



▶ J & E HALL SUPPLY 5x WATER COOLED MARINE CHILLERS

HISTORY

Atlantic & Peninsula (A&P) Australia provide service support for HMAS Choules for all major engineering platforms on the ship. A&P Australia specialises in providing marine platform through-life and in-service support to the Australian Defence sector and is part of Atlantic and Peninsula Marine Services, which also includes A & P Group, who supported HMAS Choules before it's sale to the Australian Navy.

J & E HALL WERE CHOSEN BASED ON OUR EXPERIENCE WITH BESPOKE MARINE CHILLED WATER PLANTS AND SUPPORTABILITY THROUGH-LIFE BY OUR LOCAL AGENT, CHILLFLOW SOLUTIONS



The chilled water plants provide chilled water cooling to the air handling units serving the accommodation spaces within the ship and more importantly provide direct cooling to essential services onboard.

CASE STUDY SUMMARY

- INSTALL:** J & E Hall supplied 5 x 1000kW chilled water plants using our HSM6231 single screw semi-hermetic compressor. The CWP'S supply chilled water to the ships ring mains at 6°C, returning back around 14°C
- BENEFITS:** The new J & E Hall plants will be more efficient and reliable than the existing ones and are supplied with lower GWP refrigerant R513A



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CASE STUDY



PROJECT

James Hodge (Senior Manager - Marine Projects) says

“The Customer chose J & E Hall based on our technical tender for this project which included through-life sustainment support from Chillflow Solutions. Also our experience in supplying bespoke chilled water plants to fit within a constrained space already determined from the previous design.”

As we were replacing existing chillers our design had to maintain the same footprint / height of existing chillers. At the same time the chilled and sea water connections had to be strictly maintained to avoid any major pipe modifications within the machinery spaces. Similarly the power requirements for the new chillers had to be within current limits to avoid any new cable runs.

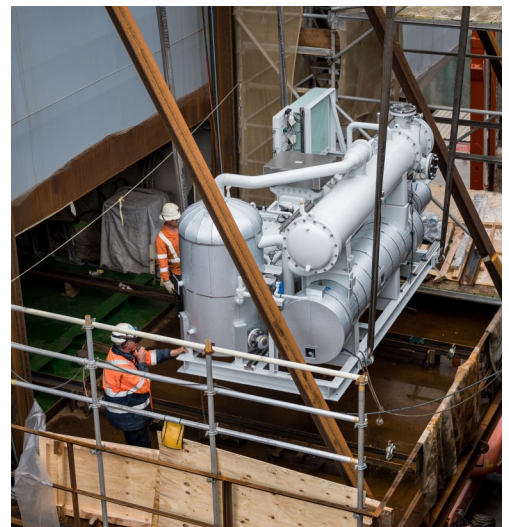
DUE TO THE AGE AND RELIABILITY OF THE EXISTING CHILLED WATER PLANTS IT WAS NECESSARY TO REPLACE ALL 5 EXISTING CHILLERS ON THE SHIP

On completion of the build, one unit was successfully factory tested at our Dartford facility, with tests including full performance trials, also pitch and roll tests to mimic ships movements.

The installation was a success, when the ship is dry docked, large sections of the hull are cut open to enable the chillers to be placed into position.

The commissioning was also a major success, J & E Hall commissioning engineer Tom Thorburn in conjunction with the Chillflow Solutions team set to work all 5x chillers including 10 day Sea Acceptance Trials in Jarvis Bay.

The contract was carried out during the global covid pandemic, where numerous issues surrounding the difficult working circumstances including major supply chain deliverables had to be overcome.



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