## Subsea Technologies for the Marine Environment











SubCtech, Kiel, Germany offers underwater power solutions and ocean monitoring systems. We find solutions in close collaboration with our clients - in the industry, in science and in offshore oil & gas. Li-lon batteries, pCO2 analysers and system solutions are our core products as is one-stop service. Our reliable and precise high-tech 'Made in Germany' products are easy to handle and provide efficiency to our customers.

Stefan Marx, the managing director, founded SubCtech in January 2010 in Osdorf, near Kiel in Germany. The team already has more than 25 years of experience. They rapidly created solutions with their previous experience in ocean engineering, the shipbuilding industry and research centres. The combination of experienced employees, young scientists and market knowledge has proven to be so successful that the company has been making profit from the first year on.

We became a professional company with a global focus after having been certificated as 'approved vendor' in the offshore industry and moving into new premises in 2013.

The targeted implementation of corporate objectives and the cooperation with the French partner SailingOne for equipping sailing yachts with measurement systems was awarded with the remarkable German-French Business Award 2013.

The realisation of unresolved and challenging tasks, and the identification and exploitation of new markets characterise our company. Customers are partners and are supported by our trained professional team from the very first project idea onwards.

The company has a broad spectrum with two business units: Power Solutions and Ocean Monitoring.

The company is still privately owned and has 14 employees. We carry out serial production with reliable, selected partner companies rather than outsourcing. We are flexible in solving specific customer demands thanks to our own R&D. Newest technologies are pursued in dialogue with trade associations and research institutions.

SubCtech reached all targeted markets with the product family of subsea Li-lon batteries in the 'Subsea Power' division. Particularly, the Oil & Gas Offshore industry requires increasingly autonomous systems for greater and greater depths. Complete systems are projected together with data loggers and the implementation of sensors.

Constant high quality is ensured due to certification and periodic audits by the Oil & Gas Industry.

Projects in depths of up to 6,000m are carried out by the Ocean Monitoring division with the adaptation of sensors for pCO2. The pCO2 analysers are used for maritime surveillance and research on buoys and ships. The exclusive production of LI-COR® Biosciences pCO2 analysers allows us to offer internationally competitive state of the art solutions.

Flexible solutions and a distinctive 'cross innovation' approach clear the way to solving new problems and exploring new markets. The pCO2 specially equipped measuring systems of the 'Ocean Pack' family, for instance, have found access to mariculture and aqua culture.

The water quality can be better controlled with instruments that are precise and stable in the long-term. The fish grow faster and a higher rate of yield increases the sales.

The establishment of an international distribution network means that customers can be serviced on-site. Issues are resolved locally in a familiar language. We engage with our clients in a fair and cooperative labour relation that allows us to perform projects successfully. Early consultation and close cooperation in the implementation phase avoid unpleasant surprises, as problems are identified early and can be solved together.

For example, the targeted development of special solutions using the pCO2 analysers and Li-ion batteries opened up the Asian market and resulted in China becoming the most important export country.

## **Future Prospects**

Our social commitment will be developed further. Supporting our employees and their families by, for example, offering them flexible working hours, will continue to be an important perk. Only well trained, satisfied and highly motivated employees will ensure the consistency of SubCtech. We offer exchange opportunities at schools and other educational establishments. International exchange programmes, such as AIESEC or the conference YouMaRes, are supported by SubCtech and allow companies and participants to broaden their horizon.

SubCtech's aim is to be the market leader in the Li-Ion batteries and pCO2 analysers business sectors. We can serve customers and specific market demands, due to the development of products demanded. SubCtech listens to its partner and develops products more efficiently.

Particular attention is paid to market niches that are of no interest to larger companies, and at the same time cannot be served by small companies. For example, small data loggers were installed under ice, combined with Li-lon batteries for high-resolution measurements, for 1 year in the Arctic. Such niche markets will develop to become the new growth markets of the future.

There is a trend towards automation. For example, ROVs or AUVs are used for subsystems such as smart and high capacitive Li-lon batteries or sensor packs for condition monitoring.

We control product development, marketing and therefore the growth of the company carefully. Equipped with a healthy equity position, the know-how of our employees and a network of contacts in industry, science and associations, SubCtech provides security for its employees, customers and investors.

https://www.hydro-international.com/content/article/subsea-technologies-for-the-marine-environment