

New Breakwater: underwater explosive hazards clearance goes ahead

01 August 2023



An underwater search for unexploded ordnances along the seabed, up to 50 metres in depth, has begun at Genoa's new open-sea breakwater site, in conjunction with a team of eight highly-experienced divers.

The explosive ordnance disposal unit, organised in four teams working in shifts, deploys a saturation diving facility, in place for a total of 60 consecutive days, to clear the designated area of explosive hazards. The system enables the divers to work in a hyperbaric environment and maximises on available resources for the completion of complex project tasks such as this.

The underwater operations, coordinated by PerGenova Breakwater, are conducted in collaboration with Drafinsub,: eight deep-sea divers, divided into four groups of two, are transported to the seabed inside a submersible decompression chamber. Each diver works up to four hours, in eight-hour shifts, until they are replaced by another pair of divers, 24 hours a day/7 days a week. The activities are coordinated from a large off-shore platform which accommodates the saturation diving facility, a 1,200 Kw power generator and living quarters for the working team of 32 technicians. A control room constantly monitors the conditions of the hyperbaric chamber and the saturation diving system.

At the open-sea breakwater construction site, works proceed simultaneously with the consolidation of the seabed, with the completion of approximately 220 of the 70,000 gravel columns to be installed and designed to ensure the stability of the foundation upon which the facility will be built. To date, 200,000 tons of material has already been deposited by a 3,600-ton capacity ship and two smaller vessels with a total capacity of 700 tons, which transport daily on average 3,000 tons of gravel for a total of 90 voyages to/from Piombino and Genoa.