



Hydraulic equipment / Sluices

Supply of two spillway sluices on the Peñadrada weir in Matarrosa del Sil, Ponferrada

End client

Endesa Generación S.A.

Contractor company

Endesa Generación S.A.

Location

León

Supply period of the equipment

January 2015

Architect

Scope

Design, manufacture, transport and assembly of two fixed wheel sluices on the Peñadrada weir in Matarrosa del Sil, Ponferrada.



Overview of the Weir



Detail of the sluice structure



Detail of the sluice hoist system

Description of the works

The Peñadrada reservoir is on the course of the river Sil, downstream from Las Ondinas reservoir.

The project consisted of full substitution, including the whole activation system, of the existing spillway sluices due to their bad condition.

The work performed was:

- Conditioning the banks for access to the work area upstream from the sluices, maintaining the ecological flow.

- Withdrawal of the activation system and the present sluice gates.
- Improving the present closing system by replacing the existing plates.
- Installation of new sluices.
- Installation of the oleo-hydraulic system and new system of control and regulation boards.
- Reconditioning the access to the original situation.

Equipment technical data

Fixed wheel sluice:

- 2 sluices 11m wide and x 2.5 m high.
- Total sluice sliding length 5.5 m.
- 1 hydraulic equipment to activate the sluices using two telescopic cylinders with two stages each.
- Working pressure of 105 bar.
- Made of carbon steel S275-JR.
- The turning axles of all the wheels and seal plates manufactured of stainless steel AISI 316L.
- A4 bolt sets.