

Construção de Reservatório de Água no Alto de Santa Catarina Alto de Santa Catarina, Oeiras

Water tank with 7,5000 m³ capacity, in reinforced concrete
Alto de Santa Catarina, Oeiras (Portugal)

Description of Work

Construction of a new tank in reinforced concrete, consisting of two cells of 5,000 m³ each, next to the existing Final Reservoir of the Western Adductor. It is a reservoir made up of two square-shaped cells with a unit capacity of 5000 m³ to store drinking water.

The main works in this endeavor are as follows:

- Earthmoving works with emphasis on rock excavation;
- Construction works in reinforced concrete;
- Supply and installation of carbon steel pipes and electromechanical equipment;
- Supply, assembly in cast iron piping (FFD) in ditch;
- Execution of rainwater drainage;
- Execution of connections to existing hydraulic circuits;
- Electrical, instrumentation and safety installations;
- Installation of a telemanagement system;
- Exterior arrangements.

The contract included the supply and assembly of all associated electromechanical equipment.

Main quantities

Excavation 4500 m³

Structural fill of the cell foundation, switching chamber and access road 10,000 m³

Landscaping of the enclosure perimeter 11,500 m³

Cyclopean concrete to reinforce the cell foundation and maneuvering chamber 2500 m³

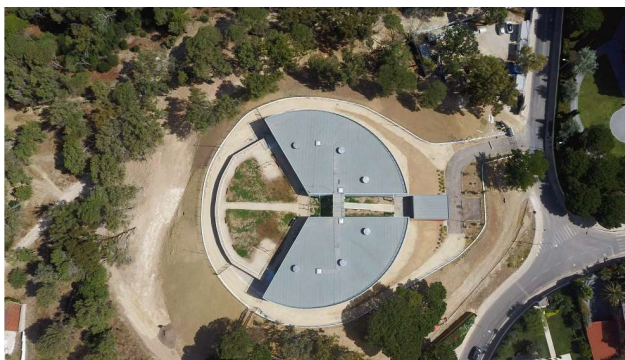
Structural Concrete C35/45 XC4 and C40/50 XA2 1800 m³

Cleaning concrete for leveling foundations 200 m³

Concrete reinforcement 240,000 kg

Formwork 6000 m²

Interior waterproofing of the entire Reservoir (2 cells) 5000 m²



Resumo da Obra

Work Summary

Cliente	SIMAS Oeiras e Amadora	Client
Tipo de contrato	Valor Global Lump Sum	Contract type
Data de construção	2021-2023	Construction period
Custo	EUR 2.048.910,91	Cost

Construção de um Depósito de Água com 5.000 m³ de capacidade

Alto do Cotão, Cacém (Sintra)

Water tank with 5,000 m³ capacity, in reinforced concrete
Alto do Cotão, Cacém (Portugal)

Trabalhos Efectuados

Foi adjudicada à Seth a empreitada da construção da 3.^a célula de 5.000 m³ do reservatório do Alto do Cotão, na freguesia do Cacém, concelho de Sintra.

Com um prazo de execução de 7 meses (210 dias) os trabalhos envolveram a execução de sondagens, movimentação geral de terras, estruturas em betão armado, tubagens e acessórios.

A solução encontrada para o reservatório, foi a execução de um reservatório pré-fabricado com 55 m de comprimento por 17 m de largura, de modo a aproveitar a área disponível para o efeito.

A localização e o tipologia do terreno, obrigou ao saneamento das fundações e a execução de betão ciclópico para garantir a cota de soleira do depósito.

Foram executadas obras de drenagens diversas, arranjos exteriores e pavimentações.

Os trabalhos incluem ainda a ligação às condutas adutoras e de distribuição, bem como todos os acessórios e válvula da caixa de manobras.



Description of Works

Seth was awarded the contract for the construction of the 3rd cell of 5,000 m³ of the “Alto do Cotão” reservoir, in the parish of Cacém, municipality of Sintra.

With an execution period of 7 months (210 days), the works involved the execution of surveys, general earthworks, reinforced concrete structures, pipes and accessories.

The solution found for the reservoir was the construction of a prefabricated reservoir measuring 55 m long by 17 m wide, in order to take advantage of the available area for implementation.

The location and type of land required the sanitation of the foundations and the execution of cyclopean concrete to guarantee the threshold level of the deposit.

Various drainage works, exterior repairs and paving were carried out.

The works also include the connection to the supply and distribution ducts, as well as all the accessories and valve of the control box.



Principais quantidades / Main Quantities:

Escavação / Excavation: 5.400 m³

Aterro / Landfill: 1.500m³

Betão estrutural C40/50 / Structural Concrete: 400 m³

Betão Ciclópico C16/20 / Cyclopic Concrete: 650 m³

Armadura de construção / Construction Armor: 50.000 Kg

Reservatório Pré-Fabricado / Pre-fabricated Reservoir: 5000 m³



Resumo da Obra

Work Summary

Cliente

**Marfer / Universidade Católica /
/ Montepio / Cacém Construções**

Client

Tipo de contrato

Valor Global / Lump Sum

Contract type

Data de construção

2021-2022

Construction period

Custo

EUR 1.019.265,05

Cost

Nova Reserva do Barlavento – Depósitos de Água **Espargal (Freguesia de S. Sebastião, Município de Lagos), Portugal** **New Barlavento Water Tank Reserve at Northwest Faro** **Espargal (S. Sebastião, Lagos), Portugal**

Descrição dos Trabalhos

Construção de um novo reservatório em betão armado, para água potável, composto por duas células de planta quadrada com capacidade unitária de 5.000m³ cada, junto ao Reservatório Final do Adutor Ocidental já existente.

Nesta empreitada, os principais trabalhos foram os seguintes:

- Movimentação de terras com destaque à escavação em rocha;
- Trabalhos de construção em betão armado;
- Fornecimento, instalação de tubagens em aço carbono e equipamento eletromecânico;
- Fornecimento/montagem de tubagem ferro fundido (FFD) em vala;
- Execução de drenagens pluviais;
- Execução de ligações a circuitos hidráulicos existentes;
- Instalações elétricas, de instrumentação e de segurança;
- Instalação de Sistema de Telegestão;
- Arranjos exteriores.

Foi incluído na empreitada o fornecimento e montagem de todo o equipamento eletromecânico associado.

Principais quantidades / Main Quantities

Escavação geral / General Excavation – 13.640 m³

Betão C30/37 / Concrete type C30/37 – 3.135,00 m³

Peso total das armaduras / Total weight of steel – 377 ton

Área total de cofragem / Total formwork area – 9.450 m²

Description of Work

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- Installation of a tele-management system;
- Exterior arrangements.

The contract included the supply and assembly of all associated electromechanical equipment.



Resumo da Obra

Work Summary

Cliente
Tipo de contrato
Data de construção
Custo

Águas do Algarve, SA
Valor Global
2020 – 2022
EUR 2.565.000,00

Customer
Type of Contract
Construction date
Cost

Dessulfurização da Central Termoelétrica de Sines EDP – Refinaria de Sines, Portugal

Civil Works for Desulphurization Plant, at the Thermoelectric Power Plant, Sines EDP Sines – Portugal

Work Carried Out

The desulphurisation project for the Sines Thermoelectric Power Station consists of implementation of four limestone/gypsum wet flue gas desulphurisation (wet FGD) units, one for each of the respective electricity generators. The desulphurisation process basically consists of removal of the SO₂ from the combustion gases through reaction with an alkaline absorbent, obtaining gypsum as a sub-product.

The main components of the desulphurisation system are indicated hereunder, complete with the associated civils:

Combustion Gas System: construction of ventilator foundations and reinforced-concrete pipeline supports.

SO₂ Absorption System: foundations of the absorbers, pumping wells, sundry foundations for equipment.

Limestone Storage System: very large foundation for two steel limestone tanks, three foundations for ball mills, well to house the limestone unloading system and conveyor belt for transport to the tanks, all the surrounding building and foundations for various items of equipment.

Gypsum Storage System: construction of a reinforced-concrete silo, diameter Ø24 m, height 40 m, capacity 9,000 m³.

Desulphurisation Liquid Effluent Treatment System: construction of 2 decantation tanks, 10 square tanks, sludge building, electrical building and sundry retention basins.

Ancillary Energy Systems: building for an ancillary boiler and sundry basins. Electrical and Central Command Building: construction of a building with basement to house the electrical switchboards, laboratory, command and control room, etc.

Compressed Air Systems: construction to four buildings next to the generators to provide compressed air to the desulphurisation system. To support the sundry pipework a Pipe Rack was build from the 4 units to what is known as the common zone.

Ancillary work included sundry drainage, landscaping and paving.

Major Quantities:

Excavation: 160,000 m³ / **Landfill:** 95,000 m³

Structural concrete C35/45: 25,000 m³

Lean concrete C12/15: 8,500 m³ / **Formwork:** 48.000m²

Construction rebar: 2,600,000 kg / **Sundry steel elements:** 400,000 kg



Resumo da Obra *Work Summary*

Cliente	Consórcio Hitachi - Coba	Client
Tipo de contrato	Valor Global <i>Lump Sum</i>	Contract type
Data de construção	2005-2008	Construction period
Custo	EUR 14.000.000,00	Cost