



Tugs Rangī & Karetai

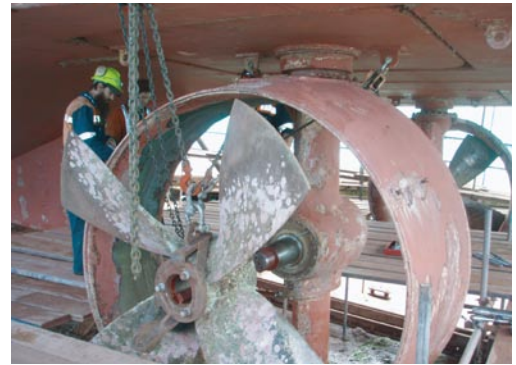
During 2008, Action Engineering Limited completed five year survey inspections on two Port Otago Tugs.

Both vessels were pulled from the water, and were closely inspected from stem to stern, to ensure that they will both continue to be in the best condition to safely guide large ships around the Otago Harbour.

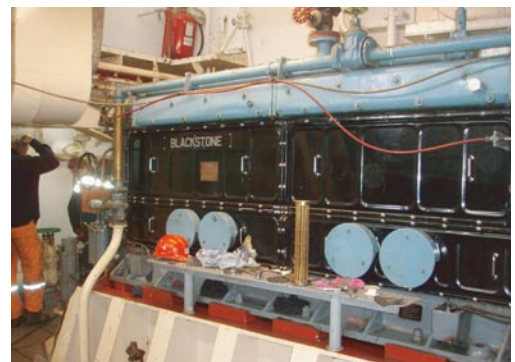
Work involved replacing pipe work, inspection of all tanks and void spaces, removal and inspection of all valves, cleaning all oil coolers, checking the anchors, overhauling the Schottel (propelling) units, repairs to the funnel casings, fitting and welding of steel plating as required, and replacement of all protective anodes.



A view of the overhauled "Schottel" propulsion units prior to re-launching of the vessel.



Staff removing the Port Propeller prior to placing pintle bushes and shaft seals



A view of one of the two "Blackstone" diesel main engines fitted to each vessel