



TOPAZ



WATER QUALITY



WATER QUALITY

VALIDATED OVER THE YEARS
IN A LARGE FIELD OF
APPLICATION

Solvay

Rhodia

Ineos

FPG Taiwan

Ciba Geigy

Sanofi

Aventis

PPG

Arkema

Asahi Glass

De Nora

Total

Samsung

Coca Cola

Lafarge

Mitsubishi

Petro Bras

Alstom...

APPLICATIONS

Drinking water

Quality control at all stages :
treatment, storage, distribution

Surface water

Study and design of surface
water monitoring stations

Waste water

Monitoring of industrial
or urban waste water

Process water

Quality control of
process water

Oil & Water

Oil in Water Detection &
Water in Oil storage tanks

PARAMETERS

TOTAL CHLORINE
FREE CHLORINE
MORPHOLINE
PHOSPHATES
AMMONIA
HYDRAZINE
COLOUR
PHENOLS
SILICA...

CHROMIUM VI
MANGANESE
ALUMINIUM
COPPER
NICKEL
IRON
LEAD
ZINC...

HARDNESS
THT
TA
TAC ...

CHLORIDES
CYANIDES
FLUORIDES
SULFIDES
ARSENIC
SULFATES ...

CERTIFICATIONS

Environment Organizations, Water production & treatment, Oil & Gas, Petrochemical industry, Refineries, Power stations, Paper mills, Metal, food and other industries, Oil rigs, Tankers, Etc ...

PROCESS CONTROL

Manufacturing industries

Drinking water

ONLINE water quality monitoring solutions for upstream and downstream purification processes.

Ensure the optimal quality all along the manufacturing and distribution network.

Process water

Integrated solutions for real-time water quality measurements suited to industrial processes.

ENVIRONMENT

Environmental protection and pollution control.

Surface water

REALTIME Monitoring stations or mobile laboratories, for the protection of surface water, spring water, rivers and groundwater.

Sea water

Prevention of sea water by hydrocarbon wastes: Oil tankers, Oil Rigs, Refinery wastes.



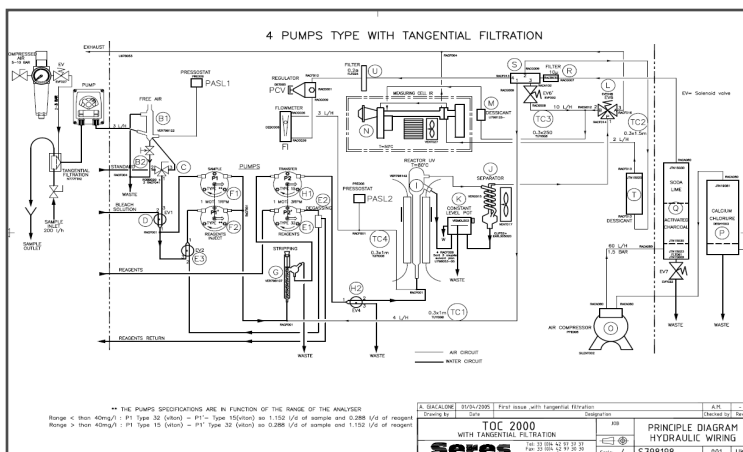
WATER QUALITY



AquaGas Scope of supply

From a stand alone analyser to a complete monitoring station (stationary or mobile) , AquaGas supplies turnkey systems fully integrated meeting the Australian standards and matching the exact project requirements.

Our system are delivered with a full set of documentation and a minimum warranty of one year which includes 24h/7 days email and phone support.



TOPAZ ONLINE WATER QUALITY ANALYSER

MULTIPARAMETER - MULTISTREAM

Description

The **TOPAZ** analyser is designed for automatic and continuous monitoring of a **several parameters** amongst a large range of chemical compounds in all type of waters. Thanks to its concept using a combination of analytical methods (**Colorimetry**, **Titrimetry** and **Potentiometry** or **selected absorption**) the **TOPAZ** allows accurate, reliable and flexible water quality strict monitoring sampled from up to **six different streams**.

Applications

Control of industrial process: Chlorine production, Soda production, Electro-chlorination, Residual concentration of active chlorine, NaOH/Na₂CO₃ in a Sodium, Hypochlorite / Soda solution, boiler cooling water

Drinking and Surface water: Alert stations and environmental monitoring

Urban & industrial effluents

Water treatment



Multi-parameters and Mutli-streams



PARAMETERS

↳ COLORIMETRY:

- AMMONIUM, FREE AND/OR TOTAL CHLORINE, HYDRAZINE, MORPHINE, PHENOL, SULPHATES
- COLOUR, SILICA, PHOSPHATES (ORTHOPHOSPHATES), HARDNESS
- ALUMINIUM, CHROMIUM VI, COPPER, IRON, NICKEL, LEAD, ZINC

↳ TITRIMETRY

- TH, ALKALINITY

↳ POTENTIOMETRY

- AMMONIUM, CHLORIDES, CYANIDES, FLUORIDES AND MORE

↳ SPECIFIC METHOD CAN BE ADAPTED FOR PROCESS AND BRINES MONITORING:

- PERACETIC ACID, VFA, CA MG, NH₄ AND MORE

Fully automated multi-parameter online analyser

Modules & Features

User interface smart & intuitive interface enabling all the analyser controls and status reports via Touchscreen

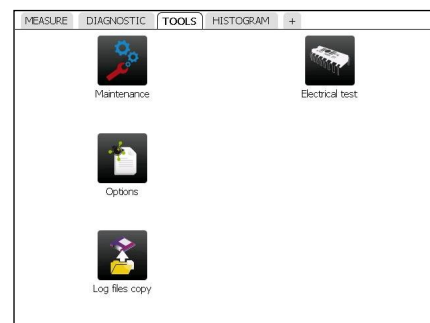
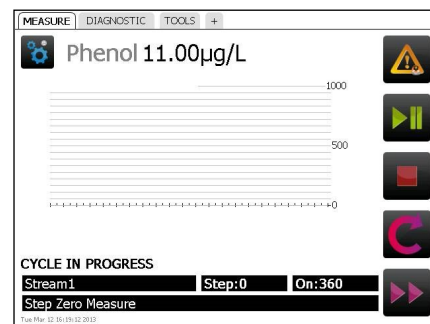
Measurement emission & reception directly on the PCB by gathering all programs driving the whole measurement process for each parameter. Increased accuracy and response time resulting from the association of the measuring and its fibre optics system

JBUS/ModBus module retrieval data / steering

Supervision management of data and JBus/ModBus « slave » protocol, execution of cycles & measurement PCB control, data storage

Low Operating cost Minimum reagents' consumption

Multi-stream 1 to 6 channels multiplexer



TOPAZ Specifications

CONSTRUCTION & ENVIRONMENT

Dimensions	Wall cabinet stainless steel 316L: 610 x 825 x 400 mm (W x H x D)
Weight & Material	20 kg approx. - Stainless steel 316L
Environment	Installation in safe and sheltered area, away from corrosive atmosphere. IP55.
& Protection	
Ambient T°	5 to 40°C (depend method)
Relative humidity	10 to 80%

ELECTRICAL UTILITIES

Power supply	110 - 240 VAC 50 / 60 Hz
Consumption	Typical 150 VA - Maximum 300 VA

ANALYSIS

Parameters	Refer to list on reverse page / Consult
Range	Depend on parameter / Consult
Method	Continuous, on line measurement Colorimetry, titrimetry, potentiometry or absorption Selection based on parameter and/or range
Reagents	Depend on parameter and method
Number of streams	1 to 6 on option (above, please consult)
Multi-parameter	Single or multi-parameter analyser (consult)
Cycle duration	15 min on average
Accuracy	± 1 to 2% end of range (colo, titri, pot.)
Repeatability	± 1 to 2% end of range (colo, titri), ± 3 to 5% (pot.)

CONNECTIVITY, ALARMS & COMMUNICATION

User interface	Colour LCD display, 5,7", 160 x 230 mm, touch-screen
	Windows interface
Data storage	Data storage in analyser memory
and retrieval	Transfer via USB port
Input / Output & Communication	4 - 20 mA, dry contacts—JBUS/Modbus RS232 On option : support converter RS485
Alarms	Thresholds per stream (HI-LO), sample & analyser failure
Remote control	JBUS/ModBus protocol or dry contact: end of cycle stop,

SAMPLING

Preparation	Filtration if needed / Dilution, depending on application
Sample inlet	Flow : min 30 l/h - optimum 46 l/h (4 l/h with water saver) Pressure : 0.1 to 3 bar maximum Temperature : 5 to 45°C Sample : Inlet 1/4" BSP F / Outlet soft tubing D INT 9
Hydraulic connections	Waste : soft tubing D INT 12
Cell volume	25 ml for potentiometry, otherwise 8 to 10 ml

OPERATION

Zero	Automatic at end of each measurement cycle
Semi-automatic calibration	Required upon renewal of reagents Otherwise : depends on method
Cleaning	Mechanical wiper on option, if needed

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ENVIRONMENT

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Surface water

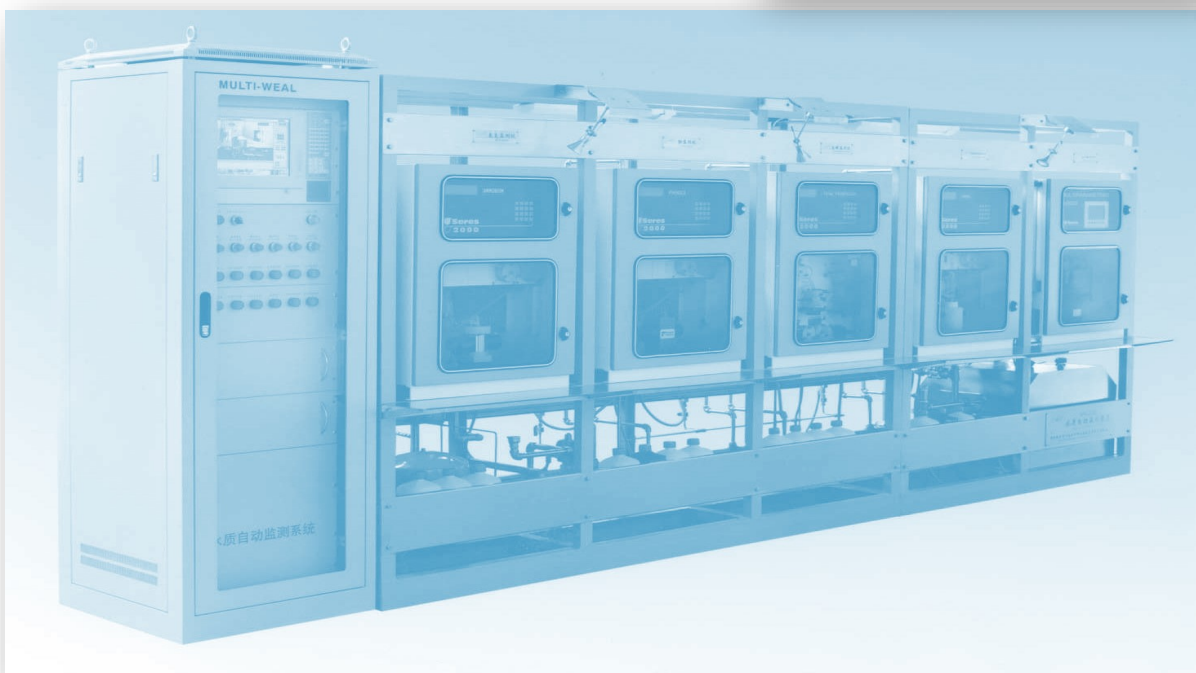
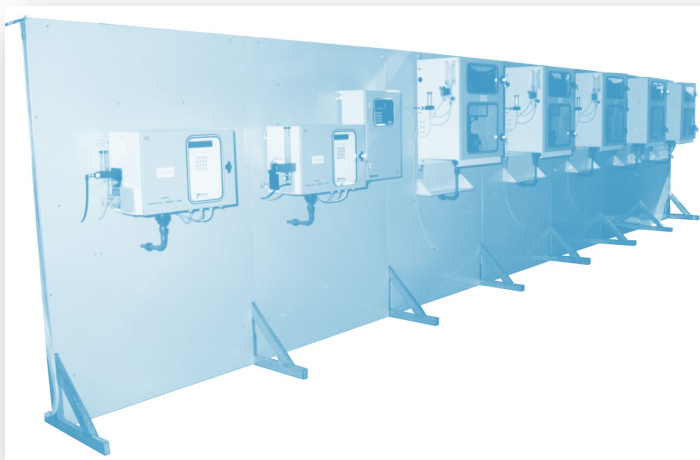
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Sea water

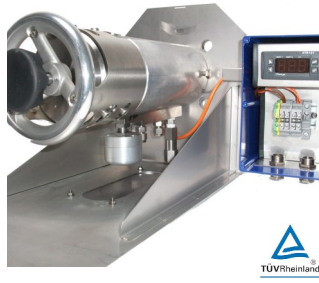
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WATER QUALITY

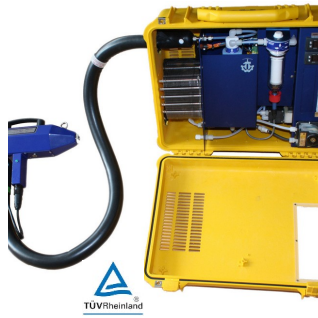


AquaGas Products and Services



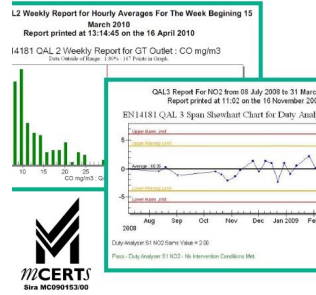
CEMS

System INTEGRATION
& Innovative
SAMPLING solutions



STACK TESTING

Portable equipment
for short term
measurement



DATA ACQUISITION

States EPA approved
Data Acquisition and
Handling Software



ONSITE

Maintenance
commissioning
Training



*"For the Environnement,
excellence comes as a standard"*

AQUAGAS SYSTEM INTEGRATION

More than 14 years of experience in **environmental monitoring**, AquaGas commitment in implementing innovative, reliable and cost effective solutions is undeniable. Our main focus is to meet your application requirements in due time while maintaining high quality service and relationship.

We have the **skills, products and services** in house with a full dedication to your monitoring needs, so please contact us when it comes to **environmental monitoring and industrial analysis**.

SERES Environnement analysers

SERES Environnement (FRANCE) is one of the major actors in the field of online analysis dedicated to **Water Quality Monitoring** in the industry and the environment. Outstanding experience, attentiveness, innovative and effective solutions are the strengths of SERES while meeting everyday challenges.

The ideal partner for Australian water quality monitoring.

Contact Us

Give us a call for more
information about our
services and products

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INTEGRATED SOLUTIONS TO MONITOR OUR ENVIRONMENT