

FOR PVA FILM DYEING PROCESS  
IODINE AND POTASH IODIZED  
CONCENTRATION CONTROL DEVICE  
**CCC METER VII**

Used in the production of polarizing plates  
(PVA film dyeing process), automatic measurement of  
the concentration of iodine and potash iodized!

**【Concentration measurement range】**

$I_2$  0~0.30%  
KI 0~10.0%

**【Measurement method】**

**Absorbance  
& conductivity**

**【Measurement  
compatible temperature】**

5~50°C



 **TOKAI SENKO**

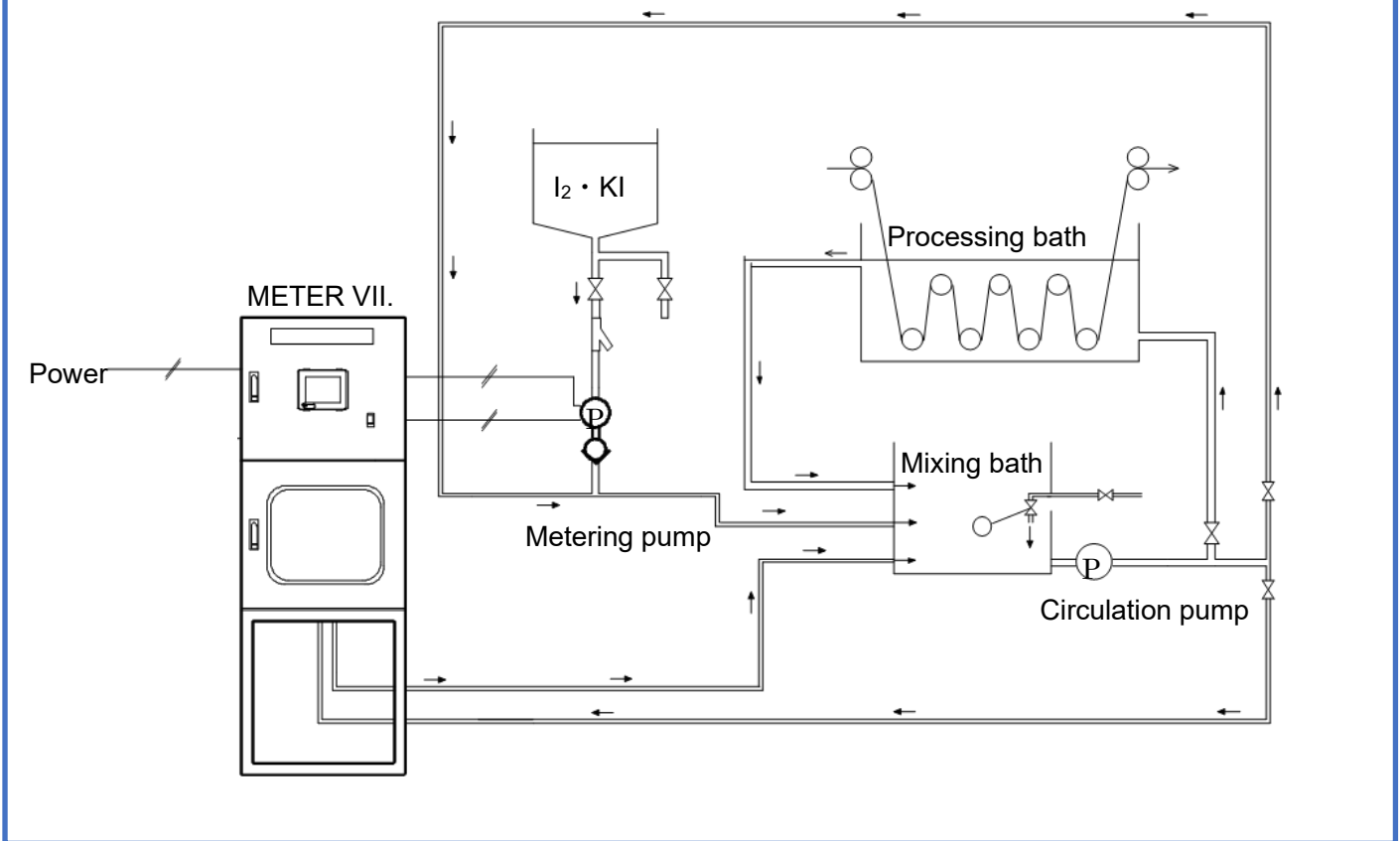
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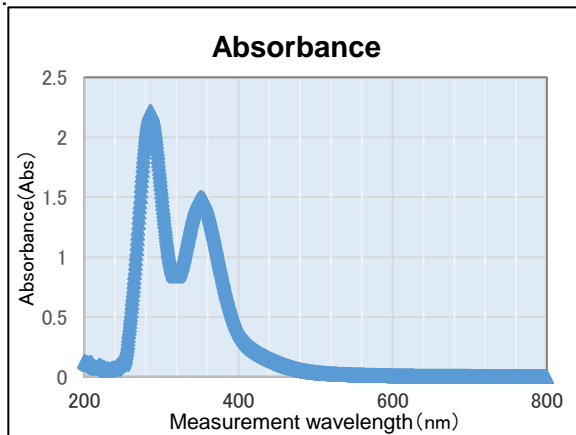
## METER VII FLOW SAMPLE



### 【Measurement principle】

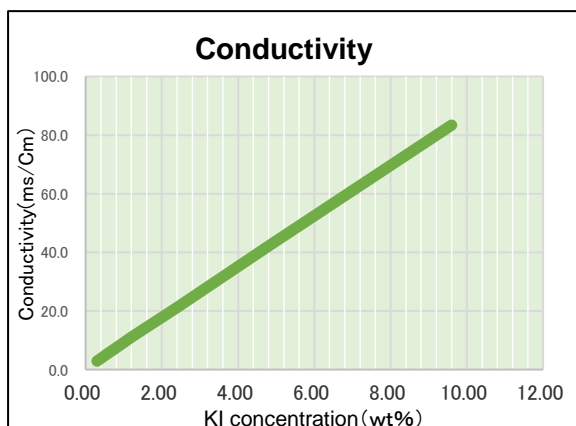
The absorbance and electrical conductivity (conductivity) of the iodine / potassium iodide solution are measured to detect the concentration.

Iodine concentration is measured by absorbance. Potassium iodide concentration is measured by electrical conductivity.



### Absorptiometry

Absorptiometry is a method of quantitatively analyzing the concentration of an object by shining light on the sample solution and measuring the degree of light absorption by the target substance when the light passes through the sample. As shown in the figure, the iodine-potassium iodide solution has a large absorbance around the measurement wavelengths of 353 nm and 288 nm. Iodine concentration is measured using this absorbance.



### Electrical conductivity

Electrical conductivity (conductivity) is a physical characteristic value that indicates the ease of electrical conduction of a substance.

The electric conductivity (conductivity) of the iodine-potassium iodide solution is measured, and the potassium iodide concentration is detected from the relationship between the concentration and the conductivity.