



“UJWAL”

WATER TECH

ADVANCED BIO BATTERY WATER

OUR PRODUCTS



5 LITER



1 LITER



COMPANY PROFILE

CTWI Group of Companies was conceived in the year 1963. Ornate Naturale an offshoot company of CTWI was established in the year 2010. The company was started mainly to cater the needs of Metro Stations & Airports. Since Metro was in its inception stage & Airport across the nation was getting a face lift Ornate got into steel Structural Fabrication both for Airport & Metro Stations Bangalore. Site Locations-M.G Road, Trinity, Devaiah park, Chord road Station to name a few. BIAL Bangalore pipe fabrication were some of the prestigious projects undertaken.



M.G. Road



Rajajinagar



Trinity



KIA

Recently about 3 years back the fuel free waste disposal equipment was manufactured and brought out to the market.

VERTICALS



JOINT VENTURE



Battery Watering: Questions and Answers :

Conventional lead acid batteries contain a liquid “electrolyte” which is a mixture of sulphuric acid and water. Each cell in a battery resides within its own vented container (known as a “jar”), ensuring that the active material contained in the battery plates is continuously bathed in electrolyte while small amounts of oxygen and hydrogen gas (produced mainly during charging) are freely released. These gases represent the breakdown products of water, and this indicates that water is being “used up” to some degree and must eventually be replaced. The bigger portion of water lost in a battery that is run at elevated temperatures is lost by simple evaporation out of the vented cap on the cell, but all things considered, a lead acid battery in good condition does not need much maintenance attention at all. Mostly, it amounts to periodic checking of the electrolyte level and water additions weekly, or less often depending on individual duty cycles. An aftermarket watering system, installed on the battery in place of the stock vent caps simplifies this process even further.

We get questions on battery watering often at **ORNATE NATURALE**, and some of the questions follow

What kind of acid do I add to my battery?

There is a simple answer here: No kind of acid at all. Under normal conditions a battery loses only water (in the form of vapour, hydrogen and oxygen), and only water should be replaced. Addition of acid would increase the sulphuric acid concentration of the electrolyte, potentially damaging the battery. If the cells have lost acid due to a tip over, or as a result of repeated over-filling and flush-out, some acid may have to be replaced, but this is a job for a trained battery technician. Sulphuric acid of a high concentration is used for replacement, but strong acid can only be added to a battery cell under controlled conditions- otherwise, it will not mix properly and cell damage can result. Safety is an issue here as well.

- 1. Before charging the battery, add just enough water so that a low liquid level is visible.**
- 2. After charging is complete, add enough water to bring the level up to the bottom of the vent opening barrel (usually about $\frac{3}{4}$ inch below the top of the cell).**

The above steps will prevent overflow. Step one ensures that the electrolyte level has not gone too low and exposed the plates to air for the charge cycle. Step two brings the level up to full height at a time (battery fully charged, electrolyte at highest point) when accidental overfilling would not be a problem.

The most efficient watering approach? Use a hose-end filler nozzle that shuts off at a preset level, or install a single-point watering system. A single-point watering system is a simple plumbing arrangement on top of the battery that replaces the ordinary vent caps with valve-equipped caps connected to a single fill point by means of plastic tubing. A single-point watering system ensures accurate fill level and saves time- the operator does not need to have access to the top of the battery. An evaluation we have done has revealed that some systems fill much faster and are configured much better than others, so pay attention to the details and seek advise.

Remember that water added to a battery is less dense than the dilute acid already in the cell. Water will sit on top of the electrolyte until it is mixed in by the bubbling, gassing behaviour of the cell during a full charge cycle. This fact is important if you take hydrometer readings of the electrolyte; the reading will not be accurate after watering until after the following charge. Also note that batteries exposed to extremely low temperatures for long periods can be damaged by freezing unless they are fully charged, especially after any water additions

Manufactured By : # 9/4; “ORNATE HOUSE” Museum Road, Bangalore - 560 001 | Corr Add : B-19, HMT Industrial Estate, Jalahalli, Bangalore - 560 013 | M : +91 89713 30099 | P : 080 2838 2099
E : info@ornate-eccotechsolutions.com | W : www.ornate-eccotechsolutions.com

Marketed By : Ujwal Power Tech, Narasimhalu Layout, Behind SBI, Nandini Layout , Bangalore - 560096
M : +91 9986 059337, +91 74836 69931, +91 74836 63227 | E : ujwalpowertech@gmail.com