

UNDERWATER OUTFALL AND AQUACULTURE PLANT IN MIRA, PORTUGAL

### Description

To date, this project represents the largest flatfish aquaculture plant ever designed and constructed globally. With an investment of 135 million euros to be executed over 20 months, the technological challenge of the project has now shifted to the execution of the works. Only an industrialized construction organization, supported and supervised by a highly specialized technical team, rigorous in its oversight duties, such as that provided by Impulso, has been able to ensure compliance with quality, cost, and schedule objectives without deviations.

A complete technical and logistical challenge that, thanks to the contributions of our professionals, has become a reality.

The civil engineering group at Impulso is composed of experienced professionals in the project and management of highly complex marine works. On this occasion, the main challenge consisted of designing a technical solution adapted to the time and cost objectives established by the Propiedad.

The project has pushed the limits of trenchless technology in underwater outfalls, setting a world record in both length and diameter: 1,500 meters executed in reinforced concrete pipes with a diameter of 3.80 meters, for each of the four tunnels constructed beneath the seabed, designed to handle flow rates close to 25,000 liters per second.

Equally unique are the structures of the intake wells. With a circular floor plan and free depths exceeding 20 meters, these wells have been constructed with continuous reinforced concrete screens that, in sandy soils, reach depths of up to 32 meters and include reaction structures capable of withstanding thrusts of up to 3,000 tons.

The technological uniqueness of the solutions provided by Impulso is combined with staggering figures of a plant with over 400,000 square meters of built area, 3,000 cultivation tanks, and 35 buildings and auxiliary process facilities, resulting in one of the largest engineering works in the neighboring country.

## **Developed functions**

- Drafting and integral management of engineering projects (including installation projects, health and safety studies, health and safety coordination, assistance in contracting).
- Direction and integral management of the construction work.
- Technical assistance for hiring.
- Health and Safety Coordination.

#### Project

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#### Promoter

Acuinova Actividades Piscícolas, S.A. (Pescanova Group).

#### Location

Mira, Coimbra. Portugal.

#### End date of works

End of 2009.

#### **Total constructed area:**

11,664 m2 of buildings and 151,457 m2 of fish and fattening pools.

#### Parcel surface area:

2,060,872 m2.

### **End date of Project**

September, 2007.

# Work



































