



Electrolytic Marine Fouling Prevention

- **Sea Water Intake**
- **Offshore Installations**
- **Drilling Platforms**

Anti-Fouling is an electrolytic process preventing the thousands of different species of algae, mussels, slime bacteria and other organisms living, breeding and developing in seawater from being attached to surfaces where the environment is favourable.

The effect of univalent copper

By the anode univalent copper ions Cu^+ are formed, these will combine with the content of oxygen in the seawater and form univalent copper oxide. This combination is unstable and within a few minutes it will transform to the much smaller, active bivalent copper oxide, which is practically indissoluble in seawater with neutral pH.

The effect of aluminium

The effectiveness of treatment with copper oxide is increased when the aluminium is dissolved at the same time by electrolysis. At the same time aluminium prevents that an increased corrosion in the system takes place due to the copper.

Experience

Guldager A/S has delivered more than 10 installations for Anti-Fouling to the rough conditions in the Danish North Sea.