

**IF WE COULD PLUG IN THE LITERATURE
WE WOULD NOT BE HERE**

BY

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Introduction

If I was a customer using batteries I would like to be able to ask some serious questions of the battery manufactures as the overall system is virtually useless without the batteries holding up when they are required to perform.

Mr. Manufacturer can you answer the following questions for me:

Technical

- Automotive case batteries
- Stationary case batteries
- Design life
- Positive plate thickness
- Positive plate design
- Specific gravity
- Calcium, antimony, selenium 1.6%, AGM, GEL
- Post seal
- Trough or jar formation
- Percentage of over sizing the battery versus the load profile
- Application
- Environment where installed
- Proper cabinets or racks
- Safety design for stationary and automotive design batteries
- Will safety design become law soon
- Where are the batteries manufactured.
- Is the quality control real or on paper

Warranty

- Replacement pro-rata using original price or inflated list price, factory delivered, de-installed, installed, and removed.
- Procedure on failure on 1, 10, 30 cells or blocks.
- Are monitoring systems to protect the manufacturer or you.
- What frequency of maintenance protects the warranty?
- What can void my warranty?
- Demand resolution to a problem immediately

Testing & Maintenance

- Capability of interpreting the results
- Factory or independent third party testing
- Proper maintenance requirements for best results

- Qualifications of people maintaining the product
- Does the manufacturer accept them:
- Qualified third party
- UPS manufacturer
- Battery manufacturer
- Pre testing procedures
- Understanding test procedure
- Test to load rather than capacity especially if you are not monitoring each cell or block.
- Testing to the end voltage of the UPS etc.

Return On Investment & Keeping Your Site Turned On

- Is it happening?
- Our logical capability can give us the answer.
- Failure in short periods or on start up.
- Altering the original physical state of the battery by adding, or changing things.
- Putting additives in after installation

- 1.0** Literature, papers, interpretation, proof, but still failure. Everyone pretends to have the best product on paper. But battery companies always seem to have an excuse or solution; White pills, drilling holes, changing vent plugs, 7 year failure in wet, thermal, meltdown on wet cells, replacement of failed product, should you replace failed right away and not wait extra years so you have to pay more, changing large numbers of cells or blocks, blaming the customer, charger, cycling, poor maintenance. I want to encourage you to learn enough that you do not have to depend on the charger, UPS, manufacturers for your choice of battery. We need to bring logic back into our industry.
- 2.0** Understanding real design life versus warranty. No one type of battery is suitable for all applications. You have a choice if you understand batteries. Voltage and conductance or resistance readings can tell an awful lot about the battery's health if you understand how to interpret the results.
- 3.0** Factory or independent testing (on site or off site) Does a signed engineering report still have a high value when it comes to testing a battery? Consistency of voltage, S.G, conductance or resistance readings can still prove yes, or no to the quality of the product when you first receive it. Understand and participate in the test regime which can prove quality or hurt your battery. A poor cell or block will start to show itself before you destroy the rest of the battery, if you know what to look for. Installation disasters can destroy

any battery (I have had a few, so installations should be done by qualified people only and not a contractors etc.)

Battery companies and installation/testing companies can certainly improve the integrity of your system regardless of the battery you use.

- 4.0** The battery industry plays some serious games warranty wise with the lack of battery knowledge by the end user. A sealed battery that is designed for 20, 10 or 5 years now has three years full warranty. Why are we being convinced to change batteries every three years? Why not improve the product instead of shifting the cost? Maybe we should fix our problems and not continue to try and convince the customer to accept the deficiencies we have in our products?
- 5.0** Selling batteries by unqualified people at the lowest price does not get you the best battery and more often than not results in serious problems. When we sell charger/battery systems we should generally offer the customer a number of options. If there is a problem shouldn't we fix it? No one is problem free but we should fix it without the blame factor. Ask for a number of options and the differences in chargers/batteries and don't use the warranty as the deciding factor. Study all available options before making the final decision.
- 6.0** Lack of knowledge or understanding can be sometimes very costly. Battery manufacturers should be responsible for explaining there products capabilities to you. The lowest price helps sell but rarely is the best product. Do the manufacturers really have your best interests at heart? Does the person selling you the battery part of the system have knowledge about the batteries or not.
- 7.0** Imagine being one of the large telecoms or computer centers or any other customer that have to change batteries every three years. How happy would you be? Buy a good product and you actually can get 10-20 years of a wet or a sealed battery.
- 8.0** Protect yourself especially if it is your first time:
- Acquire knowledge
 - Know available choice of product
 - Customer recommendation
 - Minimum specification
 - Consulting engineers
 - Interpretation capability
 - Trust
 - Testing

