

WACR2002 is an analyzer specific for monitoring total chromium in water samples.

The analyzer uses the Potassium Permanganate Oxidation-Diphenylcarbazide Spectrophotometric Method. The sample is reacted with potassium permanganate to oxidize all Cr^{3+} to Cr^{6+} . This step is critical in providing the total concentration of chromium in the water. Diphenylcarbazide then reacts in acid medium with chromium(VI) ions to give a violet solution which is the basis of this sensitive method.

The production of an intense pink/violet-dye, which has absorption maximum at 540 nm is then analyzed using the UV-VIS spectrophotometer. Data comparing with absorbance with a calibration curve gives the concentration of total chromium present in the water sample.



Applications

- Sewage treatment plants
- Industrial production of water
- Wastewater treatment process
- Process monitoring in industrial facilities

Features

High reliability, low maintenance

- Core components are imported, high reliability, long lifetime, suitable for long time online monitoring
- All part contact with liquid will be particularly tested to ensure a long service life
- Specially designed flow path to prevent blocking

Accurate measurement, wide application scope

- Photoelectric measurement method, accurate sampling, low sample injection error
- Automatic chromaticity and turbidity compensation algorithm give full consideration to the situation of actual water samples, real and reliable monitoring results.
- Unique hybrid technology or bubbles agitation ensures thorough mixing of samples and reagents

Safe use, efficient analysis

- When a reagent leaks automatic there will be an alarm and reminders for maintenance.
- Equipment has self-diagnosis function, if there is any defects and alarm will be alerted and display on screen.

Technical Specification

| Specification | |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Method | Diphenylcarbazide spectrophotometric method |
| Measure range | 0~1~5mg/l (customizable) |
| Accuracy | ±10% |
| Repeatability | ±5% |
| Maintenance | >2hr/month |
| Reagent | 1 set reagents: 250 measurements (can be customized) |
| Interface | Analog output: 1 x 4-20mA (expandable to 2) max load 500Ω Analog input: 1 x 4-20mA (expandable to 2) 0-5V input Relay Output: 4 (configuration is flexible) RS485/RS232/USB (optional) |
| Dimensions | 1400 (h) x 405 (w) x 500 (d) mm |
| Ambient conditions | Temperature: 5~40°C |
| Power Supply | AC230V, 50 Hz |
| Power Consumption | 200 W (not including pump) |
| Weight | 75 kg |

