



Forbatt SA has been supplying a full range of sealed lead acid batteries, as well as our range of Gel batteries into many different industries for more than 23 years.

Our quality and reliability have become very well known across many different sectors with our self-discharge rates being one of the lowest in the family of rechargeable battery systems. With the rise in power challenges in South Africa, it is important to understand the warranty and life expectancy of our batteries.

Our Sealed Lead Acid and Gel VRLA range of batteries come with a 1-year and 3-year manufacturing and materials defects warranty. This does not guarantee that your batteries will last the full 12 months or 36 months respectively. There are many factors that will reduce the battery capacity or runtime. Premature failure due to inconsistent electrical supply or rotational load shedding conditions being one of the biggest factors.

1. Cycle Life of the battery, this is the number of times the battery is discharged and then recharged. If we consider Eskom's load shedding of proposed area blackouts, we can have daily load shedding between 2 to even 4 times per day or every alternate day. These rolling blackouts vary between 2 and 4 hours at a time.

These blackouts cause the batteries to move from a standby type of charge to a form of cyclic charge. The net result from this is a possible capacity loss of the battery and even premature failure.

Our Sealed Lead Acid batteries have a life span of up to 5 years if used in a temperature controlled environment with infrequent power outages or disruptions. **Gel batteries significantly surpass the 5-year life span and if used in a temperature-controlled environment with infrequent power outages and disruptions, these batteries can reach a 7-year life span.**



2. Insufficient recharge time

Forbatt batteries need to be re-charged in accordance with our specific charge specifications dependant on the type of battery technology used. It is important that our Sealed Lead Acid batteries be recharged fully, and in the safest and shortest space of time.

Typically between eight to twelve hours at a minimum charge rate and for an uninterrupted time period. Under the current load shedding conditions and power blackouts, if the battery is exposed to deep discharges, the battery will not be fully recharged by the time the next power outage occurs.

This type of cycle will cause damage to the battery due to crystallization on the negative plates within the battery, which may cause permanent damage and therefore a loss in the overall Amp Hour Capacity.

In many instances within the industry the original size battery is being replaced with a larger Amp Hour battery to allow for more standby time during Load Shedding. However very seldom is the battery charging system upgraded or set to charge at a higher rate of amps.

This creates a domino effect as the charger can not recharge the larger battery to fully capacity before the next load shedding outage comes into play, therefore putting additional strain on the battery and drastically shortening the life span of the battery.

Many believe that it is better to discharge a battery down to 50% and only then recharge it back to full capacity. This is incorrect, the life span of a battery will as an example have a significantly longer life span if it is only discharged at say 15% than a battery that is discharged by 40% continuously. Partial state of charge or worse, when the battery never completes the cycle to fully recharge, this can lead to premature failure of the battery.



It is strongly recommended that one upgrades the charging circuit/system in one way or another to speed up the battery recharge rate, in particular, areas where there are many power outages during a 24-or-48-hour period.

This will assist in keeping the batteries charged and ready for when the next power outage occurs. This may be done by fitting larger chargers to quickly and efficiently recharge the batteries or by adding additional Solar panels to help charge the batteries even when the electrical power supply is affected.

3. Conclusion and warranty conditions

If the correct care is not taken and because of the current situation stated above, early replacement of batteries can be expected. Forbatt SA will test any possible battery failures at our in-house facility and will honour any warranty's that are seen as a product defect or malfunction against the manufacturing process of the battery.

As a reminder, our Sealed Lead Acid batteries carry a 1-year limited warranty, and our Gel range of batteries cover a 3-year limited warranty.

The above mentioned is not a design fault of our batteries or a manufacturing defect, the life span of our batteries are directly related to the adverse application criteria, current electrical power issues and load shedding.