

Supplying a Safe Landing for Sellafield

TPA has secured the contract to supply a temporary roadway solution as part of the prestigious 'Evaporator D Project' at the Sellafield Nuclear Reprocessing Plant in Cumbria.

The Evaporator D Project is the largest nuclear construction project currently being undertaken at the Sellafield site. Large engineered modules ranging from 100 to 500 tons in weight are being constructed off site before being transported by boat to Sellafield ready for final assembly and installation. TPA's client for the contract is Mammoet, the World renowned specialists in heavy lift and abnormal load transportation services, who in turn is working for Costain Oil, Gas and Process, the principle contractor leading the project.

TPA's aluminium roadway system enables the self propelled mobile transporters (SPMTs) carrying the modules to drive off the barge, travel over the beach and up an engineered ramp to a purpose built concrete bridge at the rear of the construction site. Additionally, further Traxpanels are used to provide a large, safe working area on the beach for a 100 ton mobile crane and articulated delivery trucks.

David Holloway, Mammoet's Project Manager commented; "We needed to come up with a robust solution of how to transport modules from the beached barge, across the sand, up a gabion mattress ramp and finally up a compacted stone ramp. TPA's solution certainly achieved this. The panels installed by TPA were done safely, efficiently and within our timeframes and, more importantly, stood up to the weight of the SPMTs carrying the modules over the various surfaces without a problem."

The power and unpredictable nature of the Irish Sea dictates that the access is exposed to the sea for the minimum amount of time possible to ensure the integrity and security of the access. Around 500 Traxpanels are used for each installation along with 150 2.5 ton concrete blocks which are used as ballast to secure the access between tides. Time is the key factor on this project. The whole access takes 2^{1/2} days to install, is used for one day and then two days to recover.

TPA is the first portable roadway company to tackle a tidal project of this scale. On this contract, aluminium roadway is installed in larger quantities, further from the shore, in deeper water and for longer periods than has ever been attempted before. The transport element of the project is proceeding in 6 – 8 phases between May 2011 and May 2012 (The first beach landing was completed on the 2nd June 2011). Each movement requires a repeat installation of the temporary access.



Pictures show TPA's products at Sellafield site...

a. Each evaporator component comprises structural steel framework containing vessels, pipework and other process equipment and has been fabricated by Interserve at its five acre, indoor site near Ellesmere Port. This ensures the integrity of each module. They have been specifically designed for use with SPMTs to allow for smooth transportation during the road and sea phase of the operation. Each module weighs between 100 and 500 tonnes and is up to 27m high x 12.5m x 7.5m wide.

b. This is the first time in Sellafield's history that sea transportation has been utilised.

c. Work on the Evaporator D project is due to be completed in 2014. It will provide additional capacity to support the existing evaporators which play a crucial role in the delivery of nuclear fuel reprocessing contracts.

Time-Lapse Footage of TPA's installation can be viewed here; <http://www.youtube.com/watch?v=VhBPjSDrgeU>

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