

TM.E.S.p.A

Termomeccanica Ecologia

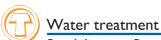
Desalination plant with reverse osmosis

Enel c.le di La Spezia

The plant produces water with a high degree of purity and treats seawater through reverse osmosis technology.

In addition to traditional treatment, such as mechanical filtration and through sand/anthracite filters, the reverse osmosis section is completed with a system of energy recovery with Turbocharger in Super Duplex.











• Name of the plant:

Seawater desalination plant with reverse osmosis for the production of water for industrial and drinking uses

• Place of installation:

Thermoelectric power station of La Spezia (Italy)

• Client:

Enel - Centrale Termoelettrica di la Spezia

• Plant description:

The process line includes:

A) Pre-treatment

- sodium chloride disinfectant dosage
- · coagulant dosage
- filtration with continuous sand filters
- pressure filtration through sand/anthracite filters
- tank for accumulation of filtered water
- UV light sterilisation

B) Osmosis

- mechanical filtration with cartridge filters of 5 micron
- H.P. centrifugal multi-stage pump with speed control and frequency variation
- Reverse Osmosis skids.
- energy recovery system with Turbocharger
- various chemical dosages
- · membrane washing system
- C) Control system and instrumentation

• Scope of the contract:

- design, turn-key supplye and erection, commissioning, start-up
- operation and maintenance of the plant for I year after the commissioning

