

# Reflex Marine: Raising the Global Standard for Offshore Crew Transfer Safety

In the offshore energy sector, where operations are increasingly global, remote, and complex, the safe transfer of personnel remains one of the most critical operational challenges. From harsh weather conditions to constrained deck space and evolving safety expectations, operators must ensure that people can move between vessels and offshore structures reliably and without unnecessary risk.

For more than 30 years, Reflex Marine has played a defining role in addressing this challenge. The company has established itself as a global expert in offshore crew transfer, specialising in the design, development, and manufacture of crane-based personnel transfer equipment that provides a safe and economical alternative to helicopters and gangway systems.

At the heart of Reflex Marine's mission is a clear objective: to help offshore workers return home safely from their place of work. The company has built its reputation on a safety-led engineering philosophy, underpinned by patented, one-of-a-kind technology that has reshaped expectations for offshore access worldwide.

## Engineering Safety into Offshore Access

Reflex Marine's personnel transfer devices are unique in the global



market. Designed specifically for the realities of offshore operations, they combine robust structural design with advanced passenger protection.

A defining feature is their ability to float and self-right within seconds of water immersion, a critical safeguard in the unlikely event of an incident during transfer.

These characteristics are not theoretical design features but the result of decades of exhaustive testing, operational experience and continuous refinement based on feedback from users operating in some of the world's most demanding offshore environments.

"Every design decision we make is driven by one objective—reducing risk for people working offshore," says Daniel Martinez, Technical Director. "Our technology is shaped by decades of engineering experience and by working closely with operators working in real conditions around the world."



This approach has allowed Reflex Marine to develop equipment that prioritises people's safety while remaining practical, durable, and adaptable across regions and sectors.

### **From Local Origins to a Global Footprint**

Founded in Aberdeen, Scotland, Reflex Marine has evolved from a regional innovator into a truly global organisation. Today, its manufacturing base supplies products to more than 80 countries across all continents, with exports accounting for over 90% of total sales.

Reflex Marine equipment operates in every major offshore region, supporting oil and gas developments, offshore wind farms, and state-operated fleets. From cold-water environments to tropical offshore basins, its transfer devices have demonstrated consistent performance across a wide range of climatic and operational conditions.

This global footprint reflects both the universal nature of offshore access challenges and the company's ability to deliver solutions that can be



deployed internationally without compromising safety standards.

### **The FROG: A Global Industry Benchmark**

Reflex Marine is best known for the FROG personnel transfer device, which has become widely recognised as an industry benchmark for crane-based crew transfer. The FROG helped redefine offshore access by placing occupant protection, stability, and operational resilience at the

centre of its design.

Building on this foundation, Reflex Marine followed with the FROG-XT range, representing a significant step forward in crane transfer safety. Developed through extensive testing and continuous improvement, the FROG-XT incorporates enhanced ergonomics, improved impact protection, and expanded operational capability.

Available in 2-, 4-, 6-, and 10-person configurations, the FROG-XT range is designed to support a wide variety of offshore operations. These include routine personnel transfers where cranes are the primary means of access, as well as contingency scenarios such as emergency down-manning, low-volume crew changes, and unplanned transfers arising from adverse weather or operational incidents.

### **Built-In MedEvac Capability**

A key differentiator of the FROG-XT range is its rapid medical evacuation capability. Units can be converted into MedEvac mode in minutes, allowing injured or unwell personnel to be transferred by stretcher, with space for a medic or accompanying passenger.

For larger-scale or more complex evacuations, the FROG XT-10 offers additional flexibility, enabling the



transport of two stretcher casualties alongside two seated passengers. This capability is particularly valuable in remote offshore locations, where alternative evacuation options may be limited or weather-dependent.

“Versatility is essential offshore,” explains Daniel Martinez. “The FROG-XT is designed to perform consistently, whether it’s a routine crew change or a medical emergency, and to do so in conditions where reliability really matters.”

### **Designed for Global Operating Conditions**

One of the defining strengths of Reflex Marine equipment is its wide operating envelope, allowing safe transfers to continue in conditions that might otherwise restrict access. Depending on model, the FROG-XT range can operate in wind speeds of up to 40

knots and in significant wave heights of up to 4 metres.

Temperature capability further supports global deployment. Arctic variants are certified for use down to  $-40^{\circ}\text{C}$ , while standard units are approved for temperatures up to  $50^{\circ}\text{C}$ . This enables a single product platform to be used across diverse regions, from cold-water offshore developments to equatorial and tropical environments.

### **A sustainable, cost-effective solution**

While lower-cost alternatives such as rigid baskets remain available, Reflex Marine encourages operators to consider the total lifecycle value of personnel transfer equipment. When factors such as product lifespan, inspection and maintenance requirements, transport costs, and

weather-related downtime are taken into account, the FROG-XT often proves to be a more cost-effective solution over time.

Its durability and operational flexibility help reduce lost time due to weather conditions, while its strong safety performance contributes to fewer incidents and reduced operational risk. For operators managing assets across multiple regions, this consistency offers both safety and commercial benefits.

### **Expanding Across Offshore Wind, Civil Engineering, and Defence**

While originally developed to support offshore energy operations, Reflex Marine’s technology has proven equally valuable across a growing range of adjacent sectors. As offshore activity diversifies, the need for safe, flexible, and weather-resilient personnel transfer has become increasingly important in industries such as offshore wind, civil engineering, and maritime defence.

In the offshore wind sector, where access to turbines, substations, and offshore platforms is critical throughout the asset lifecycle, crane-based transfer solutions offer a reliable alternative when vessel motions, sea state, or access constraints limit other methods. Reflex Marine’s personnel transfer devices are now supporting construction, commissioning, inspection, and maintenance activities, helping operators maintain safe access while minimising downtime.

Similarly, civil engineering projects involving bridges, ports, and coastal infrastructure increasingly require personnel to be transferred safely between vessels and structures in exposed marine environments. The adaptability and compact footprint of Reflex Marine equipment make it well suited to these applications, where space is often limited and conditions can change rapidly.

The company’s proven safety performance has also driven adoption within the defence sector, including naval and coast guard operations, where personnel protection, reliability, and rapid response capability are



essential. In these contexts, Reflex Marine's transfer devices support a wide range of missions, from routine personnel movements to emergency response and casualty evacuation, often in demanding sea states and remote locations.

This broadening adoption reflects the versatility of Reflex Marine's technology and its ability to meet the evolving access requirements of offshore industries well beyond traditional oil and gas operations.

### **A Broader Portfolio of Offshore Safety Solutions**

Reflex Marine's commitment to offshore safety extends beyond crew transfer devices. Its wider portfolio includes STORM-WORK, a work basket designed for working at height over water, and WAVE-4, a standing personnel transfer device developed for installations with limited deck space.

STORM-WORK incorporates a self-righting design, anti-snagging features, and a protected working zone, earning industry recognition with the LEEA Safety Award. The WAVE-4 has also received international acclaim, winning Seatrade's 'Safety at Sea' Award for its efficient design and ease of handling.

### **Supporting a Global Customer Base**

Delivering equipment globally requires more than robust engineering. Reflex Marine provides a comprehensive global support package designed to ensure safe and effective operation throughout the product lifecycle. This includes risk assessments, training, servicing, and maintenance, delivered through a worldwide network of licensed service partners.

Training can be tailored to individual operator requirements and delivered in multiple formats, helping ensure consistent standards across regions and operating environments.

"Safety doesn't stop at delivery," says Sandra Antonovic, Chief Operating Officer. "Our responsibility is to support customers wherever they operate in the world and for as long as the equipment is in use. Long-term partnerships are fundamental to improving offshore



safety."

In parallel, Reflex Marine actively contributes to industry-wide safety initiatives. The company has led collaborative programmes and developed the Ten Golden Rules for crane transfer operations, helping to promote best practice and raise standards across the global offshore sector.

### **A Proven Global Safety Record**

Today, almost 2,000 Reflex Marine transfer devices are operating worldwide, facilitating over two million safe personnel transfers every year. With close to 20 years without a lost-time incident involving a Reflex Marine product—a record that underscores the effectiveness of its safety-focused design philosophy.

As the offshore energy industry

continues to evolve—embracing offshore wind, decommissioning, and new energy developments—Reflex Marine remains focused on innovation. Drawing on decades of experience and a truly global perspective, the company continues to advance technologies that support the safe movement of people offshore, wherever energy operations take them.

"Our safety record is something we are proud of," concludes Sandra Antonovic, "but it also comes with responsibility. As offshore operations expand and diversify globally, we will continue to raise the bar for safe access and personnel transfer."

### **Reflex Marine**

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