

Desmear solution  
automatic controller

METIS - 7000

# MnO<sub>4</sub>,NaOH

## Features

- Metis-7000 MnO<sub>4</sub>, NaOH is a desmear solution automatic controller. It can analyze sodium permanganate concentration (MnO<sub>4</sub>) and sodium hydroxide concentration (NaOH) which are active components of processing solution used for desmear treatment at production line of printed wiring boards and replenish ( output signals for replenishment) supply solution automatically.
- Can also analyze sodium manganate concentration which is increased by progress of processing at advisory level.
- Can also handle potassium permanganate and potassium manganate concentration analyzing.
- 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. MnO <sub>4</sub> concentration / absorptiometry (analysis accuracy ±3.0%) 2. NaOH concentration / neutralization titration (analysis accuracy ±3.0%) 3. Sodium manganate concentration (analysis accuracy: advisory level) ※potassium permanganate concentration analysis is adaptive. Please contact our sales staff for detail.
Replenishing	Controlling replenishing pump from analysis result. ※Replenishing system needs mutual consultation about conditions at processing line.
Cycle time	About 40 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)

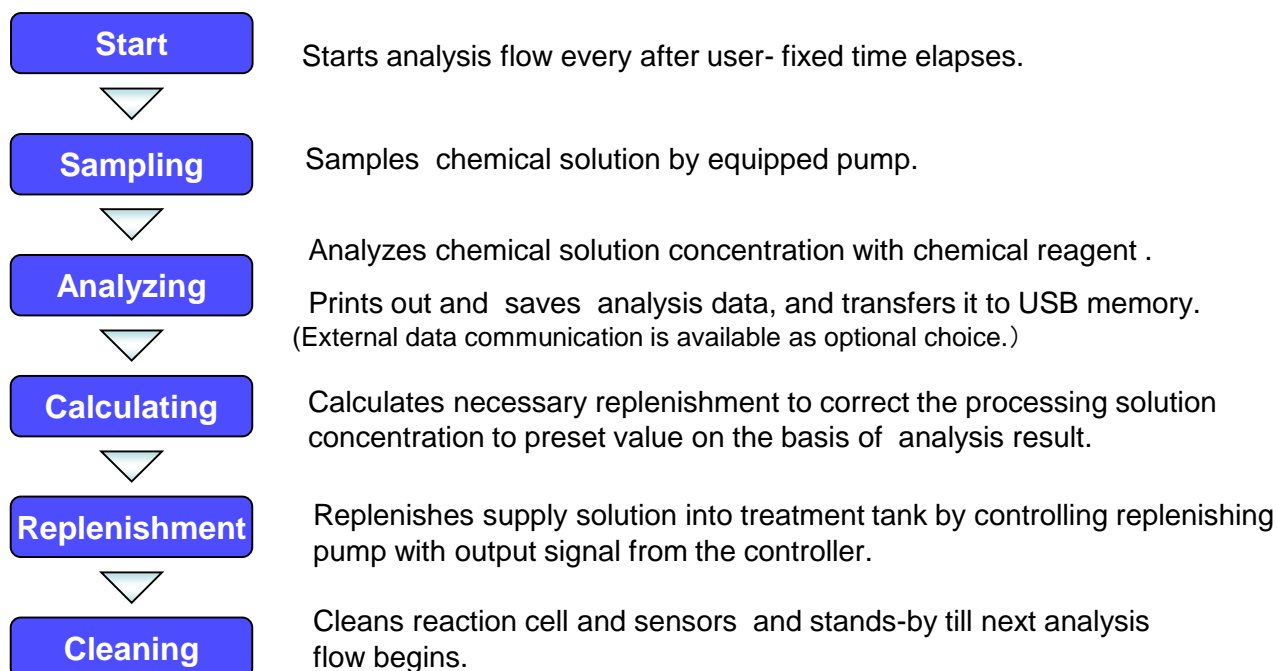
■Option (Below is just some example for your consideration. If you have requests, please feel free to contact us.)

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



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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