



### Instant Backup Revival Additive (For Revival of Backup in Lead Acid Batteries)



Environment Friendly IBR Additive for old Lead Acid Batteries IBR Additive Restores Sulfated Lead Acid Batteries. Sulfation is a Common natural process occurs during discharging. When the battery is deeply discharged or left on open circuit in the discharged condition, abnormal condition will leads into hard sulfation. IBR ADDITIVE, which is used to dissolve sulfate deposits from lead acid batteries.

Effective product for old Lead acid batteries Instant Backup Revival Additive, Which is developed for troubleshooting and old battery revival purpose only. IBR Additive is developed by innovative advanced technology. It is a very efficient lead acid battery additive for automotive and industrial battery, especially Tubular, Traction batteries and other deep cycle industrial batteries.

#### The main functions of IBR Additive are as follows:

-  **Remove Sulphation**
-  **Increase Capacity**
-  **Extend Battery Life**
-  **Higher Power Output**

Sulphation is the main cause of battery failure. IBR ADDITIVE is able to eliminate "irreversible" sulphated compound on battery plates and prevent sulphation.

**Figure (A) shows :** The new Active material plate has a spongy shape. This shape has a large surface area for the chemical change. Therefore, the new active material plate can make the chemical change smoothly.

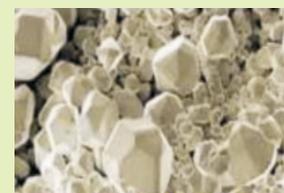
- 1. Charging efficiency is high.
- 2. The battery can save the electricity fully.
- 3. Discharging power is high.



**New plate with high porosity**  
The lead-acid battery outputs high power.

**Figure (B) shows :** The crystallized "Sulfation" covers over the active material plate. Sulfation means the lead sulfate ( $PbSO_4$ ), this substance makes the battery life shorter & does not carry the electricity. The surface of the element plate has a high resistance by this condition, therefore, the old active material plate cannot make the chemical change smoothly it leads into

- A General Lack of Capacity(Deliverable Power)
- An Increase in Battery temperature while charging & discharging
- A strong Odour of Hydrogen Gas while charging
- An excessive use of water
- A rapid rise in battery voltage while charging
- A sudden drop of Battery voltage while discharging
- Under certain conditions of over discharge, the amount of dissolved lead sulfate may be such that, on recharging, the reduced lead will form metallic bridges between the plates (dendrites).



**Old plate in the lead-acid battery**  
(Hard Sulphation - lead-acid battery outputs low power.)



Sulfation reduces the electrolyte concentration and, as a consequence the cell voltage is also reduced. As sulfation increases the internal resistance increases & the extra heat generates which produces a mark rise in electrolyte temperature. These higher temperatures then further accelerate the dry out process often culmination in the failure of battery. This Continual Sulfate Accumulation Accelerates The Weakening Process And Finally “suffocates” The Battery.

#### **IBR Cannot Work in Below Conditions of Lead Acid Batteries:**

- Not all lead-acid batteries can revive and extend the battery life. Of course, SSRL technology cannot work well on the physical damaged batteries.
- The Active material of plates are damaged under the lack of battery electrolyte.
- The lead-acid battery get a shock physically and Active material of plates and separators are damaged i.e shredding of active material.
- The Active material of plates and separators have physical problems such as corrosion, collapse and short-circuiting.
- Breaking of intercell welding etc.

#### **Charging A Battery On Pulse Rejuvenator:**

After the discoloration of electrolyte has been completed, carry out normal battery charging using different amps for different ah capacity batteries. Continue to charge the battery on Pulse Rejuvenator till full gravity is observed in each cell and the battery volts reached above 15.5V for a 12V battery and For traction battery it should be 2.6volts per cell..Fully charged battery is then removed from Pulse Rejuvenator machine and allowed to settle to room temperature, note the volts and gravity in each cell. You will find that the battery is absolutely Revived.

#### **VRLA Gel Battery Rejuvenation With IBR**

For VRLA GEL batteries Revival,First Weigh the Old Battery and Compare Weight Loss. If you have find a weight loss then remove plastic strip on the top of the battery case. And add IBR 5 ml per liter of electrolyte volume dosage in each and every cell. After addition of **IBR** add distilled water up to plate height in each cell & mix electrolyte then leave the battery for 12 hours in idle condition during this time **IBR** will go to battery plates. After 12- hours carry out Pulse Rejuvenation Charging Procedure for next 12 hours.

Results will be – All Cells Voltage / Gravity / Back Up – shows Satisfactory Magical Performance.

#### **IMP Note**

- IBR additive fully tested in SSRL laboratory & taken more practical trials in global market since last 10 years.
- No harmful effects observed in all types of lead acid batteries while treatments & after treatments.

#### **Dosage of IBR Additive**

IBR to be used in old lead acid batteries 10 ml per lit. of electrolyte volume in all cells.

**Dosage :** 10 Gm below 100Ah & 20 Gm Above 100Ah Per Cell

**Packing :** 25 Lit. Jar

**Storage :** Store in a Cool and Dry Place

For more details contact



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