

Onshore Applications **UV-C Cooler**



UV-C Cooler

CORROSION's revolutionary and environmentally friendly solution for biofouling prevention.



CORROSION has developed an alternative, non-chemical antifouling solution in an exclusive joint venture with high-end partners including Philips. CORROSION is proud to present its innovative UV-C Cooler. This unique non-chemical antifouling solution, which was developed in an exclusive joint venture with Phillips, uses UV-C light to provide effective protection against organic fouling.

CORROSION began testing UV-C light as a method to prevent organic fouling in 2017. The results were extremely promising and exceeded expectations. A critical step was the decision to utilize pillow plate technology. By combining these two tried-and-tested technologies, it was possible to develop a truly unique and extremely effective product. The UV-C light prevents fouling originating in surface water, while the cooler provides optimum heat exchange.

Benefits

- Environmentally friendly
- Efficient heat transfer
- Robust construction
- Custom-made

- Energy-efficient
- Silent
- Extremely sustainable operation



The Technology

DUV light is the first color in the spectrum that is invisible to the human eye. It is sub-divided into three categories: A, B and C. Each letter stands for a wavelength range and a progressive quantity of energy. We feel both UV-A and UV-B every day in the form of sunlight.

UV-C has the shortest wavelength, with a range of 100-280 nanometers (nm). Micro-organisms absorb most radiation at 254 nm. For this reason, UV-C light has cell-destroying properties as it causes irreparable damage to cell DNA. While this effect can be harmful to humans and animals, coolers with UV-C light can be utilized in a safe and environmentally friendly way provided that they are used responsibly.

Effective and energy-efficient

These properties ensure that UV-C light is an effective means to prevent organic fouling. The light on the cooler surface irreparably damages the cell structure of organisms and organic fouling, keeping it clean from the very first use. While other protective solutions require the use of sometimes hazardous chemicals to achieve this, the UV-C Cooler is a real game-changer.

Moreover, UV-C lights can be used effectively on their own, which makes them an excellent option for a range of applications. Strong and durable, they also have a long lifespan. Individual lights are housed in quartz tubes that have been tested in various high-stress situations. The lights are robust, which means that they remain intact even under intense pressure.

Pillow plate Cooler

The pillow-shaped plate creates a turbulent current in the cooler, cooling the water with far greater efficiency than normal tube coolers. In addition, the shape ensures that the surface of the cooler can be reached by the UV-C light, thereby guaranteeing protection of the entire device.



Contact us

Interested in our UV-C Cooler? We would be happy to answer any questions you may have and discuss the possibilities.

Visit our website www.corrosion.nl for more information or contact us by phone on: +31 (0) 79 5931295.

CORROSION, Steel Going Strong.







