

A single battery as reference.

~100+MWh
delivered

5038
cycles

7+ years
operation

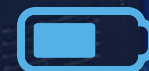
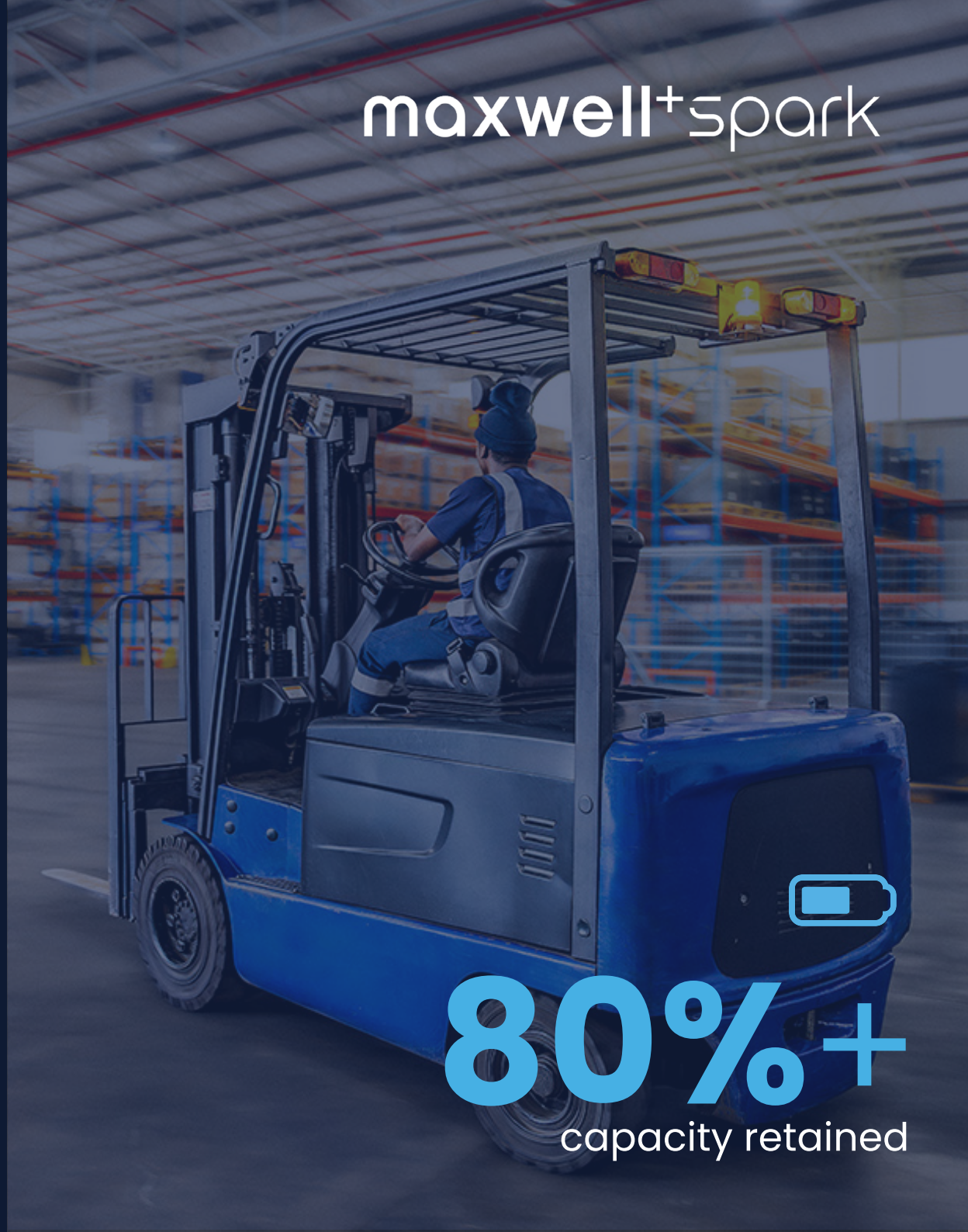
motive.li

Built to last.

7+ years of high-utilisation performance in a
national grocery DC

2019 → 2026
Still in operation

maxwell⁺spark



80%+
capacity retained

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Context

A national grocery retailer operating multiple distribution centres across South Africa deployed a fleet of maxwell+spark lithium-ion batteries to power its material handling equipment.

The challenge:

When your DC runs all day, every day — can your batteries keep up?

This is a stress environment for any battery system.



Continuous warehouse operation



High daily utilisation



Limited charging opportunities



Elevated ambient temperatures
(up to ~40°C in summer)

maxwell+spark

The Solution

KEEPING THE OPERATION RUNNING, SHIFT AFTER SHIFT

To support continuous warehouse activity, maxwell+spark batteries were deployed across a mixed fleet of material handling equipment, designed to handle long discharge periods and demanding daily cycles.

The system was designed around the site's operating profile, balancing runtime requirements, charging opportunities and operational demands to support reliable day-to-day performance.

WHAT THIS MEANS

This fleet demonstrates that lithium-ion performance is not just about day-one efficiency.

80%+

capacity retained

5038

cycles

7+ years

operation

~100+MWh

delivered

It is about:

- + Durability under sustained load
- + Stable performance over years, not months
- + Extended asset value beyond the original machine lifecycle

maxwell+spark

maxwellandspark.com

Key results

7+ years in operation for the oldest batteries



5000+ cycles recorded on the highest-use battery



Multiple batteries exceeding **2000–3000** cycles



Continued usable runtime after years in service (sample: ~7h+ depending on load)



Batteries **reused** in new machines and contracts



Engineering assessment indicates **80%+ capacity retention** on the highest-cycle battery

