

## Application Memo

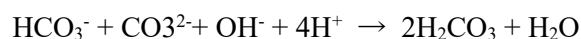
# Acid Consumption of Industrial Effluent

Industry	Environmental
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	JIS K 0102

## 1. Overview

According to JIS K 0102-2019 -15, the sample liquid is titrated with 0.1mol/L hydrochloric acid up to pH8.3 and pH4.8. The measurement result is expressed by hydrogen ion (acid) in mmol/L required to neutralize dissolved alkali or converted to calcium carbonate in mg/L equivalent to the acid.

In this application memo, the acid consumption each at pH8.3 and pH4.8 is obtained from titration with 0.1mol/L hydrochloric acid respectively.



## 2. Apparatus

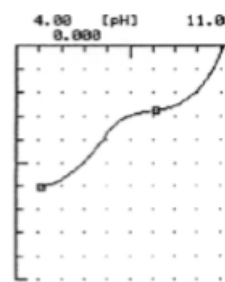
Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Combined glass electrode Temperature compensation electrode

## 3. Reagents

Titrant	0.1mol/L hydrochloric acid
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## 4. Example

—Measurement results—					
	Sample (mL)	Titer (mL)		Acid consumption (mmol/L)	
		EP-1 ph8.3	EP-2 ph4.8	EP-1 ph8.3	EP-2 ph4.8
1	100.0	2.22	4.84	2.22	4.84
2	100.0	2.19	4.84	2.19	4.84
3	100.0	2.18	4.84	2.18	4.84
Average				2.20	4.84
SD				0.02	0.00
RSD(%)				1	0



—Titration curve—

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