Robert Wynn & Sons, delivering at **Hinkley Point**

Hinkley Point A Power Station, located on the UK's North Somerset coast, was built between 1957 and 1965 and was soon followed by a B station that commenced construction in 1967. In 1968 the UK Government invested in Ro/Ro ships the Aberthaw Fisher & the Kingsnorth Fisher and created specific Ro/Ro berths around the UK for the vessels to operate. This included a berth on the River Parrett at Combwich to serve the existing A and the construction of the B station.

The 'Fisher vessels' served Hinkley Point A & B and neighbouring substations until their final delivery in 1997.

The Robert Wynn & Sons owned Terra Marique was created to replace the 'Fisher vessels' and designed to use the coastal infrastructure created for them. The Terra Marique first offloaded at Combwich in July 2005 and has now loaded/unloaded at the berth on 8 occasions since. In 2018 & 2019 the Terra Marique has visited Combwich twice, in 2018 offloading two 166te transformers for Hinkley Point B, and in 2019 a tunnel boring machine for the construction of Hinkley Point C.

The Terra Marique is experienced in the nuclear sector, having delivered multiple loads to the French Port of Dielette for the construction of EDF's Flamanville Nuclear Power Station as well as delivering 11 modules over a period of 2 years on to the beach at Sellafield in Cumbria as part of the Evaporator D project for Sellafield Nuclear Site.

Kingsnorth Fisher offloads at Combwich Wharf April 1972

Offloading a tunnel boring machine, consisting of 5 individual loads at Combwich Wharf

485te Reactor offloaded at Dielette en route to Flamanville Nuclear Power Station

2 of 11 modules. Heaviest of which was 565te. Sellafield, Cumbria.

The Terra Marique is Unique

Manoeuvring under own power prior to offload at Torness power station

Onboard lighting allows operation during hours of darkness

The design of the Terra Marique combines state-of-the-art technology with traditional marine and heavy transport engineering.

Specific design details aim to maximise the utilisation of UK and European ports, rivers and inland waterways. Her 'Lloyds classed' hydraulic roadway, operating at a touch of a button; coupled with the dual ballast system, capable of pumping 40te of water per minute, will allow the vessel to offload on varying quay heights on fast moving tides.

At a length of 80m with a beam of 16.5m, the Terra Marique's hold is 67m by 9m. Cargo of under 6.7m in height can be carried "underdeck" (and out of sight).

The Terra Marique has 3 separate roadways which can be operated singularly or in unison. Each section can be rotated 2^0 in both trim & heel, and has 8 x 125te hydraulic jacks which when combined provides a safe working load of 600te per section.

The Terra Marique's built in lighting removes the need for temporary lights and her integral lashing positions on roadway and hold sides are provided to ensure cargo can be securely lashed.

She is self-propelled in inland waters (UK Cat C) with her 4 x 275KW thrusters give 360^0 manoeuvrability, with normal sail away being permitted at BF6 & decreasing.

Delivering from Avonmouth “the Muster Port” or **direct from Europe**

The Terra Marique can deliver to Combwich from either Avonmouth (acting as a “Muster Port”) or direct from ports across northern Europe. A regular visitor to Rotterdam, Antwerp and Cherbourg and classed to navigate to Scandinavia, into the Baltic and through the European waterway network.

When operating from Avonmouth as a “Muster Port”, the Terra Marique would load afloat, and expect the operation to be complete in approx. 30 minutes; from ramp down to load aboard. Our experienced crew would lash & secure with Cordstrap, typically loading and securing 3 items in one 8hr shift.

The Terra Marique would depart Avonmouth at high water to travel the 35 nautical miles to Combwich berth. Wherever the “port of loading” the Terra Marique approaches Combwich with our Master, crew and pilot boarding off Burnham-on-Sea. Once on board our crew would use the Terra Marique’s in-built engines and thrusters to safely berth at Combwich under her own power.

Loading in Cherbourg the “muster port” for Flamanville

Multiple cargoes loaded by floating crane in European ports

Navigating the inland waterways on route to discharge

Combwich Wharf as the tide recedes

Flooded to accept cargo considerate of the marine environment

Terra Marique offloads 2x 268te Calendres mindful of environmental and political sensitivities

Safety & Environmental impact when operating on the River Parrett and Combwich

Bristol Port Company commissioned experts ‘HR Wallingford’ to carry out tests using a variety of barges in their state of the art “real time ship simulator”. The Terra Marique was modelled navigating the River Parrett and manoeuvring under her own power on to Combwich Wharf in winds up to BF 5/6T (25 Knots). Those responsible for the exercise concluded that the Terra Marique’s unique capabilities were proven repeatedly, during numerous successful dockings into Combwich Wharf in a wide range of conditions.

Robert Wynn & Sons are mindful of our impact on the land and marine environment, and the operations of the Terra Marique are carefully planned with risk assessments for all activities.

All winches are integral, all engines are housed within noise enclosures ensuring any noise is kept to a minimum, and in the event of a hydraulic leak from our vessel or cargo carrying trailer, any oil spill will be retained within the vessels hold and not spilt in to the watercourse. Additionally, the Terra Marique’s onboard hydraulic cranes means there is no requirement to use mobile cranes to lay ramps.