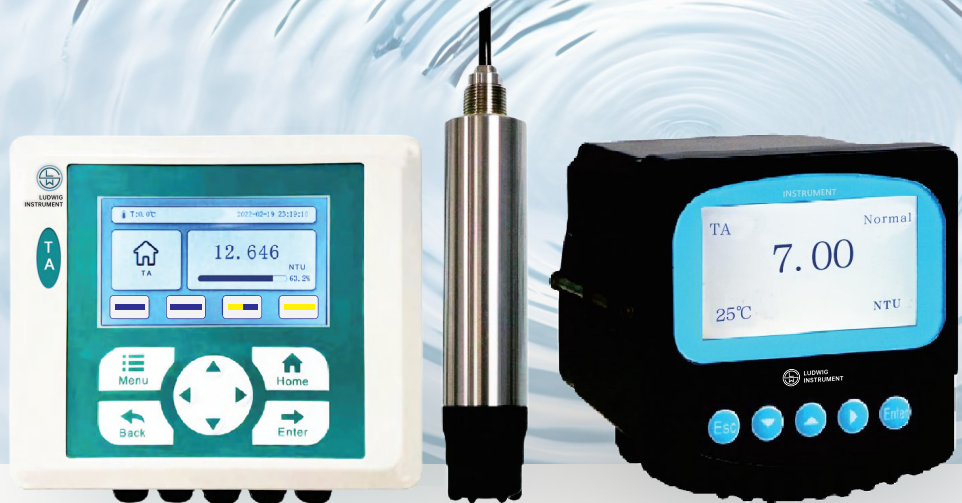


Please refer to page 8 for selection details

# Turbidity Analyzer

## TA

### Water Quality Analysis



#### Operational Principle

The light waves sent by the infrared sensor transmitter can only reach the receiver after being absorbed, reflected, and scattered by the measured object during transmission. The transmittance of the transmitted light is proportional to the concentration of the suspended object being measured, and the concentration of turbidity is calculated by measuring the transmittance of the transmitted light.


#### Functional Characteristics

- Fully intelligent, multifunctional, with high measurement performance and strong environmental adaptability;
- Simultaneous display of multiple parameters, including height, output current, time, and relay status;
- Two 4-20mA transmission outputs, relay high and low alarm control outputs;
- RS485, RS232 upload function, printing function (optional);
- Can install independent storage cards with data recording, storage, and export functions;
- Multiple signal options;
- Maintenance is very simple, with calibration every three months;
- Adopting multiple calibration methods to ensure measurement accuracy;
- Chinese and English menus are optional (optional);
- Self set password: Users can set or modify their own password to prevent unauthorized personnel from entering and causing misoperation;

#### Product Application


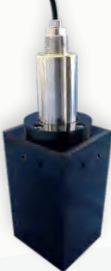
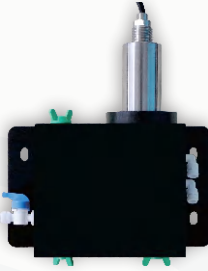

Widely used in wastewater treatment, swimming pools, secondary water supply, cooling towers and other systems, as well as in processes such as electronics, electroplating, printing and dyeing, chemistry, food, pharmaceuticals, etc., it performs excellently in large-scale sewage treatment plants, industrial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

## Product Model

Product Model	TA	
Product Diagram		
Display	4.3-inch LCD	3.2 inch color screen
Measuring Range	Turbidity: 0-2NTU, 0-10NTU, 0-40NTU, 0-400-4000NTU	Turbidity: 0-2NTU, 0-10NTU, 0-40NTU, 0-400-4000NTU
Measurement Accuracy	Turbidity: $\pm 3\%$ FS	Turbidity: $\pm 3\%$ FS
Resolving Power	0.001/0.01 (depending on electrode)	0.001/0.01 (depending on electrode)
Isolation Output Current	4-20mA (load resistance<800 $\Omega$ )	4-20mA (load resistance<800 $\Omega$ )
Communication Interface	RS-485 Modbus standard communication protocol	Optional configuration
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	$\leq 3$ W	$\leq 3$ W
Quality	0.82kg	0.5kg
External Dimensions	180 x 157 x 84.5mm	96 x 96 x 125mm
Installation Opening	Plate mounted 138 x 138mm (wall mounted)	Plate mounted 92 x 92mm
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 and digital signal electrodes	Analog signal electrode
Data Function	Data storage, operation logs, Bluetooth printing	-



## Product Model

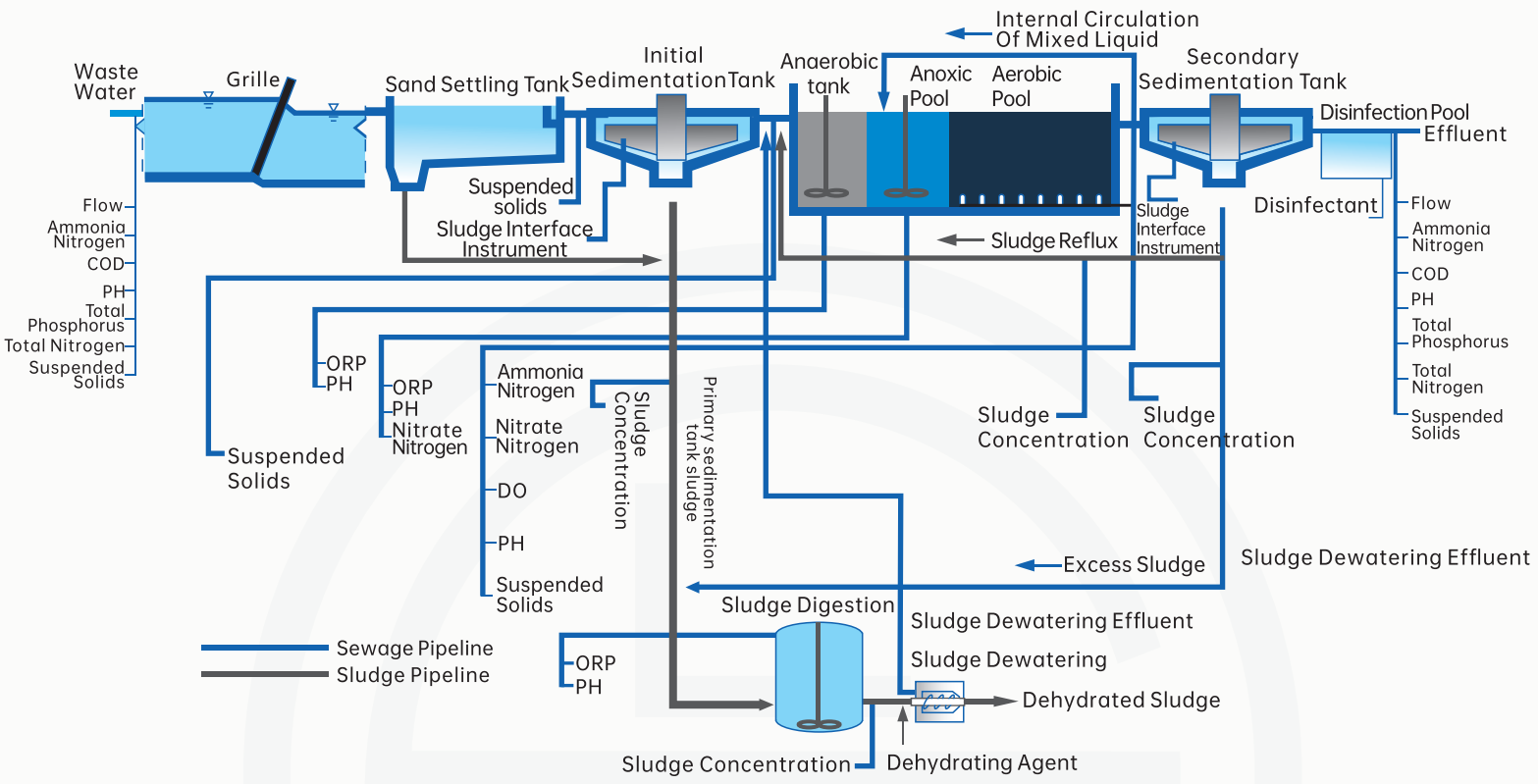
Model	Ta-f1 Sinking Type (above 100ntu)	TA-F2 Sinking (below 100NTU)	TA-F3 Circulation Type (above 100NTU)	Ta-F4 Flow Type (below 100ntu)
Product Diagram				
Detection method	Infrared optical method	Infrared optical method	Infrared optical method	Infrared optical method
Measuring range	0-200NT, 0-4000NTU Customizable	0-100NTU, Customizable	0-200NT, 0-4000NTU Customizable	0-100NTU, Customizable
Resolution	0.01NTU, 0.1NTU, 1NTU	0.01NTU, 0.1NTU, 1NTU	0.01NTU, 0.1NTU, 1NTU	0.01NTU, 0.1NTU, 1NTU
Temperature range	-10-50°C	-10-50°C	-10-50°C	-10-50°C
Using water depth	IP68, 10mMax	IP68, 10mMax	-	-
Power supply	24VDC/220VAC	24VDC/220VAC	24VDC/220VAC	24VDC/220VAC
Output signal	RS485,4-20mA	RS485,4-20mA	RS485,4-20mA	RS485,4-20mA
Installation thread	NPT3/4	NPT3/4	-	-
Installation method	Sunken Type	Sunken Type	Flow type, quick connect outer diameter 6mm	CirculationType
Material	304, POM, Quartz Glass	304, POM, Quartz Glass	304, POM, Quartz Glass	304, POM, Quartz Glass
Size	Length: 200mm Diameter: 48mm	φ50×262mm	Acrylic	☒222.6×442×221.2mm
Responsetime	T90, < 30s	T90, < 30s	T90, < 30s	-
Cleaning method	-	-	-	-
Applicable Scenarios	Sewage, surface water, tap water, swimming pool, etc	Municipal water supply, sewage treatment plants, comprehensive purification tanks, pulp and paper industry wastewater treatment plants, chemical industry, industrial wastewater treatment, livestock wastewater treatment, and raw water monitoring of industrial production processes	Sewage, surface water, tap water, swimming pool, etc	Sewage, surface water, tap water, swimming pool, etc

## Product Model

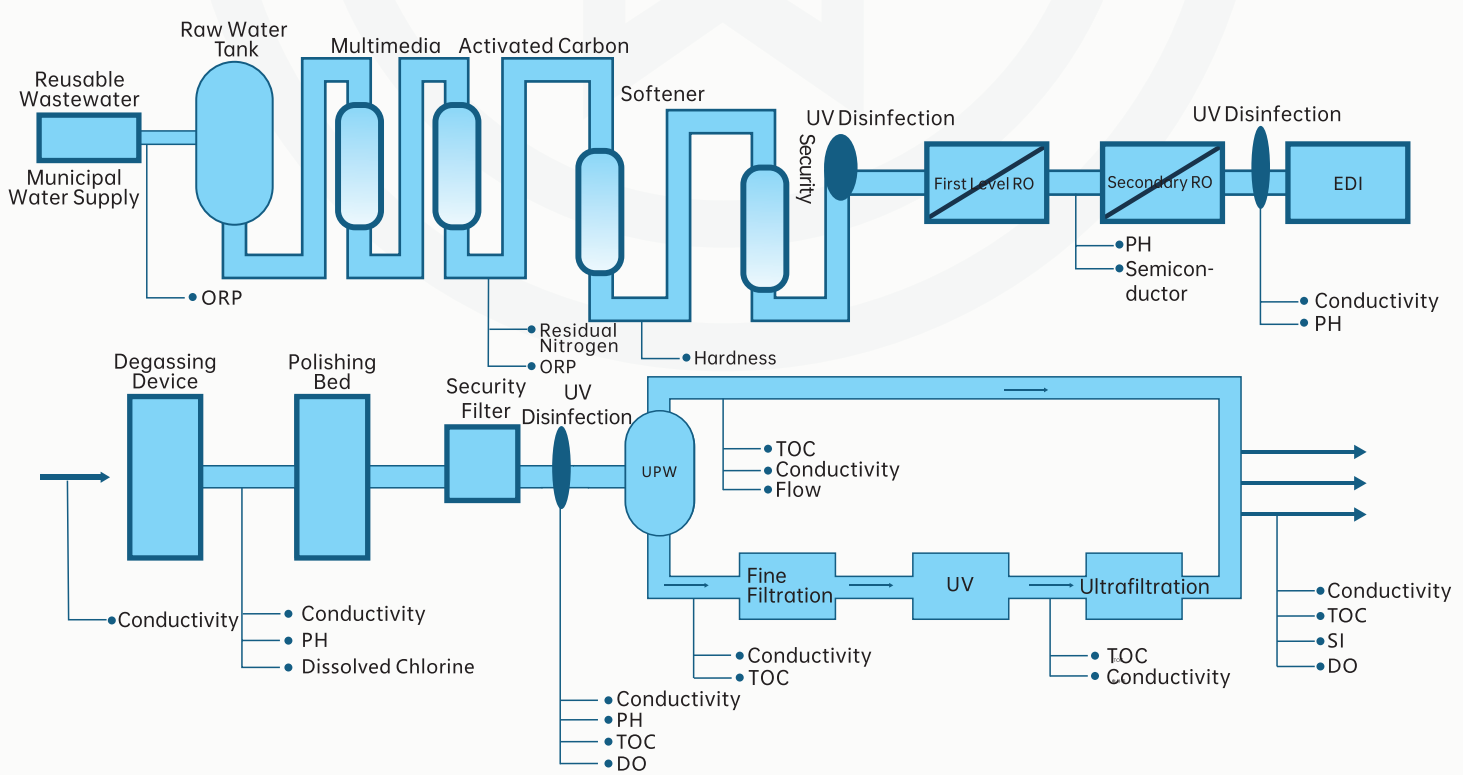
Model	TA-F5 Self-cleaning	TA-F6 High-temperature Type (plug-in)	TA-F7 High-temperature Type (Flow Type)
Product Diagram			
Detection method	Infrared optical method	Infrared optical method	Infrared optical method
Measuring range	0-100NTU,0-200NTU,0-4000NTU Customizable	0-100NTU,0-200NTU,0-4000NTU Customizable	0-100NTU,0-200NTU,0-4000NTU Customizable
Resolution	0.01NTU, 0.1NTU, 1NTU	0.01NTU, 0.1NTU, 1NTU	0.01NTU, 0.1NTU, 1NTU
Temperature range	-10-50°C	0~180°C	0~180°C
Using water depth	IP68, 10mMax	-	-
Power supply	24VDC/220VAC	24VDC/220VAC	24VDC/220VAC
Output signal	RS485,4-20mA	RS485,4-20mA	RS485,4-20mA
Installation thread	NPT3/4	-	-
Installation method	-	Insert Type	Circulation Type
Material	304, 316,POM, Quartz Glass	304+ABS+Quartz Glass	304+Carbon Steel+ABS+ Quartz Glass
Size	Length: 200mm Diameter: 48mm	-	-
Responsetime	T90, < 30s	T90, < 30s	T90, < 30s
Cleaning method	Scraper Automatic	-	-
Applicable Scenarios	Sewage, surface water, swimming pools, aquaculture, sewage pipelines, etc	Chemical, sewage, beer processing, etc	Chemical, sewage, beer processing, etc

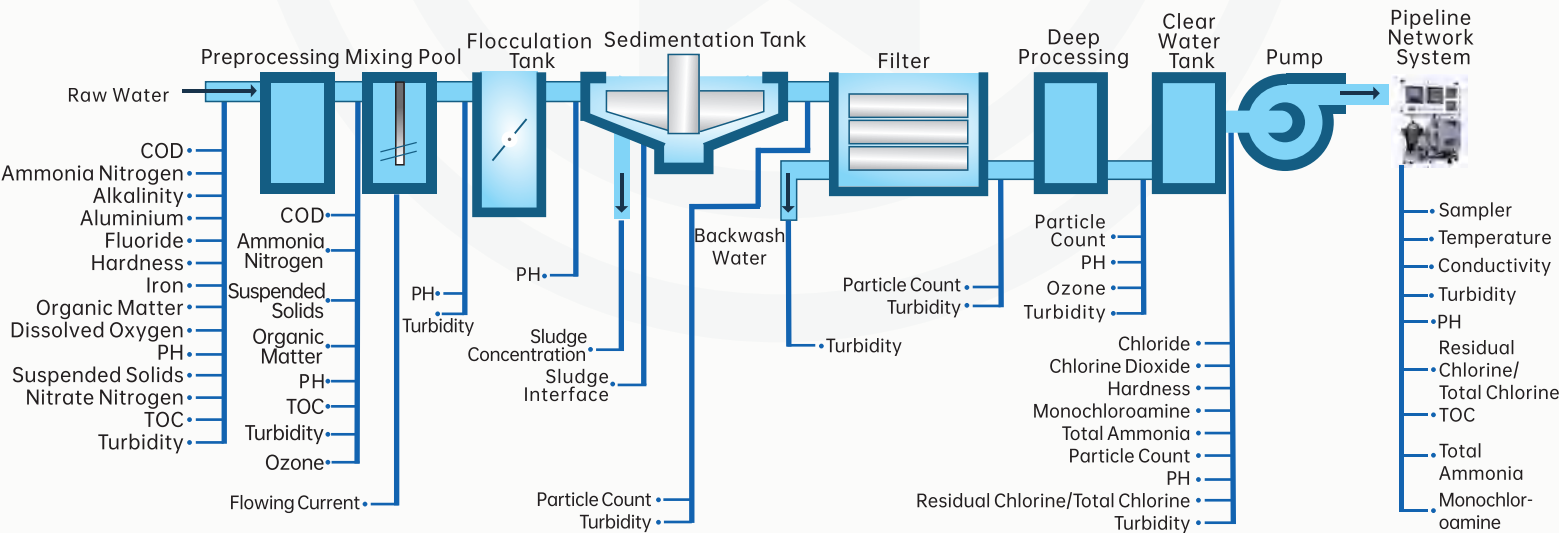
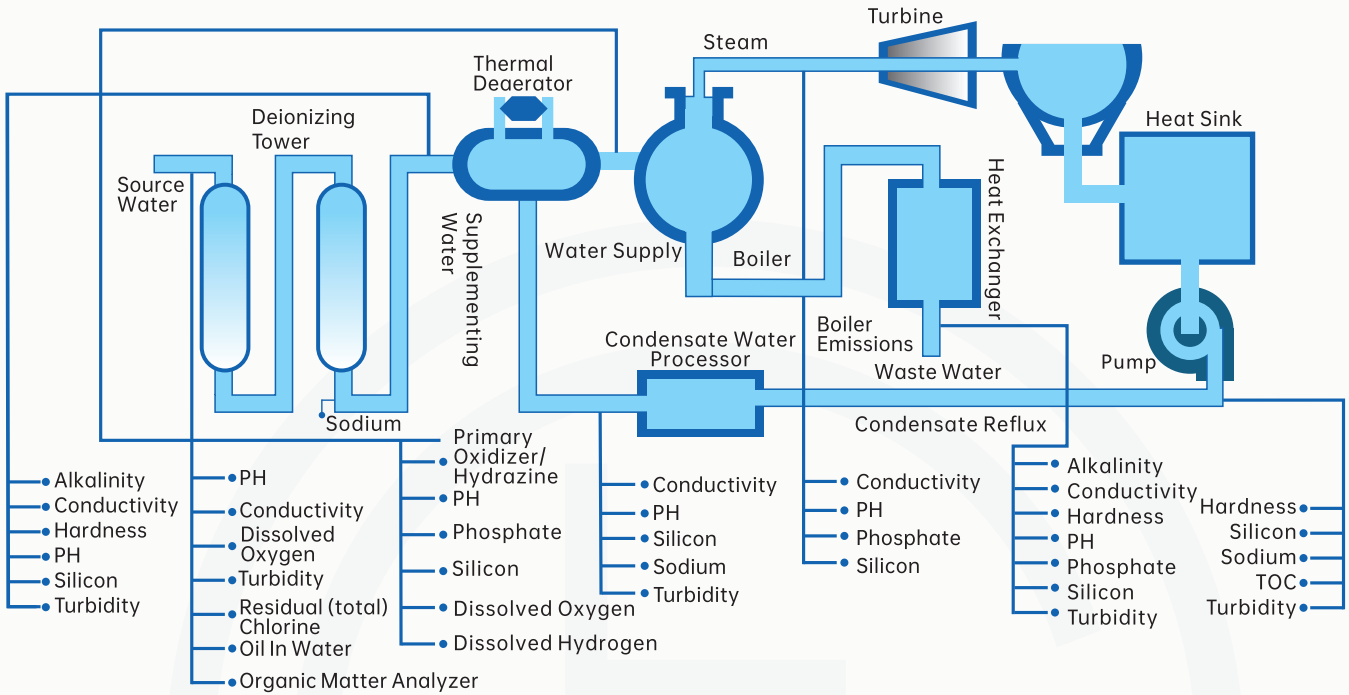


# Sewage Treatment Process Diagram

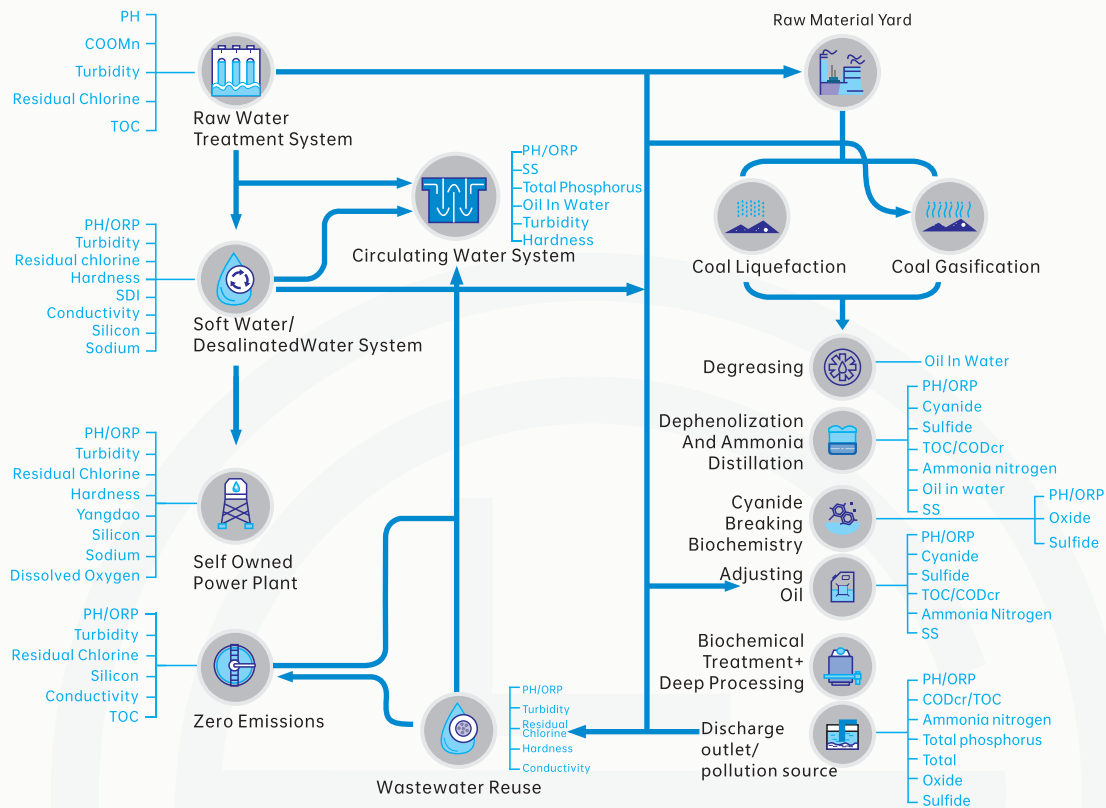


# Electronic Industry Water/Wastewater Reuse Process and Water Quality Monitoring Plan



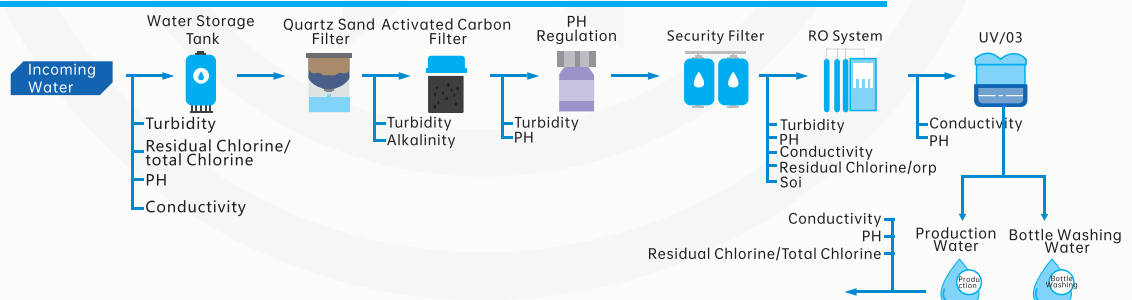


# Petrochemical Environmental Water Treatment Process Diagram

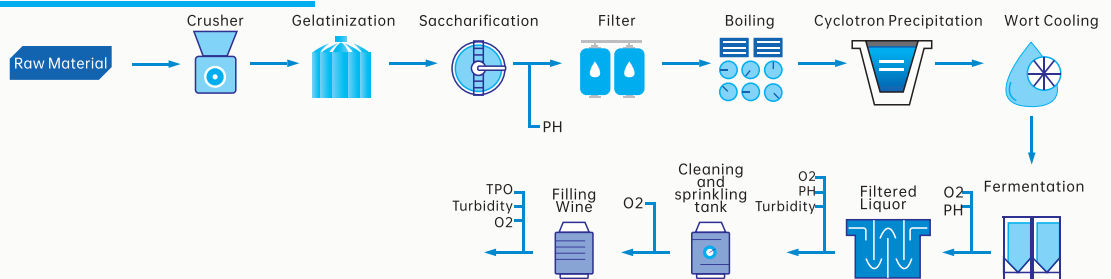


# Wastewater Treatment Process And Water Quality Monitoring Plan For The Beer And Beverage Industry

## Process Flow Of Beer Beverage Raw Water Pretreatment



## Beer Water Usage Process



### TA- Selection Composition

Selection example **TA-**

1	A	2	G	3	F7	4	R	5	C	6	A5	7	M	8	C	9	-	10	B	11	-
---	---	---	---	---	----	---	---	---	---	---	----	---	---	---	---	---	---	----	---	----	---

1.Electrodes	F1	Immersion type (above 100NTU)	
	F2	Immersion type (below 100NTU)	
	F3	Circulation type (above 100NTU)	
	F4	Flow type (below 100NTU)	
	F5	Self-cleaning electrode	
	F6	High temperature type (plug-in)	
	F7	High temperature type (flow type)	
	T()	Other electrodes	
2.Instrument type	G	Integrated	
	H	Split type	
3.Display Size	A	4.3-inch LCD color screen	
	B	3.2-inch LCD screen	
4.Range	R	0~4000NTU	
5.Resolving power	C	0.01NTU	
	D	0.1NTU	
	E	1NTU	
	T()	Other resolving power	
6.1 Installation threads High temperature type (flow type) Do not select this option	0	3/4NPT	
	P	1NPT	
	T()	Other sizes	
6.2 Installing flanges High temperature type (flow type) Select this item	A1	DN15	
	A2	DN20	
	A3	DN25(1")	
	A4	DN40	
	A5	DN50(2")	
	A6	DN65	
	A7	DN80(3")	
	A8	DN100(4")	
	A9	DN125(5")	
T()	Other sizes		
7.Output signals	H	4~20mA	
	L	4~20mA+RS485	
	M	4~20mA+RS232	
	T()	Other output signals	
8.Materials	C	Carbon steel	
	D	304	
	E	316	
	F	POM	
	G	Quartz glass	
	H	ABS	
	T()	Other materials	
9.Protection level	U	IP66	
	V	IP68	
	T()	Other protection level	
10.Source	A	24VDC	
	B	220VAC	



### TA- Selection Composition

Selection example TA- 1 A 2 G 3 F7 4 R 5 C 6 A5 7 M 8 C 9 - 10 B 11 -

11.Cable length	H	10m
	I	5m
	G	15m
	T()	Other lengths



#### Explanation:

The TA-F7 high-temperature (flow type) online turbidity meter has a display screen size of 4.3 inches LCD color screen. The instrument type is integrated, with a range of 0-4000NTU and a resolution of 0.01NTU. The installation flange is DN50, and the output is 4-20mA. The material is carbon steel, and the power supply is 220VAC.

#### 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;