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.

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 from 5 to 25%
- Suitable for all type of hydrocarbons
- Intuitive interface through touch screen
## Technical Specifications

### CONSTRUCTION & ENVIRONMENT

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Control unit (CU): ATEX 398x298x205 mm (W x H x D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight &amp; Material</td>
<td>Non ATEX CU: 360x244x170 mm</td>
</tr>
<tr>
<td>ATEX CU</td>
<td>35kg</td>
</tr>
<tr>
<td>Non ATEX CU</td>
<td>4kg</td>
</tr>
<tr>
<td>Circulation chamber</td>
<td>70Kg</td>
</tr>
<tr>
<td>CU &amp; CC: Stainless steel</td>
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</tr>
<tr>
<td>Environment</td>
<td>Suitable for potentially explosive area</td>
</tr>
<tr>
<td>&amp; Protection</td>
<td>CU: certification ATEX INERIS 03 ATEX2010-category II G,</td>
</tr>
<tr>
<td></td>
<td>Ex d IIB + H2 Ex Td A21</td>
</tr>
<tr>
<td></td>
<td>CC: certification LCIE 04 ATEX6073, Ex d IIC T6</td>
</tr>
</tbody>
</table>

### Environment & Protection

- 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
  - 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 (I/O)
  - 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 85°C
  - 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 laborato-
ries, 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. ...

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 Taïwan
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

Certifications
- Quality Management System ISO 9001:2008 Certified
- ATEX
- IMO
- Bureau Veritas LCIE