

Rozas de Puerto Real drinking water treatment plant

IN SERVICE SINCE

- 1988

BACKFITTING

- 1999
 - Lime dosing system changed

WATER SOURCE

- Morales River (Los Morales reservoir)

TREATMENT CAPACITY

- 0.175 m³/s

WATER TREATMENT

STAGES OF THE PROCESS

- Preoxidation-prechlorination
- Coagulation-flocculation
- Subsidence
- Rapid sand percolation
- pH adjustment
- Disinfection

REAGENTS USED

- Chlorine, chlorine dioxide and potassium permanganate during preoxidation and prechlorination
- Aluminium salts during the coagulation phase
- Flocculation aids
- Sodium hydroxide during the final pH adjustment
- Chloramines during the final disinfection phase

RELEVANT TECHNICAL DATA

- 1 sludge recirculation settling tank 18 m in diameter
- 4 filters formed by a double-layer bed of activated siliceous-carbon granulated sand, with a unit area of 30 m² and a total area of 120 m²

TREATED WATER TRANSPORT CHANNEL

- It supplies the Rozas de Puerto Real tank, as well as the towns of Cenicientos, Cadalso de los Vidrios and Entrepinos



SLUDGE TREATMENT

TREATMENT CAPACITY

- 380 m³/day
 - 50 m³/day from filter washing
 - 330 m³/day from settling tank purges

STAGES OF THE PROCESS

- Mixing in a tank with a 380 m³ capacity
- Storage in a silo with a 20 m³ capacity

RELEVANT TECHNICAL DATA

- 2 lamella clarifiers with floats that have a unit capacity of 35 m³/h
- 2 centrifuges with a flow rate capacity for sludge of 3 m³/h

FINAL SLUDGE DRYNESS

- 15-20%

