

DTS (DPD TRO SENSOR)

2024 #02 - April

Developed by Techcross, ECS is a direct electrolysis BWMS, while ECS-HYCHLOR is an indirect electrolysis system. These products utilize proprietary electrolysis technology to provide more precise disinfection, a method of treating ballast water by generating chlorine at a targeted concentration and maintaining consistently.

The core of this technology lies in the performance and stability of the chlorine concentration measurement sensor. To ensure the stable supply and price stability of this sensor, Techcross has successfully developed a sensor called DTS (DPD TRO Sensor) using proprietary technology. We completed testing for all certifications in 2019, commenced mass production in 2022, and are currently actively applying AS service to new vessels and existing ships.



The advantages of DTS over the existing TRO sensor are as follows:

1. **Simplified structure and enhanced durability**
2. **Increased measurement reliability:** Average error rate reduced from 8.2% (existing) to 4.08% (DTS) in freshwater, brackish water, and seawater.
3. **Improved performance in high concentration and turbidity:** Measurement range extended from 10mg/L (existing) to 15mg/L (DTS), and measurements can be conducted with a margin of error within 10%, even in areas with turbidity of 2,000NTU.
4. **Convenience of maintenance**

Techcross has increased the convenience of AS by enabling the replacement of the existing sensor with DTS through simple procedures, and both sensors are designed to be compatible and operable simultaneously.

Furthermore, the price of AS parts has been reduced to approximately 80% and the replacement cycle of reagents has been doubled compared to the existing sensor. This effort aims to significantly alleviate customer maintenance burdens and meet various customer needs.



Techcross DTS

FAQ

- Q** Is it possible to replace the existing sensor with a 1:1 replacement? Can one of the existing sensors be replaced with DTS for simultaneous operation?
- A** Yes, it is possible. we require tasks such as replacing the power supply (AC220V to DC24V) and additional installation materials are required. Only TSU of 485 communication type is compatible for ex-types. Please consult with Techcross AS team for more details to fit your vessels.
- Q** Is it possible for compatibility with existing sensors, reagents, and parts?
- A** No, It's a separate product from the existing sensor, so it needs to be procured separately. However, both non-explosion-proof and explosion-proof sensors use the same reagents and reagent bottles, so they are mutually compatible.
- Q** Would older version models such as HMI V1 or KG30 and integrated RTU etc., be immediately applied?
- A** Yes, in most cases, older models are also applicable. However, for ex-types, vessels equipped with dry contact types require additional work to change the communication type to 485 through PLC replacement. Please consult with Techcross AS team.

NOTICE

TECHCROSS SERVICE TARIFF 06 LAUNCHED FROM Feb.2024

We have launched TARIFF 06, significantly reducing service costs in the Chinese region in response to customer requests.

QR CODE - Customer survey



Please scan QR code for Techcross AS customer survey.