HMA-TCR is an on-line colorimetric analyzer for total chromium in industrial wastewater.

Features

- Low waste solution
  The amount of waste solution is only 1.1L/month. (at 4H measurement interval )
- Low reagent consumption
  No need for reagent change for 1 month.
- Auto range with automatic dilution
  HMA-TCR has two measurement ranges (0.04 - 2, 0.1 - 5mg/L) which can be switched automatically depends on the concentration of total chromium.
- Automatic backwashing sample filter
- Automatic cleaning with each cycle
- Automatic calibration
- 5.7 inch color LCD touch panel

Specifications

- Product name: Automatic Online Analyzer for Total chromium
- Model: HMA-TCR
- Measurement method: Diphenylcarbazide absorptiometry
- Measurement Range: 0.1 - 10mg/L
- Repeatability: Within ±5%
- Display: 5.7 inch LCD display
- Transmission out put: 4 - 20mADC (Load resistance less than 600Ω)
  2 channels
  CH1: Measured Data
  CH2: Temperature of reactor or inside temperature of the panel (selectable)
- Contact out put: Transfer contact 2 points
  (220VAC 3A, 24VDC 3A)
  (1) Equipment Failure
  (2) Select one from followings
    (a) In measurement operation
    (b) Out of upper limit
    (c) Out of lower limit
- Power requirements: 220VAC (±10%), 50/60Hz
- Power consumption: 370VA(max.), 110W(Average)
- Installation: Indoor installation
  Ambient temperature: 10 - 40°C
  Ambient humidity: Less than 85%RH
- Dimensions: 600(W)x255(D)x900(H)mm
- Weight: Approx.52kg

Measuring Method

The Diphenylcarbazide absorptiometry method is adopted. The sample is pumped into the high temperature oxidizing unit and added the oxidizing reagent. Then total chromium is oxidized into dissolved Cr⁶⁺ ion. And Diphenylcarbazid solution is added into the reaction cell. Then Cr⁶⁺ ions react with Diphenylcarbazid to form a red-violet colored complex. Concentration of total Chromium is calculated based on absorbance at 525nm.

Options

- Pure Water Tank
  20L, with level sensor
- Waste Water Tank
  20L, with level sensor
Flow Sheet

Dimensions

Unit: mm

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<th>ITEM</th>
<th>DESCRIPTION</th>
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Power Supply Cable Inlet
O.D ø6-ø12

3- Output Cable Ports
O.D ø6-ø12

Water Receiving Tank

Sample water Inlet Rc1/2
Drain Outlet Rc3/4
Note
1. Remove Dirt, etc by Thoroughly Flushing the Inside of the Piping
   Before Piping to the Equipment. Dirt in the Piping will Clog the Solenoid Valves.
2. Rack/Mounting Brackets Should be Provided by the Customer.