

Icebreaking Antarctic Supply and Research Vessel (RSV Nuyina)

| General:                    | The heavy icebreaker was designed for the Australian Government to resupply their<br>Antarctic bases and for research and scientific work. The vessel can deploy a wide range<br>of vehicles, including helicopters, landing barges and amphibious trucks to support<br>the resupply operations. The new ship provides a modern platform for marine science<br>research in both sea ice and open water with a large moon pool for launching and<br>retrieving sampling equipment and remotely operated vehicles.<br>Unique to the vessel is a hybrid propulsion system to provide both the high power<br>needed for icebreaking and silent running for science operations. Sensitive acoustic<br>instruments are mounted on dual drop keels and multi-beam bathymetric sonars<br>will enable sea floor mapping. Flexible and modular science laboratories will provide<br>scientists the diverse facilities needed for conducting cutting edge research. |  |
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| Main Particulars:           | Length o.a.<br>Breadth moulded<br>Depth to main deck<br>Draught max.<br>Displacement full load   | 156,00 m<br>25,60 m<br>19,20 m<br>9,20 m<br>24,000 t |
| Capacity:                   | No. of passengers (scientists)<br>No. of crew  | 116 pax<br>32 pers.                                  |
| Speed:                      | Max.<br>Icebreaking  | 16.00+ kn<br>3.00 kn                                 |
| Machinery and<br>Equipment: | Diesel-Direct + PTI (electric hybrid)<br>Propulsion power<br>Generator power<br>Thrusters  | 26,600 kW<br>11,000 kWe<br>3 bow and 3 stern         |
| Miscellaneous:              | Classification   | Lloyd's Register of Shipping                         |
| Scope of Work:              | Concept Design<br>Tender Design<br>Operational Concepts<br>3D renderings<br>Promotional movie<br>HVAC  |  |
| Ref. No.:                   | KEH 13006  |  |

