



▲
SUPERSTRUCTURE

To ensure quality and time saving, a shuttering system was used (PERI) to form the various elements of the superstructures. Columns formwork elements are lifted into position with cranes.



▲
THE SITE

The site shows the land encroached on the mountains and the part reclaimed on the sea.

Whilst the seawater intake is placed low on the coast (+7.5 m), the main area is at a higher level (+15 m), the flare is installed high on a ledge (+50 m).

The temporary jetty limits the site.

◀ **SECANT WALL**

To enable the construction of the seawater intake basin, in dry conditions, the construction of closed secant wall was necessary.

Inside the cofferdam well point dewatering system was used to complete water tightness.

PIPE RACKS

These structures constitute an important part of the civil works.

They carry pipes over the whole site to reach the various product destinations.

long lines of foundations bases and stud columns have to be accurately cast in-situ.



SEAWATER INTAKE BASIN

The intake basin is below sea level and the coastal formation is rocky.

Secant wall was built all around the structure and inside the cofferdam, a well point dewatering system was put in place to allow working in dry conditions. Sealing around the intake pipelines was particularly challenging.

MUSANDAM GAS PROCESSING PLANT

The Northern Province of Musandam in the Sultanate of Oman consists mainly of rugged mountains touching the sea and leaving no space between them and the waters.

In order to build the Musandam Gas Processing Plant (MGP), which treats gas extracted from offshore fields, a vast area had to be prepared to take the various installations and facilities.

Sarooj proposed to cut into the mountains and reclaim land in the sea, in a manner that would not require neither import of fill materials nor cast away surplus excavated rock.

This was achieved by crushing the yielded rock into various sizes.

The scope of works (SOW) included the casting of various concrete foundations, tank farm, pits and manholes, revetment, sheds, substations, administration building, roads, security fencing, trenches and slope protection.

A milestone was the completion of the main seawater intake basin constructed below sea level. This allowed the completion of subsea pipelines.

The upgrading and commissioning of the existing jetty together with the construction of a quay wall allowed marine vessels, barges, and tug boats to service and support the marine works, particularly the laying of pipes and the installation of the Single Point Mooring (SPM) anchors.

