

## The Facts About TPPL Technology

### 1. Several competing battery manufacturers are using the term TPPL to describe their non-spillable batteries. What does TPPL stand for?

**TPPL is a battery design feature, not a new battery technology.** TPPL (Thin Plate Pure Lead) is a designation some battery manufacturers are using to describe some designs of AGM (Absorbed Glass Mat) batteries.

In reality, thin lead plates will offer overall limited cycles and will not last as long as traditional “thick” plate pure lead technology, which Trojan offers in our comprehensive AGM line.

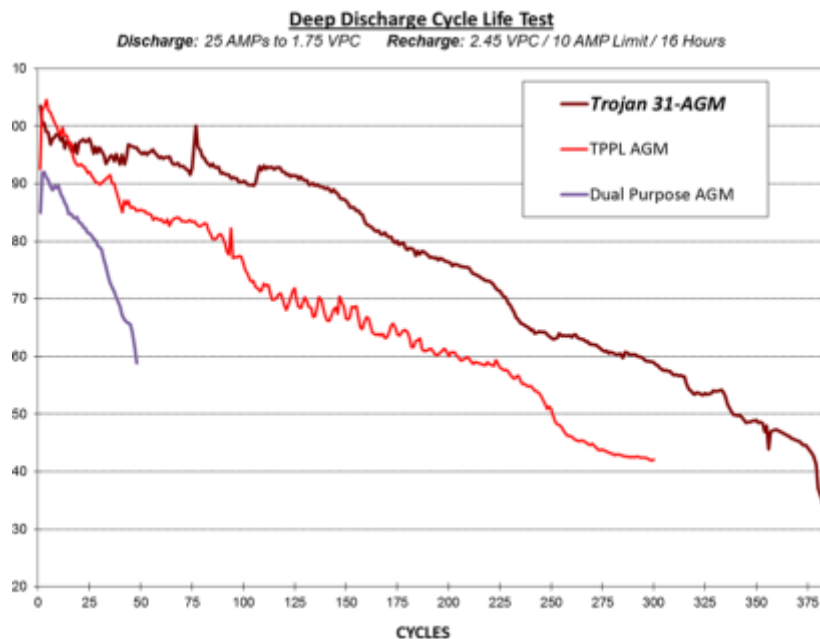
### 2. Why are some battery manufacturers using the TPPL descriptor?

In some markets, including the U.S. and Europe, subpar AGM batteries sold from Chinese battery manufacturers fail to perform to specs, and users are experiencing widespread failures in the field. Over time, the AGM designation received a bad reputation for reliability and performance based on the failed performance of these AGM battery brands.

Therefore, a handful of domestic battery manufacturers are now electing to call their AGM batteries TPPL batteries. However, it is **not** a battery type.

AGM batteries are ideal solutions for customers requiring non-spillable, maintenance free, low gassing lead acid battery technology. These types of batteries are in high demand for applications where non-spillable batteries are necessary to meet regulatory and environmental requirements, such as in enclosed buildings including airports, schools, hospitals, etc.

Below is a graph showing how Trojan’s 31-AGM batteries stack up in recent testing with current industry TPPL AGM and dual-purpose AGM batteries.



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