

# Chen-Chin Lake drinking water treatment plant



The Chen-Chin Lake drinking water plant provides 450,000 m<sup>3</sup>/d of potable water to the City of Kaoxiung.

In 2002, the Taiwan Water Supply Corporation awarded SUEZ, in partnership with China Ecotek Corporation, the upgrading and extension of the plant on a turnkey basis, as well as its operation and maintenance for a period of 15 years.

Contracted in March 2002, the works were completed in 24 months. The plant has been operated by SUEZ and CEC since February 2004.





## project highlights

- Chen-Chin Lake drinking water plant delivers Taiwan's highest water quality thanks to the combination of lime softening, pre and post ozonation and activated carbon filtration processes, a technological first in the country.
- Thanks to its effective clarification + filtration device, the plant is able to run efficiently when receiving very high turbidity raw water during typhoon periods.
- The plant, which has been operated continuously during construction works, has been delivering fully compliant clean water quality, 100% of time.
- The lime softening process (largest unit ever installed worldwide) allows recycling of 34 T/d of pellets to steel industry.
- The plant's limited footprint and architectural design ensure a perfect environmental integration into the urban area of Chen-Chin Lake district.
- In August 2006, the plant has received ISO 9001 and ISO 14001 certifications.



pretreatment  
overview



ozone  
generators



filters

## treatment line

- **preozonation**
- **settling**  
refurbishment of existing settlers + addition of 3 Pulsatube™ lamellar clarifiers
- **catalytic lime softening**
- **dual media filters**  
rehabilitation of existing filters + addition of 14 Mediazur™ BV filters
- **post ozonation**
- **activated carbon filters** (14 Carbazur™ GH filters)
- **sludge treatment** with belt filter.

## treated water quality

turbidity	< 0.3
residual chlorine	0.5 < . < 1.0
hardness	< 150
ammonia	< 0.08
nitrate	< 8 mg/l
total coliforms	0.0 CFU/100 ml

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Since March 2015, all the Group brands (Degrémont, Ozonia, Aquasource, Ondeo IS, Ameriwater, Infilco, Poseidon...) became SUEZ.

Meanwhile, from now on, the technologies and know-how of our Treatment Solutions offer will be distinguished with the label **degremont®**.

