FLUX™ Recombination Cap vs. VRLA Battery

The most common industrial battery types are VRLA (valve regulated lead-acid) batteries and VLA (vented lead-acid) batteries. A VRLA battery is sometimes called maintenance-free, but this term is improper since the battery still requires regular cleaning, testing, and charging. VLA batteries are also known as flooded or wet cell batteries.

Listed below are the pros and cons of each battery type.

VRLA Battery (sealed)

Pros:

- Lower maintenance
- Lower emissions
- Faster recharge time
- Can be mounted in any position

Cons:

- Shorter battery life
- Higher cost per kWh
- Lost water cannot be replaced
- More sensitive to heat
- Overcharging causes premature failure
- Improper charging may cause thermal runaway

VLA Battery (vented)

Pros:

- Lower cost per kWh
- Longer life
- Higher capacity
- Less sensitive to overcharging
- Electrolyte loss can be replaced

Cons:

- Must be mounted in upright position
- Requires frequent watering
- May require venting in confined areas
- Longer recharge time

Previously, you may have chosen a VRLA battery based on its advantage of low maintenance. But with the advent of the Flux recombination vent, more choices are now available. The Flux vent is a game changer because it allows far less maintenance on a vented battery. It now makes sense to choose a VLA battery which has the advantage of lower costs and longer life.

The Flux recombination vent cap eliminates the need for frequent level checking and watering. This maintenance still must be performed, but far less often since most of the lost water is recombined and returned into the battery. In addition, the Flux vent virtually eliminates the emission of hydrogen gas and toxic acid fumes. Lower utility bills and equipment costs may result since there is no need to provide mechanical ventilation where the batteries are installed in living spaces or enclosed areas.