

INDUSTRIAL AND SURFACE WATER MONITORING



PAUTBAC II Oil Tank Dewatering System

Description

The **PAUTBAC II** is the best suited system to automatize water drainage from oil storage tank. With its **capacitive probe**, it is a flexible, economical and reliable system capable to handle the crucial but time consuming task of **oil tank dewatering** without the need for human attendance. **PAUTBAC II** is designed to be install online and is a fully automatic system.

Applications

Oil & Gas refineries, oil drilling plants, energy, petrochemical and petroleum industries, tank farms, oil storage and slop stations, platform and ships.

Installation

A Teflon coated capacitive probe is inserted in an explosion proof circulation chamber mounted in the tank draining pipework. The probe measures the dielectric constant to detect the interface between oil and water. The control unit processes the probe signal to control the tank purge valve operation.

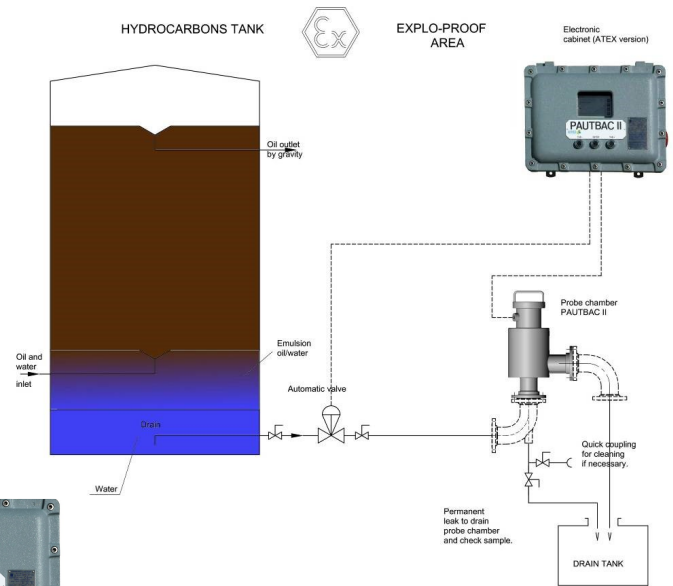
Automated Oil Tank Dewatering



Key functions for enhanced monitoring

- IMPROVES TANK NOMINAL CAPACITY
- ENSURES SAFE PURGE OPERATIONS
- ELIMINATES MANUAL HANDLING AND INTERMITTENT ATTENDANCES
- DECREASES OIL LOSSES AND HYDROCARBONS RELEASED
- PREVENTS BACTERIAL CONTAMINATION
- ATEX AND APPLICATION SPECIFIC ENGINEERED VERSIONS AVAILABLE
- MAINTENANCE FREE, PURGE TIME COUNTER AND AUTO-STOP FUNCTION
- NO TANK MODIFICATIONS REQUIRED
- AUTOMATED FULLY PROGRAMMABLE SYSTEM
- ADJUSTABLE THRESHOLD FORM 5 TO 25%
- SUITABLE FOR ALL TYPE OF HYDROCARBONS
- INTUITIVE INTERFACE THROUGH TOUCH SCREEN

System Overview



Technical Specifications

CONSTRUCTION & ENVIRONMENT

Dimensions Control unit (CU) ATEX 398x298x205 mm (W x H x D)
Weight & Material Non ATEX CU: 360x244x170 mm

ATEX CU 35kg
 Non ATEX CU 4kg
 Circulation chamber 70Kg

CU & CC: Stainless steel

Environment Suitable for potentially explosive area
 CU: certification ATEX INERIS 03 ATEX2010-category II G,
 Ex d IIB + H2 Ex Td A21
& Protection CC: certification LCIE 04 ATEX6073, Ex d IIC T6

Ambient T° 5 to 50°C

ELECTRICAL UTILITIES

Power supply 110 - 240 VAC 50 / 60 Hz

Consumption 30VA

ANALYSIS

Principle Capacitive probe

Range 5 to 25% with adjustable alarm threshold
 (factory set at 5%)

OPERATION

Emergency Stop PUSH button

Valve Not inc. in AquaGas scope of supply.
 Please contact us for valves required specifications.

Automatic Drain adjustable settings Purging frequency: from 1 to 999 hrs
 Max. purging duration: from 1 to 30 min
 Valve and Purge line flushing: from 0 to 99sec
 Valve shutdown delay: from 0 to 99sec.

CONNECTIVITY, ALARMS & COMMUNICATION

User interface Colour LCD display, touch-screen

Digital Output Valve control: dry contact output (relay) or 24VDC
 Oil detection: dry contact output (relay)
 Instrument fault: dry contact output (relay)
 Option: Spare dry contact output and buzzer control

Analogue output 4-20mA (or 0-20mA) oil content signal

Communication RS485 JBus (IO)
 Serial output RS232

SAMPLE SUPPLY

Sequential control 1 to 5 tanks / purge valves with 1 single electronic cabinet / 1 single capacitive probe

Sample inlet Flow : 5-30m3/h
 Temperature: 5 to 85C
 Pressure max. 3 bar





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.



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



Environmental Compliance & Online Process Analysis



AquaGas Pty Ltd is supporting the global industrial community with high performance **Environmental & Process Monitoring Systems** (Continuous Emissions Monitoring Systems, Air Quality Monitoring Systems, Online process analysers, **Water Quality Monitoring Systems**) specifically designed and built to meet your application requirements.

With extensive expertise and diverse technical skills acquired around the globe, AquaGas Pty Ltd designs, installs, and supports innovative technical solutions, which respond to the requirements of environmental regulations in terms of pollution monitoring and environmental impact assessment. AquaGas Pty Ltd Systems and Services are available in **Australia, New-Zealand and New Caledonia.**





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...

HARDNESS

THT
TA
TAC ...

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

CHLORIDES
CYANIDES
FLUORIDES
SULFIDES
ARSENIC
SULFATES ...

CERTIFICATIONS



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