

# PROJECT SHEET

**MEJILLONES NEW PORT**  
MEJILLONES, CHILE

## GENERAL INFORMATION

Boskalis International bv was working as a subcontractor to the Chilean civil contractor Empresa Constructora BELFI SA, which was awarded the contract to construct phase 1 of the New Mega Port Mejillones.

This port has been developed in order to ship the copper of the Chilean mining corporation CODELCO. The new terminal will be capable of handling 2 million tonnes of copper cathodes. For that purpose, CODELCO has established the holding company Complejo Portuario Mejillones, which has sold a concession for 30 years to Compania Portuaria Mejillones, a joint venture between BELFI and maritime agency ULTRAMAR.

## TERMINALS

Mejillones recently started developing its ports activities, after a long silent period. In the beginning of the 20th century, sulphate was shipped from Mejillones, coming by rail from Bolivia. Later, the village deployed its fishing activities.

## FEATURES

Client	Empresa constructora BELFI SA
Location	Mejillones, Chile
Period	November 2002 to April 2003



- A Location map
- B Amstel loading Resolution



Nowadays, Mejillones counts 4 terminals:

- Unloading ammonium terminal for the explosive industries.
- Unloading fish terminal for the fishing industry.
- Multipurpose terminal unloading cement, coal, gas and sulphuric acid.
- Unloading only sulphuric acid.

The current phase of the port consists of 3 fixed terminals. One terminal will be given 12 m and two others 14 m of depth.

### PROJECT ACTIVITIES

The works to be executed by Dragamex consist of the following:

- Monitoring the quality of the water 30 days prior to the beginning of the dredging works, including the quantity of suspended solids, the chlorophyll A concentration, the current speed and direction, the water temperature at predetermined points, and the tide, the wind direction and speed continuously.
- Monitoring the water quality during the dredging process, measuring the same parameters as mentioned in the previous paragraph, however, more frequently. This in order to assure that the sedimentation that comes out of the dredging process will not exceed a predetermined surface, and that protected areas would not receive a higher concentration than 400 mg/lit.
- Dredging and deepening of the harbour turning basin and mooring places. The volume to be dredged is approx. 1,000.000 m<sup>3</sup>.
- All dredged materials will be dumped at sea disposal areas 3 km offshore.

### MATERIAL

The activities are being realised using the cutter suction dredger Amstel and the trailer suction hopper dredger Resolution. In addition to that, the self-propelled multipurpose pontoon Zacatecas is used for assistance to the Amstel and the Resolution. A survey and monitoring vessel equipped with fully electronic survey and monitoring equipment is deployed for personnel transport, surveys and monitoring activities.

One boat equipped with DGPS positioning equipment and electronic monitoring equipment is deployed for daytime monitoring periods.

For the mobilisation, the Dragamex owned tug Jolanda was used together with the transport pontoon Jamuna IX. The Jamuna IX is being used as storage area, as there is virtually no storage facility in the area.

### PROJECT TASKS

The Resolution started dredging the deeper areas, removing the non-solid materials.

The volume to be dredged by the Resolution is approximately 250.000 m<sup>3</sup>. After the Resolution finishes, the Amstel will dredge the remaining quantity of approx. 750,000 m<sup>3</sup> and dredges and pumps the materials through a 600-m. floating line into the Resolution. Some 50.000 m<sup>3</sup> of material will be removed by dry earth plant, using 2 excavators and 2 bulldozers and placed in a stockpile to be used as landfill by Belfi.

The actual dredging works started end of November 2002 last year and will be finished according schedule at the end of April 2003.

Including the other construction works executed by Belfi the port will be operational in October 2003.



**C** Resolution dredging in the deeper areas