ISHIHARA CHEMICAL

Electro nickel plating solution (sulfamate bath) automatic controller METIS-7000

Features

• Metis-7000 Ni, Cl, pH, H3BO3 is an electro nickel plating solution automatic controller. It can analyze nickel aminosulfonate, nickel chloride n and boric acid concentration which are active components of processing solution used for electro nickel plating (sulfamate bath) 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. Nickel aminosulfonate concentration / absorptiometry (analysis accuracy $\pm 3.0\%$) 2.Nickel chloride concentration / potentiometric titration method(analysis accuracy $\pm 3.0\%$) 3.Boric acid concentration / neutralization titration (analysis accuracy $\pm 3.0\%$) 4.pH value/ glass electrode method
Replenishing	Controlling replenishing pump from analysis result. %Replenishing system needs mutual consultation about conditions at processing line.
Cycle time	About 40 minutes %Cycle time depends on concentration of solution, etc.

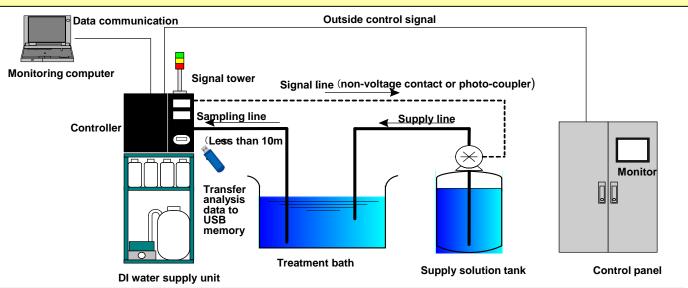


Image picture

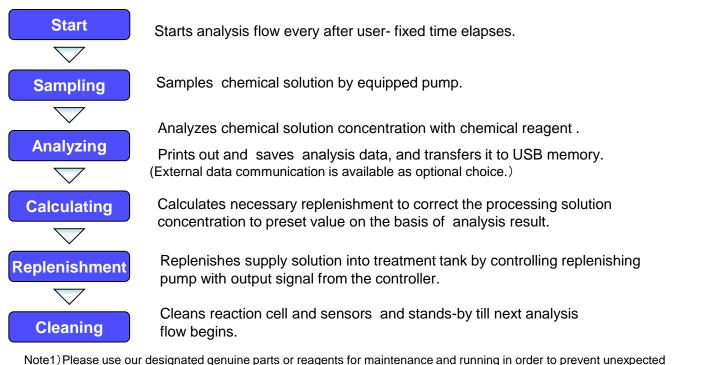
■Specification

Dimension / Weight	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



Automatically analysis flow



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



ISHIHARA CHEMICAL CO., LTD.

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

Phone+81-3-3832-8037(Direct)