



stability was also carefully monitored to maximise the vessel's deadweight carrying capacity.

The refurbished vessel now offers two fully enclosed observation-style North and South Lounges that provide bright and contemporary furnished spaces free of bulkheads and partitions and with stunning views. With moveable furniture, the South Lounge offers flexibility for alternative use as individual board room style meeting or entertainment hosting rooms depending upon demand.

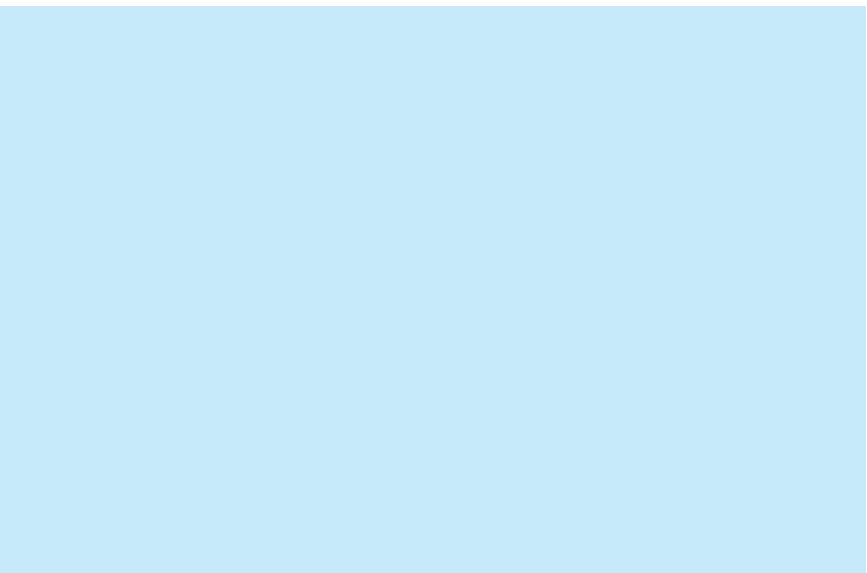
To help minimise the time that Red Falcon was taken out of service, each lounge was prepared and built in steel sections before the ship docked. The steel work was carried out by Burgess Marine, which was appointed as a sub-contractor by Trimline, although the latter maintained overall responsibility.

Formed on shore, the steel panels were then lifted onto the ship in 'at-pack' sections, where they were welded, insulated and glazed using energy efficient windows supplied by marine glazing specialist, Seaglaze. To meet the tight deadline, Trimline's team of electrical engineers, interior joiners and installers then set to work running cables, installing pipes and laying hundreds of metres of flooring.

At the same time work was progressing on the two new observation lounges, Deck B was completely stripped back to its bare shell, with the work once more overseen by Trimline. Improvements included the installation of LED lighting throughout the ferry, TV screens, air-conditioning, Wi-Fi and charging points for laptops located in the seating areas and a new bar surrounded by comfortable lounge-style seating.

Lift access was extended up to the new observation lounges and, weather permitting, passengers can now use an external 'promenade' walkway with benches and seating that allows access also for pushchair and wheelchair users. Above each lounge sun decks with seating have become the highest viewing points on the ferry.

Combined with the new observation lounges, the work has resulted in a 55% net gain in seat capacity and a completely transformed and modern passenger environment. The



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success of the conversion has recently been endorsed in a further contract for the conversion of a second Red Funnel 10.8m hull section comprising a container hold suitable for accommodating two bays of 40 reefer containers. This required refurbishment of Red Osprey, which the inclusion of a new cargo crane and the incorporation of a side loading pallet system to serve the existing cargo holds.

During this phase the vessels also saw the inclusion of an anti-heeling system along with a new reefer monitoring system and the installation of a new controlled atmosphere system.

BCTQ undertook both Finite Element Analysis (FEA) and vibration studies as part of this conversion, whilst substantial model tests were carried out at Force Technology in Denmark to evaluate the performance of the lengthened vessels. This resulted in the development of a new bulbous bow, improving performance over a range of operating conditions.

An additional feature of the conversion was for the provision of an extra auxiliary generator, to power the additional reefer containers within the lengthened section. BCTQ designed a new machinery space aft of the accommodation, as the vessel could not accommodate the new equipment internally. The

Red Osprey will re-enter service in time for Easter 2015. BCTQ's long term contractor, KeiWay Electrical Engineering, which has been commissioned to undertake additional electrical studies for Star Reefers. **SCRT**

