

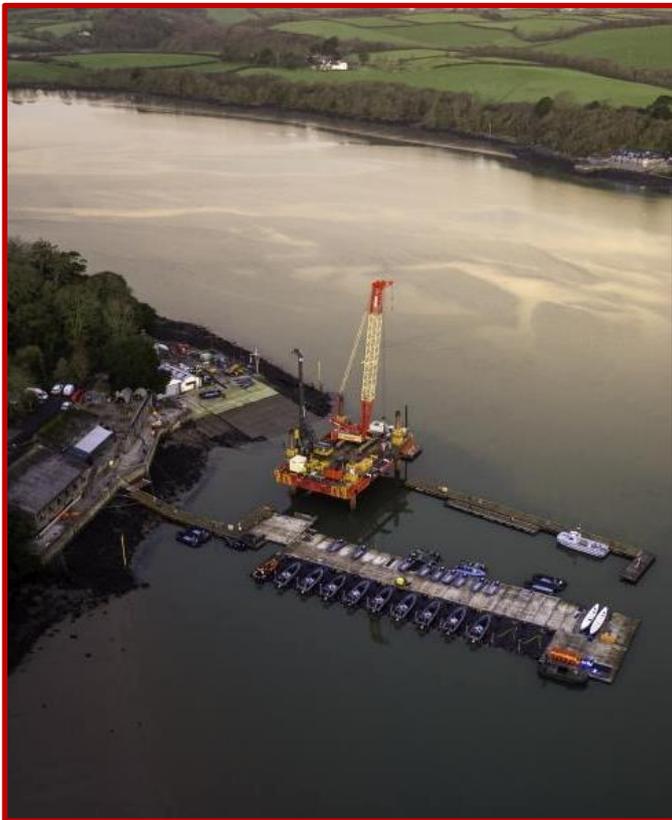
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ABI Equipment Ltd were delighted to provide one of their fleet Delmag RH28 drilling rigs, plus BT280-2 rotary head and Kelly bar for Red7Marine on a recent project at Jupiter Point near Plymouth.

The work being carried out was for the construction of a modernised pontoon structure as part of a wider project overhauling the Jupiter Point Training Facility. This facility, being not far from the HMS Raleigh Royal Navy Training School, provides specialist seamanship training for Naval recruits as well as serving members, youth organisations and military users – for small to medium sized sailing and motor dinghies.



Piling for Pontoon Modernisation, Jupiter Point

Our client:

Red7Marine Ltd

Equipment used:

Delmag RH28

BT280 Rotary Head + Kelly Bar



Application: Rock Socketed Piles

All pictures courtesy of Red7Marine Ltd



Two piles were required to be sunk, between which a 40m linkspan will land onto the new proposed pontoon structure. The pontoons will be fastened to the new piles to hold them in position. All work was carried out from Red7Marine's 400t jack-up barge sited just offshore in the tidal estuary.

This location has steeply angled beds of shale and slate, so it was necessary to create rock socketed piles to give maximum stability. Rock socketed piles are created by drilling into the rock layer and creating a shaft of a slightly

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larger diameter than the supporting pile, this way a void is produced around the pile which is then filled with a high strength grout. This 'socket' in the rock provides the final pile with additional stability by giving it resistance against both lateral loads and uplift forces, and is commonly used in this type of offshore location.

The Delmag RH28 delivers 288 kNm of torque and 420kN of crowd force, and was ideally suited to the job. The two piles installed were 18m in length, Ø610mm, while the rock sockets were 5m deep, and Ø1050mm.

As if the tough ground conditions were not enough, and as well as being sited on a jack-up barge in a tidal estuary, the work was undertaken during the winter season – with strong gusting winds and heavy rain, as well as two storm force weather events. Despite this the engineers on site for Red7Marine were full of praise for both the equipment and operator supplied by ABI, stating that they worked very well for them throughout the project, producing impeccable results.

