

Açude Insuflável de Abrantes

Inflatable Weir at Abrantes

As part of a consortium **Seth** concluded the River Tagus Inflatable Weir job at Abrantes. The job, awarded by the Abrantes City Council, was finalised in 670 working days and it included the design of the project and the construction of what is, to date, the Iberian Peninsula's biggest weir of its type.

One of the goals of this job was to create a reflecting pool upstream of the weir at a predetermined level, allowing the reservoir created between the city of Abrantes and Rossio ao Sul do Tejo to be used for leisure and entertainment purposes.

Fundamentally, the weir comprises a reinforced concrete body with a portico-shaped cross section about 15 metres wide and 200 metres long, with a variable depth of about 6 metres. The superstructure comprises 4 piers 5.5 metres tall that form four spans that can be blocked by means of cylindrical rubber bodies, the first having a perimeter of 1.20 m and the others 3.2 m. The 5th span comprises a reinforced concrete sluice.

Of the complementary organs, attention is drawn to the reinforced fish house (a zigzag labyrinth) located on the left bank surrounding the respective abutment, and to the control room where the equipment required to operate the weir is located (insufflators, valves, electrical installation, automation, emergency generators, plc-automated control, etc.).

The access roads to the weir are also part of the project.

Main quantities of work:

Concrete: 25 000 m³

Rubble concrete: 5 000 m³

Shuttering: 9 500 m²

Steel: 1 500 tonnes

Accesses: 8 800 m²

Excavation: 16 000 m³

Excavation in rock: 8 500 m³

Inflatable sluice gates:

Span 1 (weight 2.1 tonnes – thickness 10.8 mm)

Spans 2, 3 & 4 (weight 3 x 4.7 tonnes
– thickness – 13.5 mm)



Resumo da Obra

Work Summary

Cliente
Projectista
Tipo de contrato
Data de construção
Custo

Câmara Municipal de Abrantes
CENOR – Projectos de Engenharia, Lda
Concepção/Construção
2004-2007 (670 days)
EUR 9.450.290,00

Client
Architect & Engineer
Contract type
Construction period
Cost

