

“Hydrema deliver two machines to Australia’s Antarctic Program”

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Two **Hydrema** 922Gs have joined the (AAD) Australian Antarctic Division's fleet to become a part of Australia's Antarctic Program.

When Australia's new Antarctic icebreaking research and supply vessel - the RSV Nuyina, sets its course toward Antarctica in 2021, two Hydrema 922G MultiChassis will be on board and prepared to lift a heavy workload on the icy continent. The two Hydremas will be stationed respectively at Casey and Davis research stations in Antarctica, with a tipping body and a flat top tray for container transport.

From here they will provide a “roll-on, roll-off” cargo delivery and resupply service, of both 10 and 20-foot shipping containers, oversized cargo, and 10-foot “isotanks” of aviation fuel, from the barges on board the RSV Nuyina.

About the trucks

The articulated 922G MultiChassis versions have a hydraulic hook-lift system that allows them to self-load and unload containers. They weigh in at only 14 tonnes, which is one of the main reasons the AAD chose Hydrema trucks over other similar trucks. The reason behind this is that the ADD operates with a load limit of 34 tonnes when transporting cargo on the sea ice. The Hydrema trucks can, therefore, transport containers of up to 20 tonnes, which makes them very efficient and the perfect match for the tasks in the Antarctic.

The 922Gs are full-off road trucks with the highest power to weight ratio on the market and with excellent driving capabilities at all speeds and on all surfaces, due to the oscillated and hydraulic stabilised pivot joint. The combination of the rigid front axle with electronically controlled suspension and level control that aligns the machine in an optimal position, provide the operator with a high level of stability and comfort. Due to the design, all six wheels are in constant contact with the surface, which ensures low ground pressure as the weight is equally distributed.

Winterisation

But before shipping out to Antarctica in 2021-22 with the RSV Nuyina, the 922Gs will undergo a winterisation and be modified, so they are well equipped to handle the often extreme climate conditions in Antarctica, where temperatures quickly can drop to below minus 35 degrees Celsius. The winterisation of the trucks will take place at the Australian Antarctic Division, where they will be modified with the addition of low-temperature oils and fluids, installation of block heaters to pre-heat coolant and battery heaters, and have 8 LED work lights mounted. At the same time, there will be special protection over the windows.

After the winterisation of the machines, the two 922Gs will be fully operational and equipped to the tasks in Antarctica, where they will be a crucial link between the RSV Nuyina and the research stations. Facts about the Australian Antarctic Program and the RSV Nuyina The Australian Antarctic Program (AAP), led by the AAD, conducts world-class science of critical national importance and global significance that delivers on Australian Antarctic policy and operational priorities. The AAP and its scientists conduct research on the continent and in the Southern Ocean, including research into climate, biodiversity, fisheries and environmental protection.

The RSV Nuyina will be the world's best scientific capability in the polar region at this time and will form the centrepiece of Australia's Antarctic presence for decades to come. Equipped with state of the art research equipment and facilities such as a moon pool, the ship's 116 scientists from all over the world, will be able to perform research 24/7.

The concept design of the ship was developed by the Danish engineering company Knud E. Hansen, while the design and construction are conducted by the Dutch Damen Group's facility in Romania. In the keel of the ship, coins from Romania, Holland and Denmark sit alongside an Australian coin, from the Royal Australian Mint, in recognition of each countries contribution to the design and construction of the ship. Depicted on the Danish coin is His Royal Highness Crown Prince Frederik of Denmark and Crown Princess Mary. So when the two 922Gs arrive in Antarctica, they will be part of a very important scientific program for decades to come.

Source: Hydrema Baumaschinen GmbH