

Refit for Research Vessel Marion Dufresne II



The French research vessel Marion Dufresne II arrived at Damen Shiprepair Dunkerque on 14 March 2015 for a project that will extend her life by a further 20 years. The work is expected to span a total of 4 months. One of the major parts of the work will be the replacement of the vessel's multibeam sonar. For this the existing equipment will be scrapped, the ship's hull rebuilt and a new gondola and control room installed.

The complete KONGSBERG package for the upgrade consists of the following equipment:

- EM 122 – Full Ocean Depth Multibeam Echo Sounder
- SBP 120 – Full Ocean Depth Sub-Bottom Profiler
- EM 710 MKII – Medium Water Multibeam Echo Sounder

- EK80 – Scientific Echo Sounder
- K-Sync – Synchronisation System

R/V *Marion Dufresne II* is equipped with a full suite of geophysical facilities (including multibeam bathymetry and imagery) and has unique capabilities for raising long sediment cores, up to 60 metres (her record core being 58 metres). With a capacity for 110 passengers, the R/V *Marion Dufresne II* allows large scientific parties to embark on multidisciplinary programmes.

Additionally, the ILOT capstan – a system used to take samples – will be replaced, which involves a lot of access work, a new sewage tank will be installed, the air-conditioning system will be renewed as well as the A-frames.

On 30 March, the vessel went into dry-dock for a 6-week period, during which the yard will carry out an extensive scope of work.

It's not only equipment that the yard is refurbishing, however. *Marion Dufresne II* will also receive a visual overhaul. The hull and some of the ballast tanks will completely being blast and repaint.

The vessel's accommodation, which the yard is renewing in cooperation with the client's subcontractor will contribute to the new look. *Marion Dufresne II* has accommodation capacity for 104 scientific researchers and 46 crew. Additionally, the accommodation areas of the vessel include laboratory facilities used by IPEV scientists.

The multi-purpose vessel is owned by Les Terres australes et antarctiques français (TAAF) and managed by CMA CGM. *Marion Dufresne II* carries out oceanographic research under the responsibility of the Institut Polaire Paul-Emile Victor (IPEV). The client selected Damen Shiprepair & Conversion following an extremely competitive tendering process.

Operating out of the Port of La Réunion, the ship transports passengers and supplies to remote locations of scientific interest around the Indian Ocean in addition to her scientific capabilities. Much of her previous work has involved the vessel operating in the Crozet and Kerguelen Islands, in the French Southern and Antarctic Lands.

Following completion of the project, *Marion Dufresne II* will return to these remotes areas, sailing first to La Réunion and from there once again to the French Southern and Antarctic Lands.