INDEPENDENT CAPACITY TEST RESULTS

ROLLS S-600 (4000 SERIES) AND 6CS17P (5000 SERIES) BATTERIES

Purpose of the test:

When purchasing an industrial deep-cycle battery for a renewable energy application, it is important that the specifications provided by the battery manufacturer accurately match the battery's real life published capacity rating. Any significant discrepancy can affect the system design, causing the batteries to have a shorter life than anticipated, cost more than necessary, store less energy than the application calls for, and not adequately supply enough power to the loads.

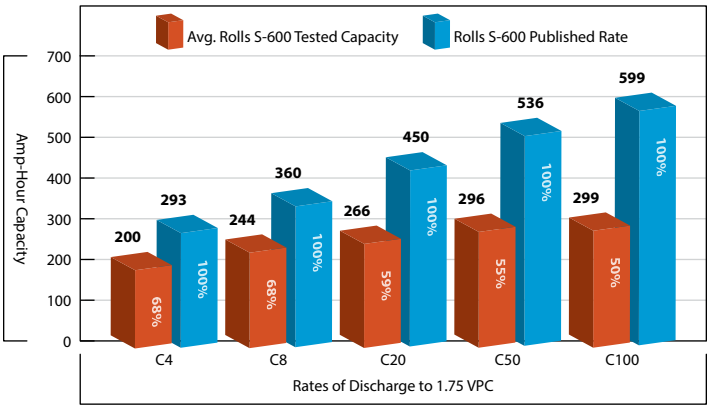
Trojan Battery used an accredited independent battery testing laboratory, to perform capacity tests* on two of the leading industrial batteries on the market to compare the batteries' published capacity ratings to actual data when put into use.

The test was designed to verify the published capacity ratings at several rates of discharge for the Rolls S-600 and 6CS17P batteries. It was conducted by a well-respected independent test facility that specializes in battery testing. The S-600 is a 6V, 450 amp-hour (Ah) battery while the 6CS17P is a 6V, 546Ah battery, both being rated at the 20-hour rate of discharge (C20).

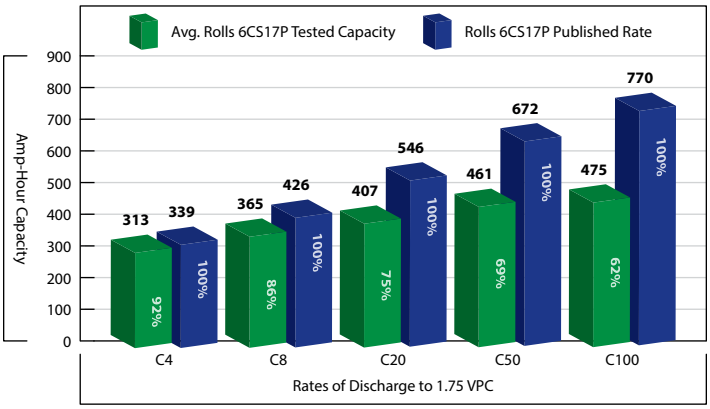
How the test was performed:

The test facility purchased 8 batteries from two different sources (4 samples of each type) and ran capacity tests at the C4, C8, C20, C50 and C100 rates of discharge. These tested capacities were then compared with the corresponding capacities published by the manufacturer. The results, summarized in the two bar charts below confirm that neither the S-600 nor the 6CS17P batteries delivered their published capacities at any of the five rates of discharge.

Tested and Published Capacities for the Rolls S-600 Battery**



Tested and Published Capacities for the Rolls 6CS17P Battery**



Test result findings:

The test results show that the tested amp-hour capacity of the Rolls S-600 battery varied from a low of 50% to a high of 68% of its rated capacity across 5 separate rates of discharge. Similarly the Rolls 6CS17P batteries delivered capacities ranging from a low of 62% to a high of 92% of its rated capacity. If a battery does not reach its stated capacity, it is not performing to the manufacture's specifications and will deliver reduced return on investment over time.

* Tested in accordance by the charging protocol established with Rolls Battery.

** Mean test results from 4 samples of each type of battery.

Note: Test reports are available upon request.

Trojan batteries are available worldwide through Trojan's Master Distributor Network.
We offer outstanding technical support, provided by full-time application engineers.

For a Trojan Master Distributor near you,
call 800.423.6569 or + 1.562.236.3000 or visit www.trojanbattery.com

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