



Spin-off of VUB's Computational Electrochemistry Group and the von Karman Institute for Fluid Mechanics.

Established in 1997.

Milestones

- **1998:** Release of Elsy2D for 2-D simulation of electrochemical processes.
- **2003:** Venture capital investment by B13 Fund.
- **2004:** Release of PlatingMaster for electroplating manufacturing simulation.
- **2006:** Establishment of an engineering branch in Romania.
- **2008:** Establishment of prospection office in USA.
- **2009:** Release of ECoatMaster for simulation of electrocoating processes, validated in collaboration with major German car manufacturer.
- **2010:** Release of CorrosionMaster for design simulation of corrosion risk.
- **2012:** Elsyca introduces V-PIMS for integrity simulation of gas pipeline networks.

Elsyca NV

Vaartdijk 3/603

3018 Wijkmaal (Leuven) | Belgium

CEO: Jean-Marc Dewilde

[T] +32 (0)16 47 49 60

[F] +32 (0)16 47 49 61

[E] info@elsyca.com

[W] www.elsyca.com



From left to right: Christophe Baete, Jean-Marc Dewilde, Leslie Bortels

Powered by Electrochemical Intelligence

Surface finishing and electrochemical manufacturing

As experts in electrochemical processes, Elsyca optimizes electroplating, -forming, -polishing, anodize and electrochemical machining applications.

Where legacy trial-and-error approaches waste valuable time and money, Elsyca's simulation technology helps customers to troubleshoot and optimize processes.

In **automotive**, we help OEMs to design the vehicles for an optimal primer coat and we support suppliers in the decorative chrome plating of automotive trim components. In **aerospace**, we assist engine manufacturers in the platinum coating of turbine blades, and we optimize plating processes for safety-critical components such as landing gear assemblies. Other industries such as **medical, oil & gas, consumer products, etc.** all have their applications where products are coated either for decorative or for functional purposes, and where Elsyca's expertise is welcomed to improve our client's products.

Cathodic protection

Elsyca's involvement in cathodic protection started with an engineering research co-operation with Nederlandse Gasunie to evaluate the efficiency of corrosion protection measures of underground gas pipelines.

Traditional survey methods are error-prone and do not give a full insight into the pipeline's health status with respect to corrosion. Leading companies have embraced our technology and we are now able to simulate the cathodic protection performance of huge networks of thousands of kms of pipelines including interference effects from DC sources such as railroad or AC sources such as overhead transmission lines.

In addition, we have extended this market towards offshore oil and gas and more recently towards offshore wind turbine where the simulation serves to accurately design cathodic protection systems that guarantee a long service life of these critical assets.

Corrosion-resistant design

Based on our generic electrochemical simulation platform, Elsyca was approached by the industry to develop a technology able to evaluate a design for its corrosion resistance. As a result, Elsyca released its CorrosionMaster platform in 2012 which attracted considerable interest from the aerospace and defense industry, and resulted in the awarding of a research grant from the US Department of Defense to extend the scope towards additional corrosion mechanisms.

As Jean-Marc Dewilde states: "We are proud at Elsyca that we have built up an impressive client reference list in a variety of markets. Leading companies such as Bosch, United Technologies, Audi, Safran, Nederlandse Gasunie, Stork and many more not only regard us as solution providers but also as engineering innovation partners that help them meet their future challenges with respect to corrosion mitigation and surface finishing. Quality and innovation are our core values !"



**'Quality and innovation are
our core values !'**

Jean-Marc Dewilde, CEO