators of the equipment.

- Passenger Inductions. Duration: 2 hours
- Product Familiarisation. Duration: half day (includes theory and practical)

COME TO US

Scheduled events are run throughout the year, please visit our website for details on our next hosted training event.

OR WE'LL COME TO YOU

All of our training courses can be delivered at your facility and are run throughout the year.

ON LAND OR AT SEA

All of our courses are available onshore. Operational courses can be delivered offshore.

02

INSPECTION AND MAINTENANCE COURSE

The aim of this course is to induct mechanics and supervisors in the requirements and practice of unit inspection, maintenance and repair.

- Introductory Inspection and Maintenance Duration: 1– 3 days
- Includes theory and practical
- Includes certificate valid for two years

To book a course

Tel +44 (0) 1872 321155
support@reflexmarine.com

www.reflexmarine.com/training



REFLEX MARINE EXPERT SERVICING



FROM ROUTINE MAINTENANCE TO DAMAGE REPAIR, REFLEX MARINE AND OUR APPROVED SERVICE CENTRES HAVE THE EXPERIENCE AND EXPERTISE TO ENSURE YOUR DEVICE'S OPERATIONAL INTEGRITY – AFTER ALL, WE KNOW YOUR TRANSFER DEVICE INSIDE AND OUT

VISUAL INSPECTIONS

EXAMINATION BY DISMANTLING

LOAD TEST/POST LOAD TEST VISUAL INSPECTION

CRITICAL COMPONENT REPLACEMENT

REPLACEMENT PARTS

DAMAGE REPAIR

REPORTING AND CERTIFICATES

COME TO US OR WE'LL COME TO YOU

Servicing work is carried out at our facility in Aberdeen or through one of our many Approved Service Centres around the world. On-site servicing at a location convenient to you is available upon request.

To book a technician

Tel +44 (0) 1872 321155
support@reflexmarine.com

www.reflexmarine.com/contact





REFLEX MARINE PARTNER NETWORK

WE HAVE BUILT A NETWORK OF TRUSTED PARTNERS WHERE QUALITY AND EXPERTISE ARE ASSURED, PROVIDING YOU WITH FIRST CLASS OPERATIONAL SUPPORT

WHAT THIS MEANS FOR YOU:

Everything you need on your doorstep

- Approved Distributors
- Approved Service Centres
- Approved Training Centres

Local stock, training and servicing, all in a convenient location

Assured quality standards

- Confidence in the safety of the serviced product
- Assurance of the partner's overall standard of service
- Reduced risk to your operations

Additional benefits

- Reduced potential downtime whilst transporting replacement parts from the UK
- Avoids commercial impact of maintenance delays
- Local rental of a FROG, FROG-XT or TORO for peak demands/servicing schedules

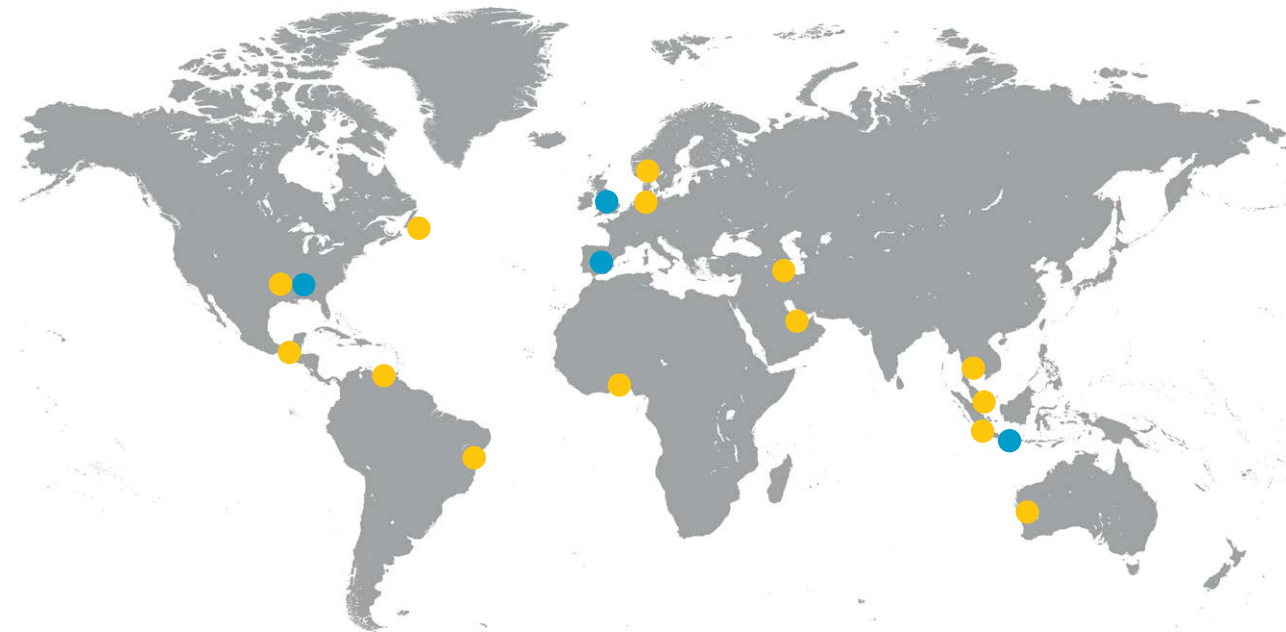


For your nearest
Reflex Marine Partner
please visit

www.reflexmarine.com/contact

REFLEX MARINE WORLDWIDE

WHETHER YOU'RE TRANSFERRING PEOPLE OR CARGO, WHICHEVER OFFSHORE INDUSTRY YOU'RE IN – A REFLEX MARINE REPRESENTATIVE WILL ALWAYS BE NEARBY, WHEREVER YOU ARE



- Reflex Marine Office
- Reflex Marine Partner

UK Head Office

Tel: +44 (0) 1872 321155

Fax: +44 (0) 1872 321166

Sales & General Enquiries

info@reflexmarine.com

Technical & Product Support

support@reflexmarine.com

NEVER
FAR
AWAY