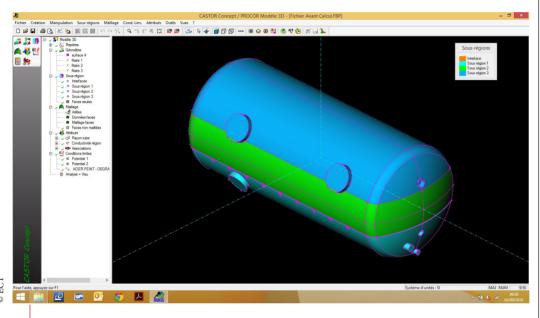
## Water treatment



F.C.T

## A corrosion expert with Procor software

Procor, the software acquired by ECT, has granted it to this enterprise a competitive edge by optimising the cathodic protection of its filters and reservoirs.



OUR CUSTOMER

Corporate name ECT

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**Business activity**Water treatment (hot water

tanks, filers for swimming pools, specific tanks).

Workforce 10 people

Turnover

1 million euros

TCT is an SME with a workforce of ten people that specialises in water treatment for local authorities, the tertiary sector and the industry (hospitals, swimming pools, office buildings, etc.). The company offers a range of filters for swimming pools and hot water tanks as well as large tanks for specific facilities. Further to a training session at Cetim about cathodic protection, Fabrice Aniel, its CEO, decided to purchase Procor. Procor was developed by Cetim as part of a research partnership optimise cathodic protection of metallic systems in aqueous environment.

« I had just taken over the company and I understood that the software program could give us a competitive edge», explained Fabrice Aniel.

## The most suitable cathodic protection

Cathodic protection involves the design on the circulation of an electric current between an anode and the structures to be protected which acts as a cathode. This current is adjusted to reach a potential value that stops the metal corrosion phenomena. Most of its effectiveness depends on the position and the geometry of the anode which will modify the potential of the surface

to be protected. Procor uses boundary element method. The 3D geometry of the tank and the characteristics of the electrodes are to be taken into account for the modelling. With consideration for the polarisation laws, the software then calculates potential values and the current demands on the tank and therefore by iteration it is possible to optimise the solution. Modelling and simulation help to select the most appropriate cathodic protection, to determine the number of required boxes and anodes, to optimise their geometry and to play on all factors which affect the effectiveness of the protection. ECT uses the software to dimension the cathodic protection of its standard products and its specific systems. An industrial solution that is tailored to the needs of the customer.

## Cetim's asset

Procor was developed in partnership with industrial manufacturers and is a forerunner in its field. It offers an efficient solution for support in designing and optimising the cathodic protection.



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