

Babcock (NZ) Ltd



s/y Athena



m/y Dragonfly



m/y A

Dry-docking and refitting of Super Yachts and Passenger Vessels

Follows examples of some of the yacht and small passenger vessel dry-dockings and work packages undertaken at Babcock NZ's facility in Devonport Dockyard Auckland. Babcock NZ would be pleased to offer dry-dock and maintenance services to similar vessels operating in Australasian and South West Pacific waters and would be pleased to discuss future plans for vessel survey dockings and refit packages.

Athena

The 80 metre superyacht Athena has docked three times with the yard here in Auckland. The first stay was prior to Christmas 2006 where she spent 2 weeks in dry-dock and the balance on the repair berth. During the dry-docking the existing anti-foul was removed and replaced with new Trilux 33 anti-foul coatings. To reduce the risk of damage to coatings, instead of the more usual ultra high pressure water blasting paint removal process, the anti-foul was removed using a soda washing process. To protect topside coatings from possible overspray the underwater hull area was encapsulated, with the encapsulation process worked around the clock to ensure that the whole process could be completed in the 14 day dock window available. The Athena then dry-docked with us in 2010 and in 2011 for general survey and underwater hull preservation works and for replacement of propeller shaft bearings. The existing water lubricated composite bearing sets were replaced by Ecosafe bearings, a Wartsila composite bearing product, which involved removing the propeller shafts, to machine the shaft liners and dimension and final machine and install the Owner supplied Ecosafe bearings.

Dragonfly

A recent first docking for Babcock NZ was the 73 metre Silver Series motor yacht Dragonfly, which docked with Babcock in October 2014 for a propeller shaft bearing change and propulsion system alignment checks. The Dragonfly, a semi-displacement yacht built in Australia in 2009 by Silver Yachts (formerly Hanseatic Marine) is equipped with an ultra-modern stabilization system and two 3,305hp MTU 16V400 engines and has a maximum speed of 25 knots and a range of 4500nm. The yacht's fine hull form and aluminium construction required more sophisticated dry-dock block supports than typically used for our more heavily constructed commercial vessels, but by CNC milling the docking cradle blocks our docking team were able to ensure an accurate and timely dock set. Babcock's marine fitting team worked closely with the ship's engineer and the bearing supplier's NZ representative Henleys Propellers, to remove the vessel's propeller shafts and to survey and replace the composite shaft bearings. The Babcock team then assisted the ship's engineer post docking to carry out alignment checks and adjustment of the vessel's gearbox foundations at berth in Auckland's Silo Marina.

m/y A

The 120 metre motor yacht 'A' dry-docked at Devonport in 2013 to fulfill Classification Society survey requirements including removal of controllable pitch propellers for overhaul, servicing of stern tube seals, and overhaul of sea valves. Other work carried out during the 16 day dry-dock period included water blasting and painting of the underwater hull, renewal of hull anodes and survey of sea chests, anchors and cables and general underwater fittings. Had more dry-dock space been available, the yacht would have stayed for a larger work package however due to the relatively short notice for dry-dock arrangements and the yard's busy dry-dock program, the work package had to be tailored to the 16 days available. M/y A then commissioned various in-water works while berthed at Auckland's Silo Marina.

Caledonian Sky

The 90.6 metre LOA, 4,280 tonne small cruise ship Caledonian Sky took time out following a 14 day New Zealand coastal cruise to drydock with Babcock NZ for an 11 day survey and maintenance period in December 2014.

The dry-dock work package included servicing of the vessel's boilers; charge air coolers; air conditioning compressors; deck cranes and winches. Steelwork repairs; water blasting and painting of underwater hull; survey of anchor chains and sea valves and repairs and minor installations for the vessel's storage and deck areas were also completed. Safety items such as fire-fighting and life-saving equipment and life boats have been serviced during the docking period. Babcock NZ, with assistance from Babcock design consultancy MID, also designed and manufactured a c-band satellite antenna foundation for installation during the vessels January Auckland port visit.

Mayan Queen

The 93 metre long, 3,879 grt motor yacht Mayan Queen dry-docked with Babcock NZ in 2011 with the work package including anti-foul painting, tail shaft survey and main engine survey and miscellaneous deck and survey works.

Exploration Yacht

The 88m LOA Exploration Yacht Arctic P first docked with Babcock in 2010 to complete a 12 week docking survey and maintenance work package. The work package included replacement of the three existing generator sets with four new Deutz BF8M1015MC engines. The upgrade also involved fitting a new switchboard and command and control cabling to the bridge and control room. New exhaust systems, fuel lines, sea water cooling lines etc were also installed. A shipping route was required through the vessel's side shell plate for removal of old equipment and services from the generator space and for installation of the new switchboard and generator sets. VTF's commercial design arm MID were able to provide structural and mechanical services design assistance to the project. Other work included; construction of two new Generator Space air inlet plenum chambers complete with noise dampening to improve fan motor noise on deck; manufacture and installation of new stairways, installation of new superstructure doors, modifications to boat cradles; hull & superstructure preservation; application of new deck coatings and survey and general repair items including overhaul of capstans; removal of tail shaft for survey and assistance with main engine survey. The Arctic P docked again with Babcock (NZ) Ltd in 2013.



Caledonian Sky



Mayan Queen



Exploration Yacht Arctic P



Exploration Yacht tailshaft withdrawal