

Please refer to page 6 for selection details

Water Quality Analysis Residual Chlorine Analyzer RC-G1



Operational Principle

The instrument consists of signal measurement, calculation, display, and panel commands. This instrument uses a specific negative voltage amplitude applied between the polarizing electrode and the reference electrode to selectively select residual chlorine to participate in the reaction, causing it to undergo an electrochemical reaction at the cathode of the electrode, thereby forming a current signal proportional to the concentration of residual chlorine. The instrument calculates the concentration of residual chlorine by collecting and analyzing current signals, therefore it has strong selectivity, no replacement parts, and low maintenance; Long electrode life; High reliability characteristics.


Functional Characteristics

Intelligence: Using a single chip microprocessor to complete residual chlorine value measurement;
High impedance preamplifier: high input impedance, anti noise, strong anti-interference ability;
Multiple calibration methods, including zero calibration, slope calibration, and on-site calibration;
Human machine dialogue: menu operation structure, users can operate according to the prompts on the screen;
Multi parameter screen display: simultaneously display residual chlorine value and working status or output current value;
Output signal: The software selects 0-2mA, 4-20mA, or 20-4mA for output;
Free setting of measurement range and alarm upper and lower limits; Upper and lower limit exceeding alarm prompt;
Two sets of relay control switches, with adjustable hysteresis control range;
Self set password: Users can change their password to prevent unauthorized personnel from entering and causing misoperation.

Product Application

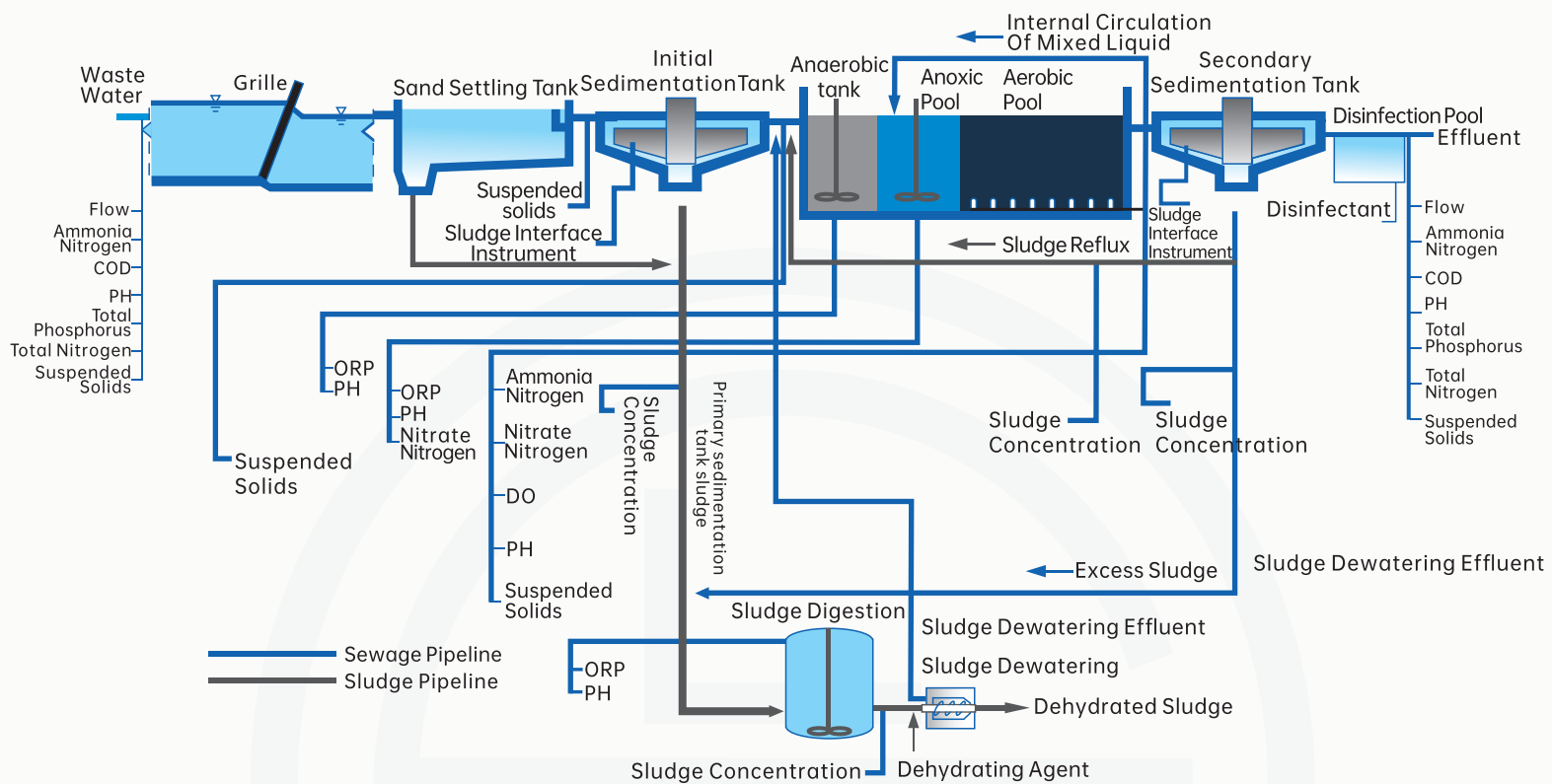
Widely used in wastewater treatment, swimming pools, secondary water supply, cooling towers and other systems, as well as in processes such as electronics, electroplating, printing and dyeing, chemistry, food, pharmaceuticals, etc., it performs excellently in large-scale sewage treatment plants, industrial process monitoring, and other applications.

Product Model

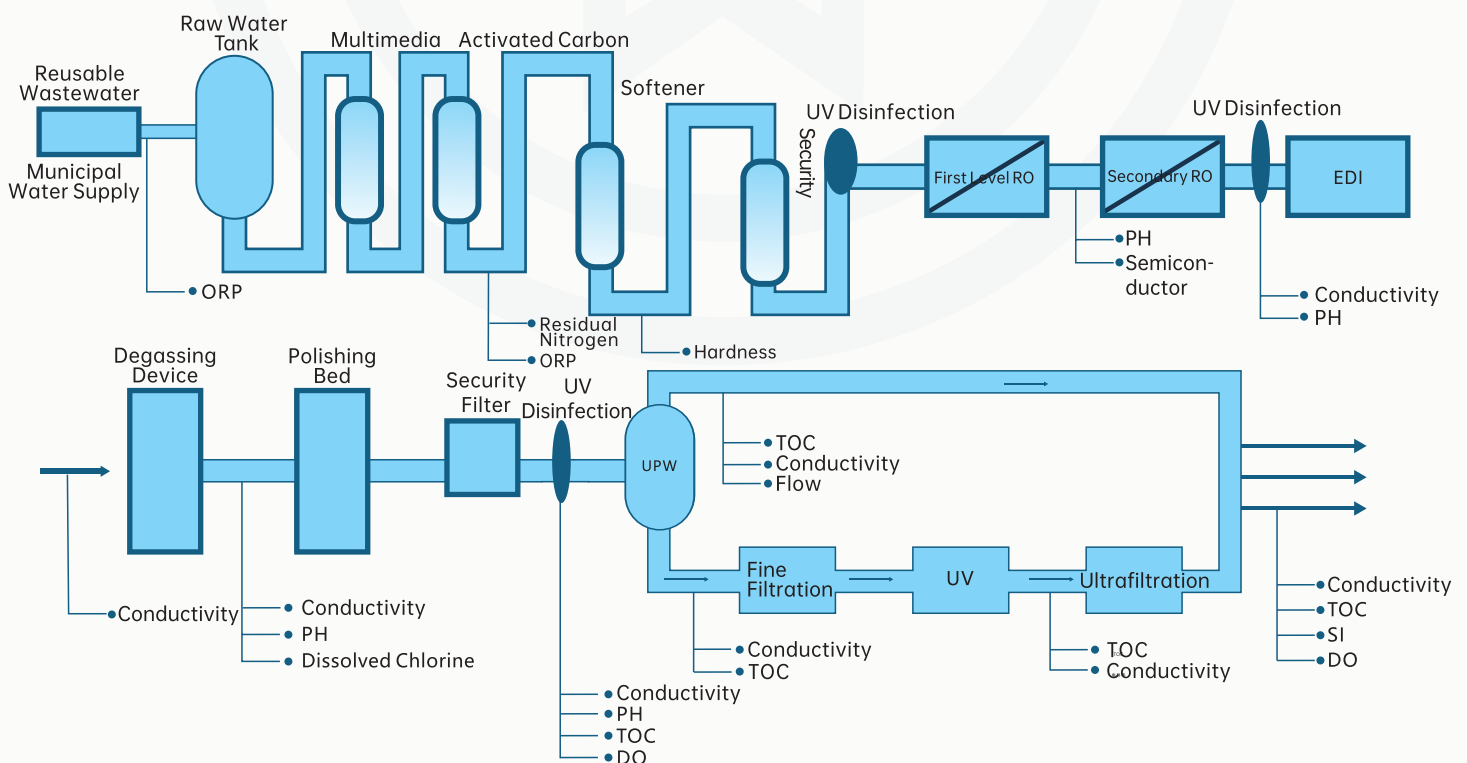
Model	RC-G1	
Product Diagram		
Display	4.3-inch LCD color screen	3.2-inch LCD screen
Measuring Range	Residual chlorine/chlorine dioxide: 0~5~10~20mg/L	Residual chlorine/chlorine dioxide: 0~5~10~20mg/L
Measurement Accuracy	Residual chlorine/chlorine dioxide: better than the larger of $\pm 1\% F \cdot S$ or $\pm 0.05\text{mg/L}$	Residual chlorine/chlorine dioxide: better than the larger of $\pm 1\% F \cdot S$ or $\pm 0.05\text{mg/L}$
Resolving Power	0.001/0.01(Depending on the electrode)	0.001/0.01(Depending on the electrode)
Isolation Output Current	4-20mA(Load resistance<800Ω)	4-20mA(Load resistance<800Ω)
Communication Interface	RS-485 Modbus standard communication protocol	RS-485 Modbus standard communication protocol
Two Sets Of Relay Contacts	3A 240VAC, 6A 28VDC or 120VAC	3A 240VAC, 6A 28VDC or 120VAC
Power Supply	85-260VAC/50-60Hz or 24VDC	85-260VAC/50-60Hz or 24VDC
Power	$\leq 3\text{W}$	$\leq 3\text{W}$
Quality	0.82kg	0.5kg
External Dimensions	180x157x84.5mm	96X96X125mm
Installation Opening	Plate mounted 138x138mm (wall mounted)	Plate mounted 92x92mm
Usage Conditions	Temperature 0-45 °C, humidity not exceeding 85%, no electromagnetic field interference	Temperature 0-45 °C, humidity not exceeding 85%, no electromagnetic field interference
Electrode Selection	Analog signal, digital signal electrode	Analog signal electrode
Data Function	Data storage, operation logs, Bluetooth printing	-

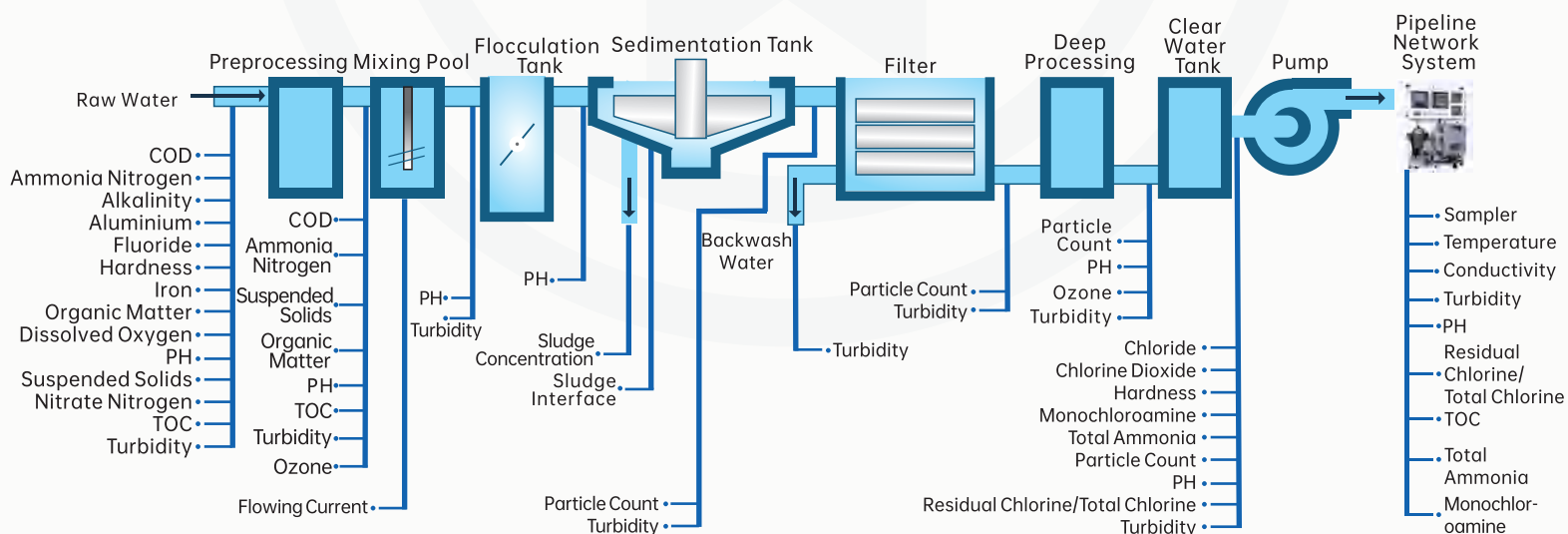
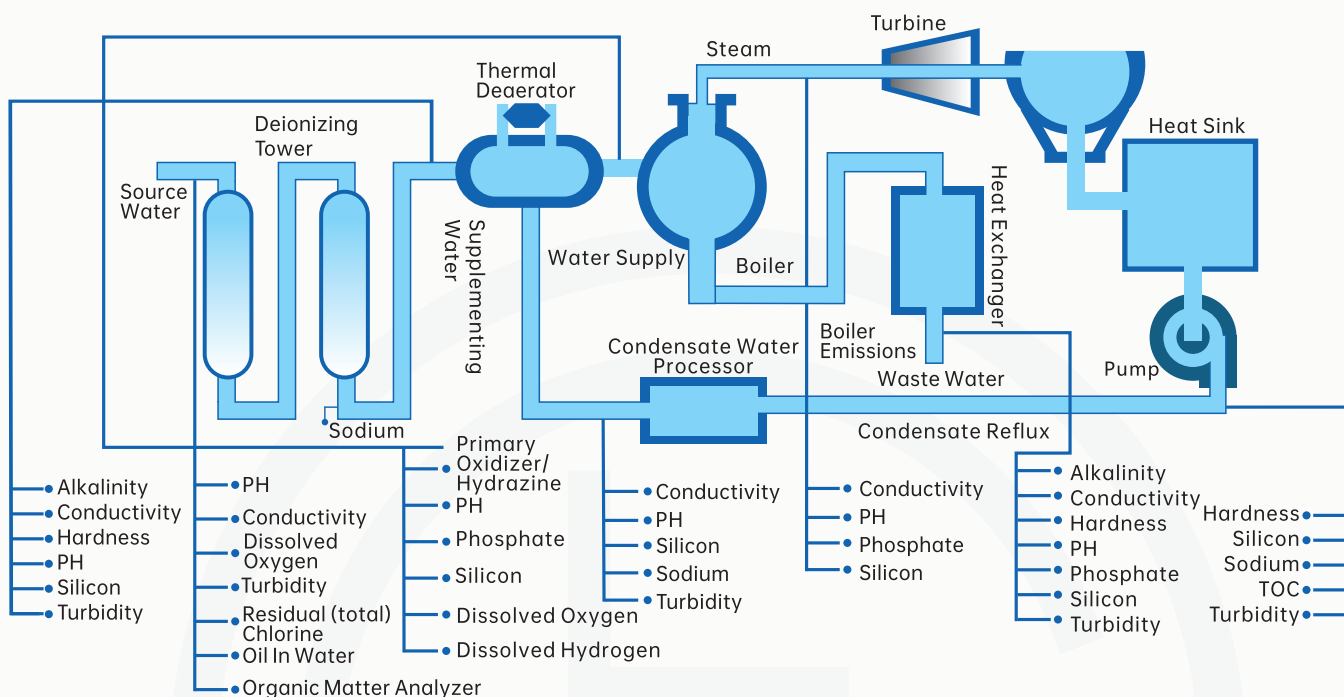


Sewage Treatment Process Diagram

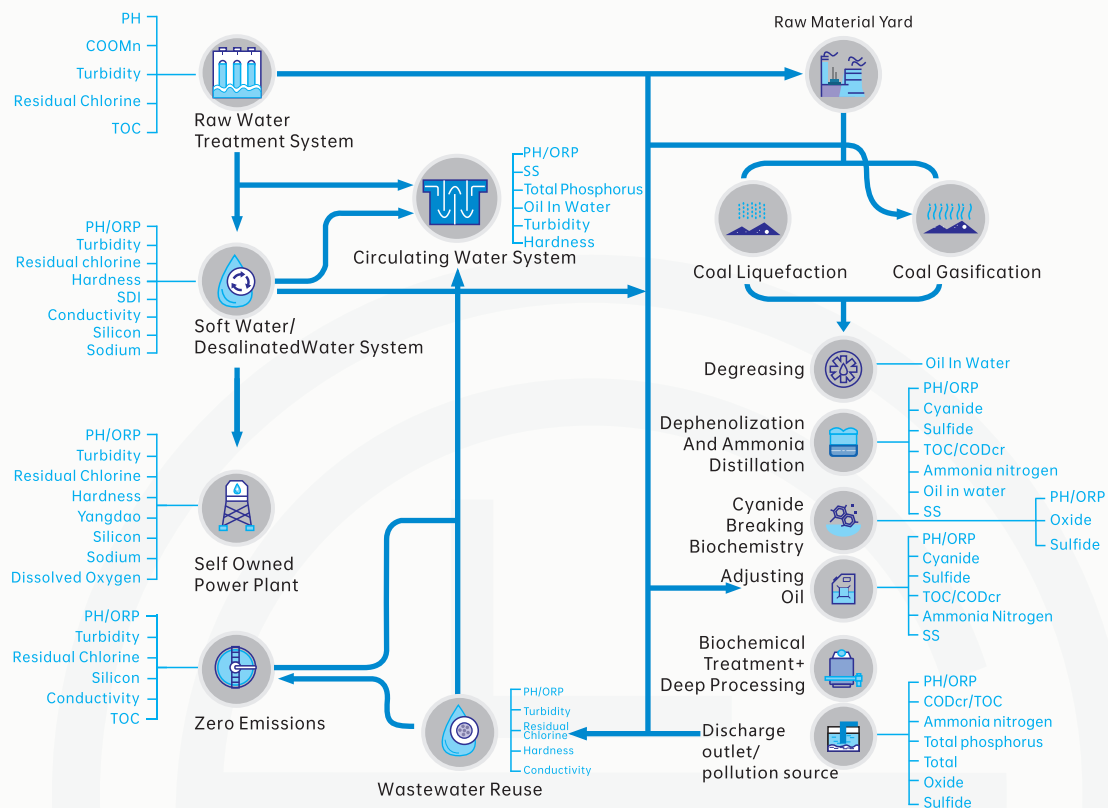


Electronic Industry Water/Wastewater Reuse Process and Water Quality Monitoring Plan



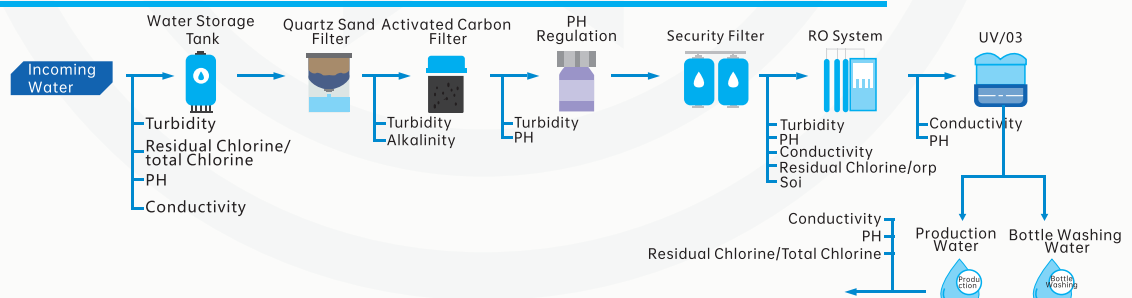


Petrochemical Environmental Water Treatment Process Diagram

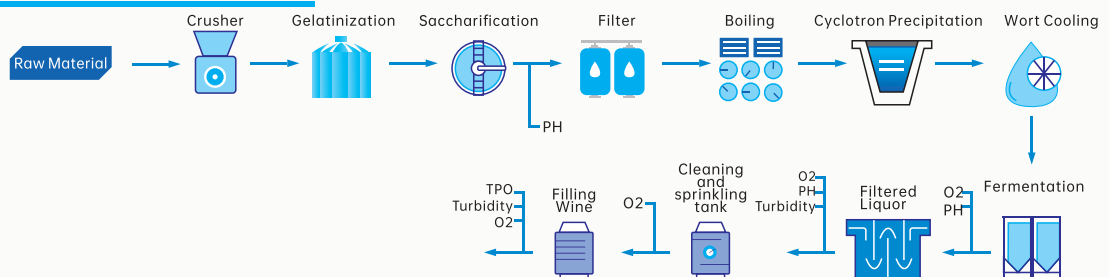


Wastewater Treatment Process And Water Quality Monitoring Plan For The Beer And Beverage Industry

Process Flow Of Beer Beverage Raw Water Pretreatment



Beer Water Usage Process



RC-G1 Selection Composition

Selection example **RC-G1**

1	A	2	G	3	N	4	V	5	A	6	N	7	S	8	E
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1.Model	A	RC-G1
2.Display Size	G	4.3-inch LCD color screen
	H	3.2-inch LCD screen
3.Measurement ranges	N	0~5mg/L
	O	0~10mg/L
	P	0~20mg/L
	T()	Other measurement ranges
4.Resolving power	V	0.001
	U	0.01
	T()	Other resolutions
5.Output signals	A	4-20mA
	B	4-20mA+RS485
	C	4-20mA+RS232
	D	Other output signals
6.Source	N	24VDC
	M	220VAC
7.Protection level	V	IP65
	S	IP68
	T()	Other protection level
8.Cable length	E	10m
	F	5m
	G	15m
	T()	Other length

Explanation:

The RC-G1 residual chlorine meter is equipped with a 4.3-inch LCD color screen, a range of 0~5mg/L, a resolution of 0.001, an output signal of 4~20mA, a power supply of 24VDC, a protection level of IP68, and a cable length of 10m.

Product certification

Compliance and approval; The Ludwig water quality analyzer meets key standards and certifications for process measurement technology; To ensure the highest reliability in such settings;