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Termomeccanica Ecologia

Waste water treatment plant
Catania

The plant is active sludge biological type with tertiary treatment for the reuse of the water for industrial purposes.

The plant is composed of two treatment lines that are independent of one another. One is for the treatment of urban sewage and sludge and the other for industrial sewage.

Commencement date: 2000
Delivery date: June 2002



Water treatment
Treatment of Civil and Industrial Waste Water



• **Name of the plant:**
Waste water treatment plant

• **Place of installation:**
Catania (Italy)

• **Client:**
Catania Municipality

• **Plant description:**
The process phases are the same for the two treatment lines, urban sewage and industrial sewage.
The water line is constituted of the sections of:

- screening
- sand and grit removal
- primary sedimentation
- denitrification – nitrification
- secondary sedimentation

For the reuse of the water for industrial purposes the plant includes a tertiary treatment constituted of:

- phosphorus removal
- ozonization
- UV light sterilisation

The sludge line is constituted of the sections of:

- pre-thickening
- anaerobic digestion, post-thickening
- dewatering with centrifugal machines

The plant has the energy recovery of biogas produced through anaerobic digestion.

• **Specific data:**

- population served: 432,500 inhabitants equivalent
- average flow: 1,890 cm/h
- maximum flow: 6,640 cm/h
- BOD5 at input: 26,550 kg/g
- nitrogen at input: 5,780 kg/h

• **Scope of the contract:**

- Construction of the second lot of the urban and industrial sewage treatment and water purification plant.



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