Dockside

Babcock [NZ] Ltd Ship Repair and Marine Engineering News

FEBRUARY 2019

Welcome - Tēnā koutou

I trust that 2019 finds you and your teams well, and that business prospects are positive.

The last six months have been busy for Babcock New Zealand, with highlights being the docking of boutique cruise ship Caledonian Sky and expedition motor yacht Senses. Caledonian Sky docked for an extensive class renewal docking and Senses for her 20 year class renewal docking and maintenance package. Two other key projects were the dockings of the research vessel Tangaroa and the factory fishing trawler Tomi Maru 87. A pleasing aspect of all these projects (featured in the newsletter below), is they are repeat visitors to our Auckland dry-dock facility. The common factor across these successful projects is that we worked with the respective vessel managers on planning and engineering well in advance of vessels' arrival. Together we were able to minimize material surprises for the customer, and we made use of our experience with these vessels to ensure the delivery of their work packages on time.

Looking ahead, whilst Fairplay commented in September that "the outlook for the shipping industry is gradually brightening", we would note that some sectors still remain in recovery mode. Locally, however several of our regular South Pacific customers are planning their class survey cycle dockings, which is a good sign. As ever, we would be pleased to discuss 2019 dry-docking and vessel maintenance options with you.

With the America's Cup being held in Auckland between January and March 2021, we are anticipating increased superyacht docking activity particularly between July and December 2020 and potentially from April 2021 onwards. As enquiries for Auckland berths and maintenance now coming in, we recommend that our regular customers consider early booking for docking projects planned during this period. Please contact Keith Drake for further information.

Once again, thank you for your continuing support. We value your business and look forward to hearing about your successes and working with you on future projects.

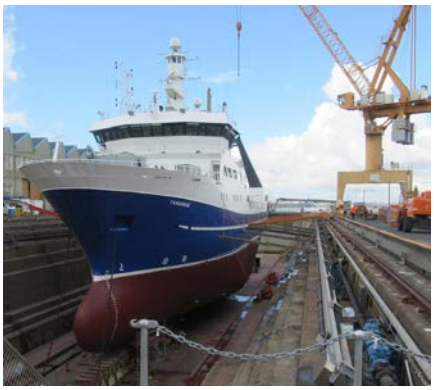
Ngā mihi

Chris Saxby
Managing Director
Babcock NZ

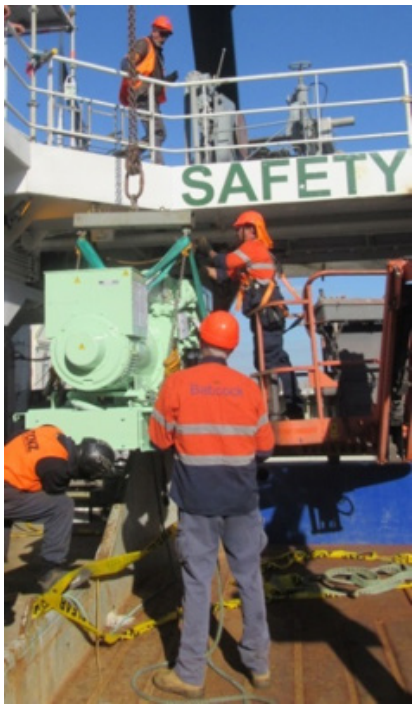
Research Vessel Tangaroa in Drydock

Babcock dry-docked the 70m, 2,291 grt research survey vessel Tangaroa in August 2018 to undergo a 16 day survey, preservation and maintenance work package.

A regular visitor to our dry-dock, RV Tangaroa is operated by the New Zealand National Institute of Water and Atmospheric Research who conduct marine and fisheries research in New Zealand's exclusive economic zone and the waters surrounding Antarctica. The 2018 work package included installation of a replacement harbour generator that required outfitting removals/replacement and modifications of electrical cabling and sea water cooling pipework. Another modification was the fabrication and installation of a trawl net monitor hydrophone pod on the existing hull sonar gondola. Underwater equipment and survey works included ship side valves, anchor cables and hull anodes. Boiler valves and fittings were serviced and cooling water cross ducts and ventilation ducts cleaned. A significant preservation package was completed including water blasting and painting of underwater hull and topsides; preservation of superstructure and A-frame gantries; application of new NIWA logos; and, cleaning and painting of ballast tanks and grey water tank spaces.



Two shifts were worked on the harbour generator installation to achieve the 16 day dry-dock duration required by NIWA.



Tangaroa - Replacement harbour generator

For enquiries about dry-dock or repair, please contact Keith Drake, Business Development Manager.
Phone +64 21 922 335 or email: keith.drake@babcockinternational.com or shiprepair@babcockinternational.com

Caledonian Sky completes third docking with Babcock

Babcock was very pleased to dock the 4,200 grt Caledonian Sky in November 2018. This is the third time the international cruise ship has dry-docked with Babcock confirming the trust and confidence that customers have in our ability to provide them with the service desired.

The Caledonian Sky project was one of the most intense work packages in terms of work scope versus time in hand that has been undertaken by Babcock NZ. This year's docking was for a Class Renewal Survey, and some key structural repairs. With a very fixed repair window between cruise bookings (passengers were flying into Auckland to join the vessel the day after the planned dry-dock period completed) it was a challenge for all.

Our project team had been working with the Salen Shipping Technical Director based in Sweden since early 2018, and preparations included ship inspections in Auckland and Darwin to plan the work package accurately and allocate sufficient resources to ensure the agreed work package could be completed. Contingencies were put in place to deal with any unforeseen emergent work that may have arisen following in-dock survey.

Approximately 17,000 working hours were planned for 16 days although for projects of this size (noting the potential conflicting activities such as propeller shafts and stabilizer surveys, structural steelwork repairs and hull preservation) we would normally allow a longer duration. A strong consideration in the planning process was to achieve the condensed timeline without affecting the quality of our workmanship or in any way compromising ship and personnel safety. The approach was to assign additional work teams and subcontractors and employ additional shifts, in a seven day working week to ensure that the timeframe was achievable.

We are pleased to report that the Caledonian Sky undocked on schedule and was available to embark passengers. The volume of work required could not have been achieved in the time available without excellent communication and co-operation from Salen Shipping and the ship's officers and crew not to mention the superb and professional effort from Babcock's project team, our own technical team and a fantastic team of sub-contractors from across our local supply chain.

Caledonian Sky - working the late shift

Caledonian Sky with stern being high pressure water blasted prior to removal of propeller shafts

Long standing customer Tomi Maru 87 returns to the Yard

The 69m factory fishing trawler Tomi Maru 87 returned to Babcock NZ in June 2018 to undergo a 3 week dry-docking and maintenance period. Tomi Maru 87 has been coming to the Devonport Dockyard for approximately 20 years for a mix of dry-docking and engine and machinery overhaul projects. Initially owned by Kanai Fisheries Japan, since 2015 Tomi Maru 87 has been owned by NZ's Aurora Fisheries and now operates as a New Zealand flagged vessel. During this dry-dock period, Babcock provided machinery repair and maintenance services as well as stripping the topsides hull to bare steel and renew paint coatings. Additionally, Babcock's Survey Unit completed ultrasonic hull thickness measurements of underwater hull plating. Mechanical works included: servicing the 2,200Kw Niigata main engine and the Yanmar auxiliary generator engines; and, overhaul of various valves, pumps, motors, coolers and separators. The vessel's rudder and tail shaft were removed for survey, with the shaft delivered to specialist NZ machining subcontractor A.I.E. for bearing surface repairs. We found on docking that the vessel was unable to drain her aft diesel fuel tanks to enable lifting eye plates to be welded to the hull for rigging of the propeller shaft. So, to save the customer time and money Babcock's engineering and project team derived an alternative solution to safely utilise small mobile cranes for propeller shaft and rudder removal/replacement. Preservation work also included the underwater hull antifouling; the forecastle deck; and superstructure areas such as the bridge front and mid-ships and stern gantries.

Tomi Maru 87 – Re-fitting propeller shaft following inspection and bearing surface repairs

Tomi Maru 87 – Departing Auckland on completion of maintenance period

HMNZS Te Mana

A-bracket bearing in water repair

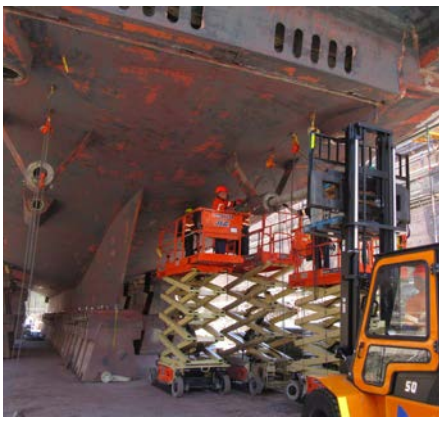
The New Zealand Navy Frigate HMNZS Te Mana recently experienced an engineering issue related to a propeller shaft bearing, whilst being operationally deployed near Hawaii. Babcock NZ Centre of Engineering staff isolated the problem area and recommended the bearing be changed out. Docking a ship in Hawaii presented various unfavourable issues for the NZ Navy, so Babcock NZ came up with a solution that allowed the bearing to be replaced in-water, without the ship going to dry-dock. The complete procedure was filmed underwater and fed back live so that all work was able to be closely monitored by the ships' engineering staff, which gave the customer confidence in our approach and execution of the procedure. To reinforce the assurance, Babcock NZ staff travelled to Hawaii to oversee the operation. On completion, HMNZS Te Mana completed her deployment through Australia and Asia without further incident from the bearing.

Babcock PM Team with Specialist Support from IKAD and Phoenix during in-water propeller shaft bearing replacement in Hawaii

Expedition motor yacht Senses

Senses encapsulated for hull painting

The 58m motor yacht, Senses, dry-docked with Babcock in December 2018 for a 20 year class renewal survey. Babcock first docked Senses in 2015, so this is a very welcome return from a satisfied customer. This time Senses spent the Christmas / New Year period with us as part of a 9 week dry-dock programme.



Rudders and propeller shafts removed for survey

Critical works included the removal of main engines, gearboxes and generators for overhaul with shipping routes cut through the main deck and also the overhaul of propeller shafts and fin stabilisers. The hull has been encapsulated to facilitate the preparation and application of a complex paint scheme to the vessel's topsides and underwater hull areas. Other works include the replacement of engine silencers; repairs to stern door; the installation of underwater lights; and, a bow thruster overhaul. A Babcock team was able to visit Senses in Fiji to assist with work specification and planning and, with this being our second collaboration with with the Senses team, we were able to set up the work package in a relatively short time-frame. At time of writing, work is still underway, but very much on track to undock mid-February, when Senses will move to Auckland's Silo Marina for completion of superstructure painting and in-water outfitting.

Health and Safety news

Emergency Response Team

Babcock NZ's Health & Safety team have initiated an Emergency Response Team to assist with confined space incidents, or similar incidents that may occur on site. Specialist equipment has now been received including an Emergency Response buggy so that all parts of the site can be covered, and training has ramped up so the team can confidently respond to potential incidents.

Working in close collaboration with the Local Fire Emergency Services (LFES), who have been advising on how to best respond to these types of incidents, has resulted in the delivery of some cross training opportunities with LFES gaining valuable experience of emergency and personnel withdrawal procedures on ships, particularly warships that are traditionally not blessed with much internal space.

Babcock's group-wide goal is to never compromise on health and safety and to ensure everyone goes home safe every day.

Babcock Emergency Response Team in training

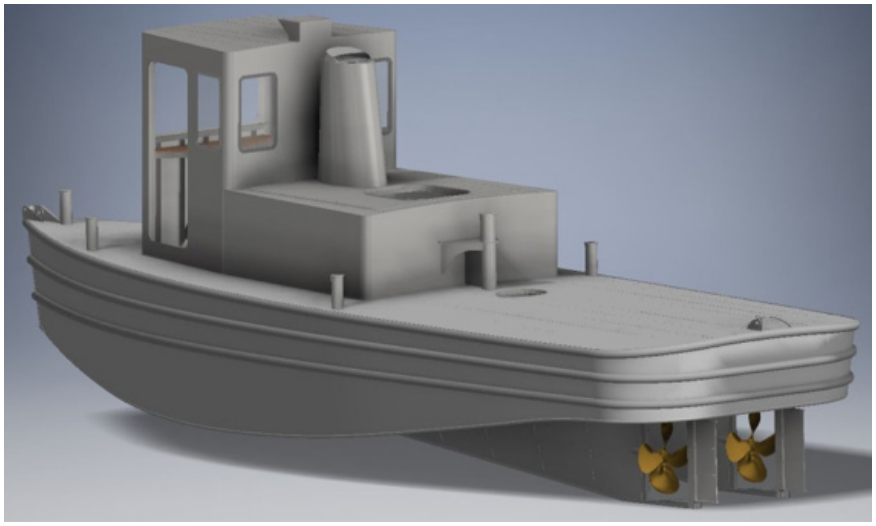
MARINE INDUSTRIAL DESIGN

Marine Industrial Design update

In a busy second half of 2018, MID worked on superyachts, work boats, barges, project cargos, fishing boats, Naval support, cargo vessels and gangways and, also expanded their design team in the Whangarei office. MID have also been actively providing project management services to vessel operators for planning and budgeting capital projects and maintenance packages.

It's the summer break for NZ University students and MID continues to support the Babcock Intern programme with two Naval Architect students very successfully placed in the MID team. As well as providing the students with invaluable experience working in the commercial and naval areas, MID have been able to make permanent Naval Architect appointments as a direct result of the programme.

MID completed design of a new build 10.4m river tug in the latter half of 2018 and this is currently under construction by Auckland's Titan Marine Engineering. The design was developed by MID in conjunction with the operator with lessons in use derived from a previous vessel that will be retired. The tug will be used to move 24m x 150t sand barges used in a river dredging operation. It has a 2.5t bollard pull, is designed for operating in shallow water, with a rugged construction/durability that has been optimised for its harsh environment and the fast turn-around needed of its dredging barges. The design has full Maritime NZ compliance.



10.4m river tug Hull Model

Super Yacht stairway design

Passenger gangway access

MID continue to provide design support for superyacht refit projects in the region. One vessel required re-configuring external deck accesses and layout, with the provision of new stairways in a particular style to suit the yacht. New custom stainless steel and teak stairways were designed, with the structural capacity to suit statutory requirements.

Additionally, MID have seen an increasing demand for compliant vessel gangways and have recently completed several projects of this nature. MID now have a wide portfolio of ladder and gangway designs that are compliant with international standards, that include maximum slope angles for gangways. One 2018 project required a novel solution to provide passenger gangway access from a vessel to the wharf. This resulted in a design for a scissor lift platform to adjust for tidal variation and a hinged gangway to land on the vessel.

For any enquiries or more information regarding MID, please contact Jason Smith, MID Manager MRINA C.Eng
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www.marinedesign.co.nz

Ship Repair and Marine Engineering Enquiries

If you are considering NZ docking or refit projects, or if you would like further information regarding Babcock services, please contact:

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or Email: Keith.Drake@babcockinternational.com or shiprepair@babcockinternational.com
Website: www.babcock.nz

We currently have dry dock space available between May and December 2019, with dry-dock openings also available from July 2020 onwards.

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Babcock [NZ] Ltd
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Steelwork Repairs & Fabrication | Painting & Outfitting | Electrical & Electronics
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