

The Watermark

The Newsletter From

Automated Water & Effluent Ltd

Autumn 2013

ALT2 Temperature & Liquid Level Controller

The ALT2 is an instrument for controlling the liquid level and temperature in plating vessels, being a combined level and temperature control instrument, housed in a corrosion resistance weatherproof housing with a clear viewing front panel.

Featuring large accurate red LED digital temperature display of 0 – 100 oC reading to the nearest 0.1 oC with a Pt100 platinum resistance sensor. The level controller is as per our model ALC1101 level controller which uses three conducting level electrodes which maybe in various materials being compatible with the solution in the plating vessel.

The ALT2 features either on/off control of the heater or PWM (pulsed with modulation) where the heater is on for a period of time and off for a time period. The ratio of on to off decreases as the set

point is approached to help prevent overshooting of the temperature set point. The level control cuts the supply to the heater if the level falls below middle electrode of the three electrodes. The level control will not reset until the vessel level is filled above the highest of the three level electrodes. The longest of the three electrodes is the earth electrode required to make the electrical circuit. By using three electrodes, a differential can be set between cutting out off the heater and resetting of the heater. This differential should be large enough to ignore changes in the vessel level as work is inserted and removed from the processing vessel.

The ALT2 is a simple to install and use instrument featuring analog controls, for large heaters we are able to supply remote contactors or thyristor stacks.



Surface World Exhibition

At The National Exhibition Centre (NEC) Birmingham.

We would like to thank all the visitors who stopped by our stand at the recent surface world exhibition at the National Exhibition Centre in Birmingham.

It was nice to see to see you all both old and new friends dropped by. If you need any addition information after the exhibition, please contact Tom Young our business development manager either by phone or by emailing tom@awe-ltd.co.uk.

We had on show our new ALT2 combine level and temperature controller and a microprocessor effluent monitor with a graphic touch screen. More about that exciting new product in 2014



PH10-K PORTABLE pH Meter

The portable pH meter market is an enormous one with a wide and varied range of instruments available. There are some very good instruments available one being our PH135 portable pH, mV and temperature instrument with the ability to data log unto 99 pH values see Spring Watermark.

However many customers want something simple to use and low cost but better than the throw away type pH sticks which only are really only electronic litmus paper at there very best.

Therefore, we have reintroduced our PH10-K low cost simple and very easy to use and calibrate analogue portable pH meter kit with manual temperature compensation. We are supplying the PH10-K as a simple kit comprising of PH10 portable pH meter with leather carrying case and epoxy bodied combination pH electrode 9015-3B with 3' cable and a BNC connector. Portable pH meters do not get simpler and easy to use than this and the electrode can be replaced

by simply unplugging the industry BNC connector to remove the electrode.

Any standard combination pH electrode from the AWE range can be used in place of the 9015-3B. For example, the 9072-3B low conductivity water electrode ideal for use in springs and mountain streams where the conductivity is usually low and the sample very often cold.

Model 9092-3B double junction pH electrode is ideal for solutions which can poison an electrode such as cyanide or hexavalent chrome.

The PH10 can be used as a test instrument to test any of our industrial combination electrodes in the lab or workshop before installing them out on your plant.

So the PH10 becomes a piece of test equipment like the PH15 see the issue of the Watermark Technical tips.



- ★ Simple Operation
- ★ Full pH Range 0 - 14.00pH
- ★ Large Digital Display
- ★ Supplied with an Electrode
- ★ Supplied with Carrying Case
- ★ Cost Effective
- ★ High Quality
- ★ Ex - Stock Deliveries

THE GRAPEVINE

Continuing the subject of level and temperature control of plating vessel, one of customers involved in the aerospace sector requested controls for several process vessels.

The customers requirements where for double security of the control of the heaters, so we designed and built a floor standing panel with duplicate temperature controllers for each heater. One for control and the second temperature controller acting as a policeman for over temperature cutout. This was wired to a second contactor in series with the main contactor used for control. Therefore, if the controlling contactor failed on caused by welded together contacts, the temperature would increase to the temperature setting of the second contactor the

policeman and the second contactor would open stopping the heating.

The same principal was applied to the level controllers with two separate sets of level electrodes and controllers, one wired to control each contactor offering double security in the case of a failed level control loop.

The customer is believed to have received a discount on his insurance for the duplicated systems.

We will of course by carrying out routine servicing and calibration of the temperature instruments and sensor with annual traceable calibration certificates being issued as required by the customers quality standard.



Automated Water & Effluent Ltd

AWE House Antom Court, Tollgate Drive, Beaconside, Stafford, ST16 3AF UK.

Tel: 01785 254597 Fax: 01785 257724

www.awe-ltd.co.uk email sales@awe-ltd.co.uk

AWE