Eight months of site data: why the E3000's range is used differently than you think

Based on telematics from 9 HG E3000 dumpers in customer use, 28 March to 23 November 2026.

When contractors consider an electric dumper, the first question is nearly always the same: will the battery last the day? We no longer have to answer that with a specification sheet. Every E3000 reports its hour meter and battery level while it works, and after eight months we have 443 working days, 838 operating hours and 144 charging sessions to look at.

The data shows what the range is for. It is the reason operators can stop planning their day around a charger.

No two days are the same

A dumper works in bursts. It moves material, waits, and moves again. On a typical working day an E3000 logs 1.3 operating hours on its hour meter.

But nobody buys a machine for the typical day. One working day in ten runs to 4.6 hours or more, and the longest day in the period was 8.9 operating hours, from 06:50 to 17:30. A machine on hire does not know on Monday which kind of week it is going to have.

The reserve gets used

On most days the E3000 finishes with plenty left: 84% of working days end with at least half the battery remaining.

The other days are where the capacity earns its place. On 78 of 401 working days the battery was drawn below half. On 53 of them, roughly one working day in eight, it went to 40% or lower. That is the point where a machine with 40% less battery capacity, starting from the same full charge and doing the same work, would already have been empty.

The E3000 itself dropped below 20% on only 10 of those 401 days, and never below 9%.

Days of work on one charge

Looking at the stretches between charges makes the point concrete. Across 118 stretches, the typical E3000 does 3.2 operating hours over two working days before it is plugged in again. Fourteen stretches ran to 10 operating hours or more.

The longest ones show what the capacity allows:

- 17.2 operating hours over six working days, from 100% down to 17% (13 to 19 October).
- 14.4 operating hours over four working days, from 98% to 16% (3 to 9 November).
- 14.0 operating hours over nine working days and 15 calendar days, from 100% to 19% (23 August to 7 September).

Each of those used around 80 percentage points of battery between charges. In all, 13 stretches used more than 60 points, which is more than a battery with 40% less capacity holds. The same work would have needed at least one extra charge in the middle.

Charging happens when it suits the site

Operators do not charge the E3000 because they have to. The typical charge starts with 69% still in the battery, and about two thirds of sessions (64%) happen overnight or over a weekend, when the machine is standing still anyway.

That freedom depends on capacity. One charging session in four (35 of 144) started at 40% or lower. With 40% less capacity, each of those would have meant a machine that stopped before the operator got round to plugging it in, or an operator who had to break off work to charge earlier.

When an E3000 does come in low, it is back in work quickly. On 7 September one machine was plugged in at 9% and was at 77% no more than 2 hours 12 minutes later.

What this means on site

The E3000's range is not there to be emptied every day. It is there so the heavy day, the forgotten charger and the week without a power outlet on site do not stop the job.

About the figures: operating hours are the machine's hour meter, which counts the time the key is on. Battery levels are the percentage shown on the machine's display. The comparison with a battery of 40% less capacity is arithmetic on the E3000's own battery levels, assuming the same work and the same starting charge; it does not describe any specific machine. Charts and method are in the accompanying document "E3000 usage evidence".