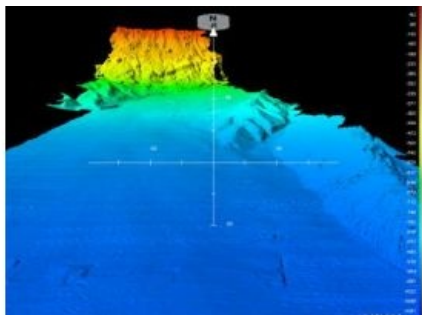


ROV in Seawater Air Conditioning Survey



GDF Suez Energy Services is using a remotely operated underwater vehicle from Copetech-SM, France, as part of a vast seawater air conditioning (SWAC) project near La R union. Equipped with a multi-beam echo sounder, the ROV is performing deep sea bathymetric surveys.

This energy efficiency project is in line with sustainable development principles. Basically, it involves pumping cold seawater from more than 1,000m deep up to the 27 sites to be air conditioned, located in Saint-Denis and Sainte-Marie. The Marseille-based engineering consultancy firm was contracted to map a reliable route for the installation of approximately 20km of subsea pipelines.

High-precision surveys at abyssal depths require onboard sensors capable of capturing the data as close as possible to the areas being surveyed. The ROVs carrying the equipment typically weigh nearly one tonne, requiring large vessels for transport.

Copetech-SM, however, developed an original approach and came up with a different solution, which was a decisive factor in their winning the contract. The ROV used is compact. Weighing less than 200kg, with an adjustable payload from 18 to 40kg, it can be transported and shipped easily, significantly reducing the overall cost of operations.

The underwater vehicle sold by Cadden, France, comes with a leased R2 Sonic Sonic 2022 multi-beam echo sounder, a Sonardyne Lodestar attitude and heading reference system and a LinkQuest Doppler velocity log.

The SWAC system has already been used successfully in Bora Bora in French Polynesia to provide air conditioning in a hotel. The preliminary deep sea study for that project was conducted by Cr oc an, also a Cadden client.