

Deregallera Scales Up Sustainable Pouch Cell Development With Pilot Production Line

Deregallera's sodium-ion pouch cells promise cleaner, safer energy storage, countering soaring cobalt and lithium demand and resultant environmental damage.

LONDON, UNITED KINGDOM, February 19, 2021 /EINPresswire.com/ -- [Deregallera](#), the South Wales based sustainable battery and electric motor developer, has completed building its pilot scale pouch cell production line for advanced sodium-ion batteries.

The new pilot production line is housed in Deregallera's state-of-the-art class 100 clean room, enabling the R&D team to optimise processing of the moisture-sensitive sodium-ion into pouch cells.

Deregallera's Chris Kavanagh, Materials Scientist and project lead said: "We can now commence pilot-scale battery manufacture; demonstrating our sodium-ion based materials in packaged cells conforming to industrial standard regulations in large, commercially relevant sized batteries.

"Production of pouch cells provides the right format for demonstrating excellent volumetric and gravimetric energy density of the devices."

Why Sodium-ion?

The drive for low carbon technologies has resulted in an explosion in demand for lithium-ion batteries. However, the scarcity of lithium precursors and the soaring financial and environmental costs in sourcing cobalt, are driving demand for cleaner, safer battery chemistries.

Sodium-ion is comparable to lithium in terms of battery operation and manufacture. However, it is far more abundant than lithium – and has the added advantage that it can be discharged to zero volts, making it eminently safer to transport. Switching to sodium-ion based energy storage is viewed as a 'drop-in' technology to replace lithium-ion batteries without disrupting established manufacturing lines.

Martin Boughtwood, Managing Director, explains: "Our energy storage technologies do not rely on toxic materials such as lithium and cobalt, both of which require environmentally destructive

and energy-intensive means of extraction and processing.

“The new line gives us capability to manufacture large devices in sufficient quantity for introduction into commercially relevant scenarios such as the ‘buildings as power stations’ demonstrators in [SPECIFIC at the University of Swansea](#).”

The new production line is funded by [Innovate UK](#), as part of the Government’s drive to position the UK as a global leader in the manufacture of advanced and sustainable energy storage materials at scale. The novel materials synthesis processes that Deregallera is developing could provide exciting opportunities to manufacture ‘home grown’ battery technologies in the UK.

Deanna Standen

Deregallera Ltd

+447597341418 ext.

[email us here](#)

Visit us on social media:

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/535643181>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2021 IPD Group, Inc. All Right Reserved.