

T9000

CODcr Water Quality On-line Automatic Monitor



1. Product Overview:

Chemical oxygen demand (COD) refers to the mass concentration of oxygen consumed by oxidants when oxidizing organic and inorganic reducing substances in water samples with strong oxidants under certain conditions. COD is also an important index reflecting the degree of pollution of water by organic and inorganic reducing substances.

The analyzer can work automatically and continuously for a long time without attendance according to the site settings. It is widely used in industrial pollution source discharge wastewater, industrial process wastewater, industrial sewage treatment plant wastewater, municipal sewage treatment plant wastewater and other occasions. According to the complexity of site test conditions, the corresponding pretreatment system can be selected to ensure the test process is reliable, test results are accurate, and fully meet the needs of different occasions.

2. Product Principle:

Water samples, potassium dichromate digestion solution, silver sulfate solution (silver sulfate as catalyst can be added to oxidize linear aliphatic compounds more effectively) and concentrated sulfuric acid mixture heated to 175 °C . The color of organic compounds in dichromate ion oxidation solution will change. The analyzer detects the color change and converts the change into COD value then output the value. The amount of dichromate ion consumed is equivalent to the amount of oxidizable organic matter, namely COD.

3. Technical Parameters:

No.	Name	Technical Specifications
1	Application Range	Suitable for wastewater with COD in the range of 10~5,000mg/L and chloride concentration less than 2.5g/L Cl ⁻ . According to customers' actual demand, it can be extended to wastewater with chloride concentration less than 20g/L Cl ⁻ .
2	Test Methods	Potassium dichromate digestion at high temperature, colorimetric determination
3	Measuring range	10~5,000mg/L
4	Lower limit of Detection	3
5	Resolution	0.1
6	Accuracy	±10% or ±8mg/L(Take the bigger value)
7	Repeatability	10% or 6mg/L(Take the larger value)
8	Zero Drift	±5mg/L
9	Span Drift	±10%
10	Measurement cycle	Minimum 20 minutes. According to the actual water sample, the digestion time can be set from 5 to 120 minutes.
11	Sampling period	Time interval (adjustable), integral hour or trigger measurement mode can be set.

12	Calibration cycle	Automatic calibration (1-99 days adjustable), according to actual water samples, manual calibration can be set.
13	Maintenance cycle	Maintenance interval is more than one month, about 30 minutes each time.
14	Human-machine operation	Touch screen display and instruction input.
15	Self checking protection	Working status is self-diagnostic, abnormal or power failure will not lose data. Automatically eliminates residual reactants and resumes work after abnormal reset or power failure.
16	Data storage	No less than half a year data storage
17	Input interface	Switch quantity
18	Output interface	Two RS485 digital output, One 4-20mA analog output
19	Working Conditions	Working indoors; temperature 5-28°C; relative humidity≤90% (no condensation,no dew)
20	Power Supply Consumption	AC230±10%V, 50~60Hz, 5A
21	Dimensions	355×400×600(mm)