



## Experts on extreme conditions

Permascand is one of the leading producers of electrodes and electrochemical equipment, serving process industries worldwide.

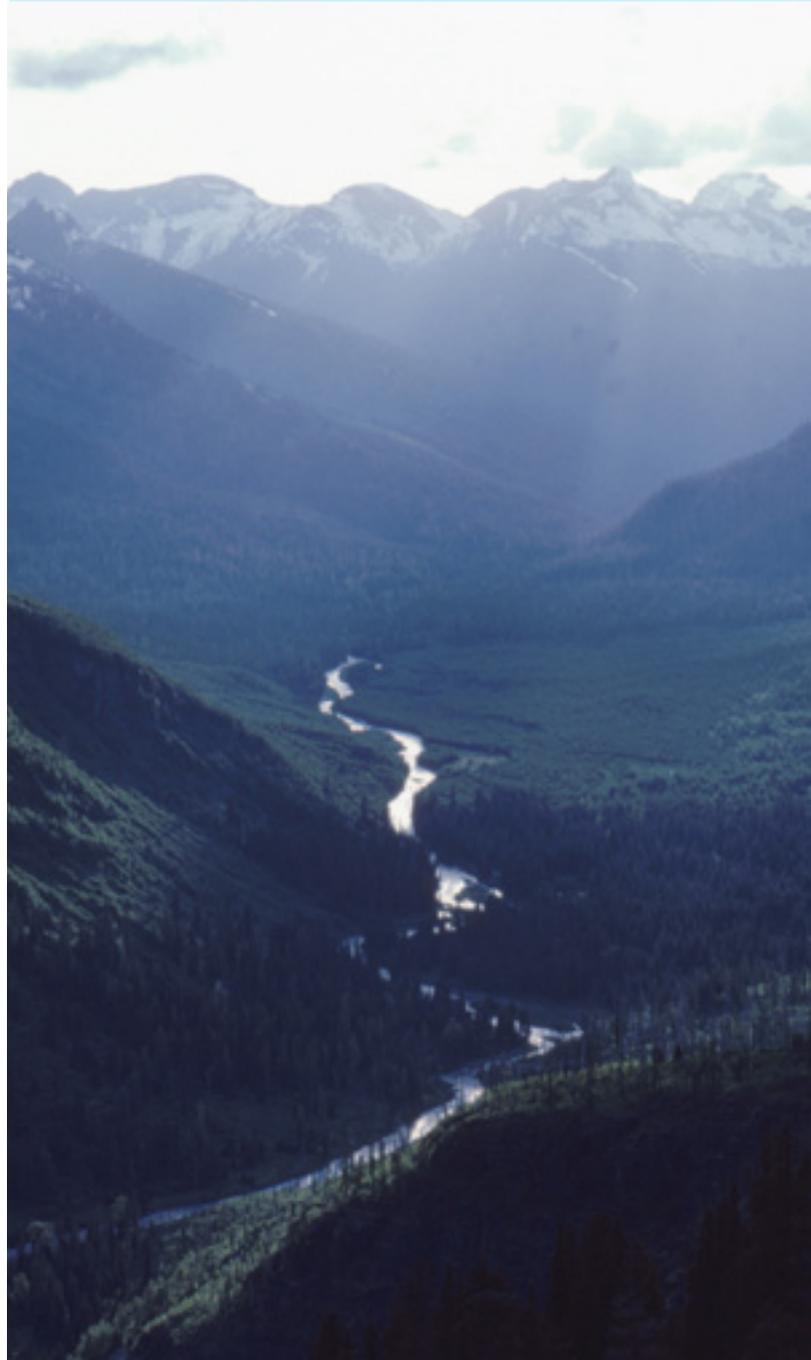
On account of the stringent requirements in this field for material strength, weight and resistance, Permascand has developed high level of know-how in forming and welding of titanium, as well as the design and engineering of customized products in titanium and other materials.

This manufacturing know-how in titanium equipment serves the process, offshore, and marine industries in Scandinavia, Europe and worldwide.

### The range of services includes

- production of electrodes with catalytic coatings
- refurbishment of electrodes and electrochemical cells
- design, engineering and production of light-weight, strong, corrosion resistant products for various markets
- sale of titanium materials and fabricated components
- research, development and innovation

HAVE YOU EVER THOUGHT ABOUT WHAT IT TAKES TO CHALLENGE THE WORLDS HIGHEST DEMANDS FOR MATERIAL STRENGTH, WEIGHT AND RESISTANCE? WE HAVE.



## Permascand's history

We have more than 40 years' experience in the production and supply of hightech products to the process, marine, offshore and defence industries. Our high level of technical know-how has been achieved by extensive international exchange of technology.

The introduction of dimensionally stable anodes (DSA) was the definitive start of a new business, and development has been ongoing, with more sophisticated electrodes and coating systems.

The know-how and methods established in the development of electrodes have been used in the design and engineering of other titanium products. The challenges posed by the high demands of the offshore and marine industries have resulted in the design and production of high-pressure vessels, advanced piping systems etc.

## Core Competence

We belong to the elite as far as the processing of titanium is concerned – but the reason is neither the titanium nor the machinery: it is the people who work here. Permascand was one of the first companies in Sweden to begin working with titanium and by the beginning of the twenty-first century we had built up an enormous bank of competence in our workforce. This is based on a combination of theoretical and practical knowledge and experience along with innovative thinking. A proper mix of these makes us unique, not only in Sweden, but throughout the world.

The ability to understand customer requirements, proposing solutions based on knowledge and experience and then pass on to expert technicians who can manufacture the product – this is Permascand in a nutshell. From the customer's need to the finished product!

## Research & Development

40 years of in-house experience of electrode production, senior expertise and access to competence have established a solid ground for our research & development activities. Our R&D personnel are of high academic level and possess a world wide network that consists of research institutes as well as universities, mainly in Europe and North America. Many R&D projects push the front of technology to new heights leading to novel and innovative products within, but not limited to, the electrochemistry industry.

## Design & Engineering

Permascand's long experience and high degree of know-how of lightweight, strong and maintenance-free metal constructions – mainly in titanium – enable us to meet customer demands at an early stage.

Starting from a problem or a need, we design customized solutions with structural analysis and manufacture.



## Electrochemical Systems

Permascand offers an extensive range of anode and cathode models with various types of catalyst coatings suited to a variety of electrochemical processes.

For many years, we have played an important role as maintenance workshop and manufacturer of electrochemical monopolar/bipolar cells for chlorate production and membrane cells for chlorine production.

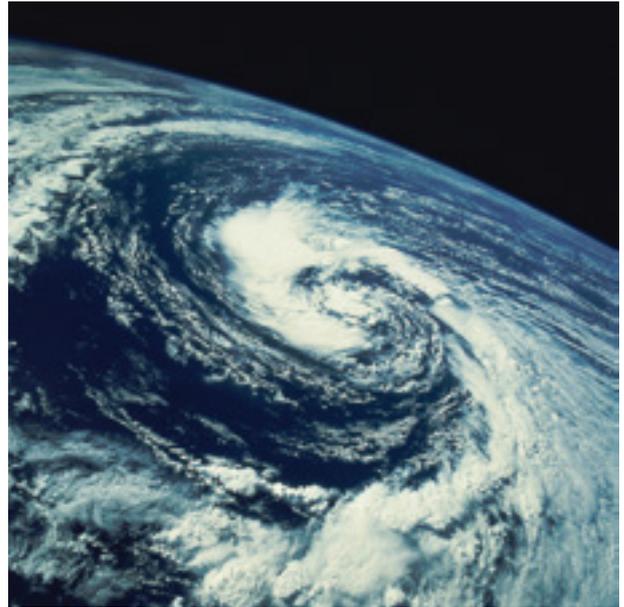
## Fabricated Equipment

With experience in titanium products reaching up to 10,000 metre heights and down to 3,000 metre depths, Permascand meets the highest demands for material strength, weight and resistance.

We have developed a very high level of know-how, and apply our expertise to serve customers in the offshore, marine, process and defence industries in Scandinavia, Europe and worldwide.

Starting from a problem or a need, we design customized solutions based on structural analysis. Permascand has the resources needed for complete project management, from research, development and planning to prototype evaluation and manufacturing.

Permascand has one of the largest stock of titanium material in the Nordic countries, and possesses invaluable knowledge about the material, its potential and its areas of application.



Certified according to:

