Case Study

Market: Industrial Equipment

Solution: Power Floor Care Machine Battery

Product: U1-12BMS (12.8 V, 40 Ah) Valence U-Charge® Lithium Iron Magnesium Phosphate battery module with integrated battery management system

Features & Benefits:

Module:

- High cycle life >4000 cycles (80% DOD to 80% of rated capacity)
- Low total cost of ownership
- No ventilation required
- Extremely Safe Lithium Ion chemistry
- Robust mechanical design
- Flame retardant plastics to UL94-V0
- LED battery status indicator

Module Technical Specifications:

Nominal Voltage: 12.8 V
Nominal Capacity: 40 Ah
Weight: 6.5 kg / 14.3 lbs.
Dimensions (incl. terminals LxWxH): 7.76” x 5.12” x 7.20”
197mmx131mmx183mm

A global technology developer of industrial floor care equipment requested a reliable energy storage system to provide motive as well as brush power for their professional floor scrubbers. The lead acid batteries within their floor scrubber required water top-up maintenance, had limited run time, as well as limited cycle life. Additionally, the equipment was subjected to significant down time because of the long charge time required of the lead acid batteries.

By switching to Valence’s maintenance-free Lithium Phosphate batteries, the users of the power floor scrubbing equipment realized longer run times and longer cycle life. With floor care models using single battery solutions up to multiple module solutions, the manufacture of floor care products is now a leader in advanced battery options for their cordless walk-behind and ride-on scrubbers, cleaners and burnishers. The runtime of the equipment essentially doubles that of the previous battery solution, with faster recharging, and increased years of service.