

Roughening treatment
solution automatic controller

METIS-7000

Na₂S₂O₈, H₂SO₄, Cu

Features

- Metis-7000 Na₂S₂O₈, H₂SO₄, Cu is a roughening treatment solution automatic controller. It can analyze sodium persulfate (Na₂S₂O₈) (or ammonium persulphate) and sulfuric acid (H₂SO₄) concentration which are active components of process solution used for surface roughening process at production line of printed wiring boards and replenish (output signals for replenishment) supply solution automatically.
- Can also analyze Cu concentration which are increased by processing and helps you to know the timing of renewing the process solution.
- 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. H ₂ SO ₄ concentration/ neutralization titration (analysis accuracy $\pm 2.0\%$) 2. Na ₂ S ₂ O ₈ concentration / back titration method (analysis accuracy $\pm 3.0\%$) *Ammonium persulphate concentration is analyzable instead of Na ₂ S ₂ O ₈ . please contact our sales staff for detail information. 3. Cu concentration / absorptiometry (analysis accuracy $\pm 2.0\%$)
Replenishing	Controlling replenishing pumps from analysis result. ※Replenishing system needs mutual consultation about conditions at processing line.
Cycle time	About 20-30 minutes ※Cycle time depends on conditions of solution and the line, etc.



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)

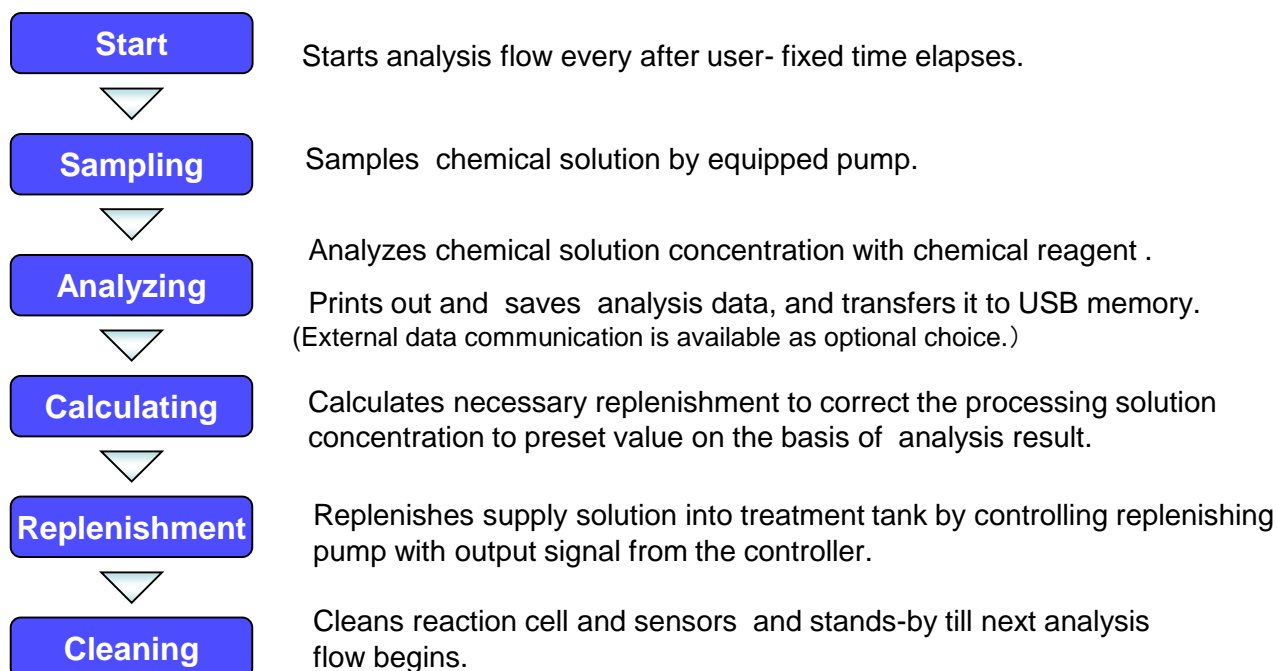
■Option (Below is just some example for your consideration. If you have requests, please feel free to contact us.)

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



Automatically analysis flow



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



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