ISHIHARA CHEMICAL

Development solution and cleaning liquid automatic controller

METIS - 7000

NaOH

Features

- Metis-7000 NaOH is a development solution and cleaning liquid automatic controller. It can analyze sodium hydroxide (NaOH) concentration which is active component of process solution used for development and cleaning process at flat panel display production and replenish (output signals for replenishment) supply solution automatically.
- Can maintain high analysis accuracy by washing sensors every after analysis cycle ends.
- Can perform the optimum control of analysis and replenishment by simple parameter change.
- Easy to integrate into specification of production line.
- Contribute to cost down by reducing amounts of use of process solution and labor costs for analysis and replenishment.

Specification

■Function

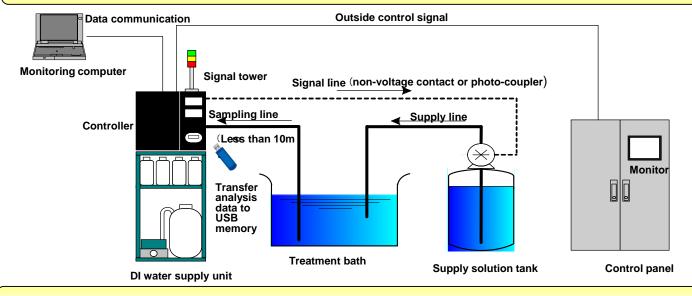| Control items/ analysis method	1. pH value / grass electrode method 2. NaOH concentration / neutralization titration （analysis accuracy ±2.0%）
Replenishing	Controlling replenishing pump from analysis result. ※Replenishing system needs mutual consultation about conditions at processing line.
Cycle time	About 15 minutes

Image picture

■Specification

Dimension / Weight (body)	W385×H470×D455(mm) / 30kg
Dimension / Weight (Footstool)	W465×H930×D425(mm) / 20kg
Power supply	AC100V（±10%）、60/50Hz、3P Plug+ Ground (separated ground line needed for equipped computer)
Power dissipation	200VA(max)

■Option （Below is just some example for your consideration. If you have requests, please feel free to contact us.）

Replenishing unit	Replenishing pump, tank, replenishing hose, liquid level sensor, etc.
Alarm	Patrol light, various signal towers.
DI water supply unit	Automatically supplying DI water used for analysis.
Data communication	CC-Link、RS-232C、RS-485、4-20mA communication、external control, etc.

System summary

Data communication

Outside control signal

Monitoring computer

Signal tower

Controller

Signal line（**non-voltage contact or photo-coupler**）

Sampling line

Supply line

（**Less than 10m**）

Transfer analysis data to USB memory

Monitor

DI water supply unit

Treatment bath

Supply solution tank

Control panel

Automatically analysis flow

Start　　Starts analysis flow every after user- fixed time elapses.

Sampling　　Samples chemical solution by equipped pump.

Analyzing　　Analyzes chemical solution concentration with chemical reagent .

Prints out and saves analysis data, and transfers it to USB memory.
(External data communication is available as optional choice.）

Calculating　　Calculates necessary replenishment to correct the processing solution concentration to preset value on the basis of analysis result.

Replenishment　　Replenishes supply solution into treatment tank by controlling replenishing pump with output signal from the controller.

Cleaning　　Cleans reaction cell and sensors and stands-by till next analysis flow begins.

Note1）Please use our designated genuine parts or reagents for maintenance and running in order to prevent unexpected troubles.

Note2）Please be notified that we may change the specification or appearance of the controller for improvement without notice.

Note3）So as to maintain analysis accuracy, we recommend periodical maintenance or adjustment by our skilled engineer. (out of warranty)

For inquiry contact