

PILING

SHEETPILING COCKBURN SOUND MARINE BASE



Construction of the Australian Marine Complex on the shoreline of Cockburn Sound in WA is nearing completion and commercial operations are scheduled to start in September. The Marine Complex is the culmination of over two years of planning and construction and will result in the consolidation of existing marine, defence and resources fabrication plants with the new \$200m state and federal government funded Fabrication and Common User Precinct.

Western Australian construction company Multiplex was awarded the \$27.2m contract to construct the complex's on-shore facilities and joint venture partners Transfield and Macmahon Contractors were awarded the \$53m contract for civil and marine works.

As well as the construction of a seawall, bulk reclamation involving over 3 million cu m of dredge spoil and numerous demolition, relocation and construction projects, the marine and civil works involved the construction of two wharves.

The first wharf is designed to handle the 3,000t load-out requirement whereas the other is a 60m long 15,000t heavy lift wharf. In total the wharf area is able to accommodate a 300m long vessel.

Steelcom specialises in the hire and sale of sheet pile and pile driving/foundation equipment and hired the Transfield/Macmahon consortium a BSP HH14, 14t ram weight piling-hammer for the wharf construction driving steel tubes up to 46m in length and up to 1m in diameter.

UK piling-hammer manufacturer BSP designed and manufactured the HH1146 series with ram weights of 11t, 14t or 16t to meet the trends of larger and more heavily loaded piles. The 1146 series of hammers are able to operate at a maximum stroke of 1500mm as opposed to the traditional 1200mm thereby improving the impact energy rating by up to 25%.

In the case of the 14t hammer the increased stroke results in a maximum potential energy per blow of 208 kilonewtons as opposed to 168 kilonewtons or an 18% increase in performance.

The BSP HH14 was used to drive the steel tubes 40m into the seabed. Transfield/Macmahon used a 200t crane with multigated piling frame to drive the tubes that were later filled with concrete.

Further information: Steelcom (02) 9954 9166 www.steelcom.com.au