

Industry first as JCB leads way with lithium powered scissors

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JCB has notched up an innovative industry first with the launch of a range of electric scissor lift aerial work platforms powered by lithium ion batteries – just a year after entering the access sector.

In 2017 the newly-launched JCB Access business unveiled nine all new electric scissors as the company signalled its intention to become a major player in the \$8 billion powered access market.

Now JCB Access has unveiled a new innovation for the sector with the launch of the five brand new lithium ion models: the S1530E, S1930E, S2032E, S2646E and the S2646E, offering working heights of 6.6m through to 10.1m.

Lithium ion batteries offer up to 40% longer operation and a 50% cut in recharging times and innovative Dutch rental company Hoogwerkt has already placed an order for 420 of the new lithium ion scissor lifts as it sets up a new 'green' rental business.

Access Managing Director Jonathan Garnham said: "We are delighted to be offering innovative new solutions to the powered access industry so early into JCB's entry into the sector. Lithium ion powered scissor lifts will offer real benefits to our customers around the world, particularly in significantly reducing total cost of ownership."

Technology boost

The lithium ion design has been created in response to customer demand, including from Hoogwerkt (www.hoogwerkt.nl). The company is establishing a green rental business across Holland, with a web-based ordering system and hourly rental periods. Having a simple, safe recharging system was a critical component of the company's development plan.

The biggest concern for all electric work platform operators, particularly in the rental industry, is battery misuse and damage through incorrect recharging. By offering a range of scissor lifts with lithium ion batteries, in place of conventional lead acid units, JCB Access has delivered a solution that will allow platforms to operate for up to 40% longer between recharging periods.

Recharging times are reduced by up to 50%, improving utilisation on site. Plus, unlike lead acid batteries, lithium ion batteries can be left in a low state of charge without damaging the cells and can be set to cut-out

when minimum charge level is reached, to protect the battery. No maintenance is required with lithium ion and there are no hydrogen emissions during charging.

The lithium ion powered machines come with a Smartphone app which provides wireless connectivity for real-time condition checks of the batteries. The battery has up to 2000 recharge cycles – four times as many as a lead acid battery.

JCB Access has developed a Battery Management System (BMS) that allows customers to monitor each cell in the battery pack, adjusting the load to ensure all cells are performing at their optimum. The BMS works in conjunction with the motor controller to ensure that batteries deliver maximum power and performance throughout their lives. As the batteries reach a low charge level, the JCB motor controller activates a cut-out to alert the operator to the need to recharge the machine. This ensures that there is sufficient charge in the battery for the operator to return the machine to the charging station.

By combining JCB's robust scissor lift design with innovative lithium ion battery technology, JCB Access has produced a range of platforms with longer running times, faster charging and longer battery life, while preventing battery misuse on site.

JCB Access Sales Director Phil Graysmark said: "The main customer benefit is ease of charging, with no worries about short charging periods. The battery life equals the life of the machine, so there is a greatly reduced requirement for replacement batteries. This is a more environmentally friendly solution, which is ahead of all other machines on the market."

Source: JCB Deutschland GmbH