ISHIHARA CHEMICAL

Conductive treatment solution automatic controller

METIS-7000

Cu

Features

- Metis-7000 Cu is a conductive treatment solution automatic controller. It can analyze Cu concentration which is control item of processing solution used for conductive treatment of decorative plating process 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	Cu concentration / absorptiometry （analysis accuracy ±2.0%）
Replenishing	Controlling replenishing pump from analysis result. ※Replenishing system needs mutual consultation about conditions at processing line.
Cycle time	About 10 minutes ※cycle time depends on solution's condition such as concentration.

Image picture

■Specification

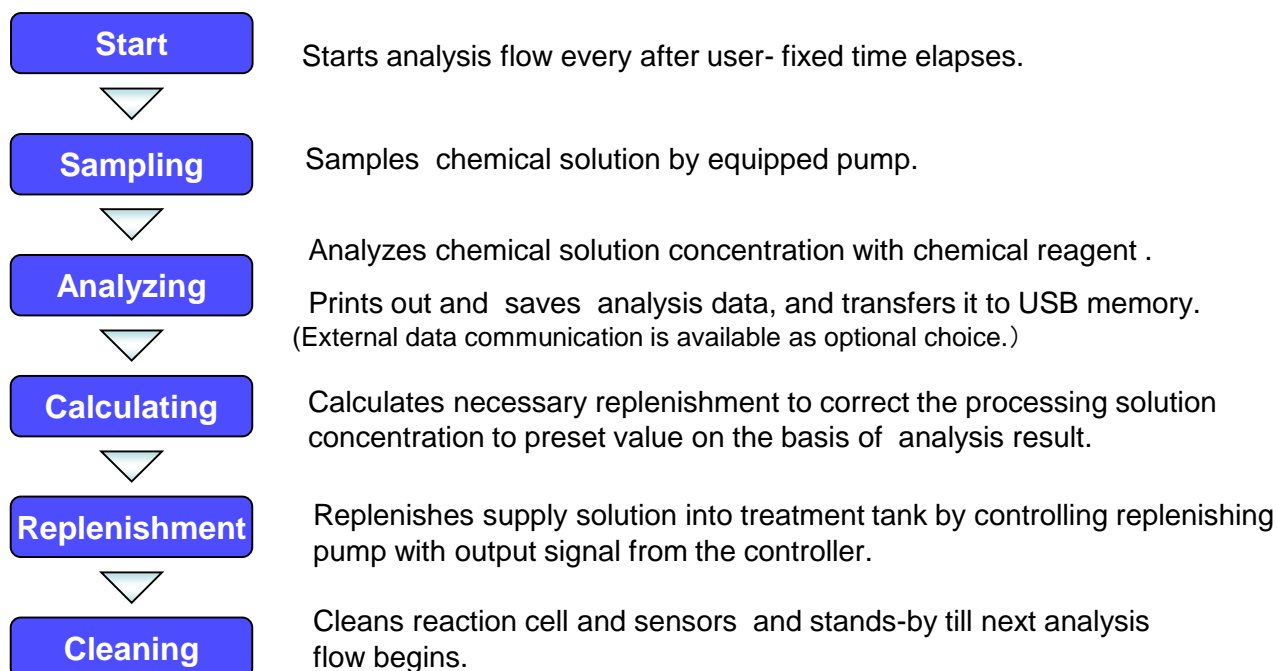| Dimension / Weight (body)	W385 × H470 × D455(mm) / 30kg
Dimension / Weight (Footstool)	W465 × H930 × D425(mm) / 15kg
Power supply	AC100V（±10%）、60/50Hz、3P Plug+ Ground (separated ground line needed for equipped computer)
Power dissipation	200VA(max)

■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.
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

Treatment bath

DI water supply unit

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

UNiCON   ISHIHARA CHEMICAL CO., LTD.

Head Office	5-26 Nishiyanagiwara-cho, Hyogo-ku, Kobe-shi, Hyogo 652-0806, Japan	Phone+81-78-682-2307(Direct)
Tokyo Branch	2-26-11 Taito, Taito-ku, Tokyo 110-0016, Japan	Phone+81-3-3832-8037(Direct)