

## High Temperature Rechargeable Li-Ion Cells - Market Review

This market research will focus on following key points:

What for we need lithium rechargeable cells for extreme temperatures?

Why can't we use "standard" cells?

Who are the cell makers to offer high temperature range cells?

What are the cell models available in the market?

## **Report Content**

Extreme Temperatures Lithium Rechargeable Battery Needs

Lithium Rechargeable Systems & Batteries and Best performance cells

What Are an extreme Temperatures for Rechargeable Li-Ion Cells? (For discharge >60C, <-20C, for charge >45C, <0C)

Unofficial Industry Low - High Charge/Discharge Temperature Limit Definitions

The market needs standard definitions

Why charging temperature limits are always narrower than discharge temperature limits?

What Happen on Extreme Low/High Temperatures

Performance Uniformity Damage and Temperature Effect on Cycle life

Li-Ion Life Estimation at Different Storage Temperatures

Li-Ion Cells Extreme Temperature Behaviour Mechanism

"Standard" Cell behaviour when charge on High/Low Extreme Temperatures?

Voltage Techniques to Gain More Discharge Energy

Voltage Techniques Combined with Extreme Temperatures

Cell Packaging effect behaviour at Extreme temperatures

Li-ion Cylindrical can shape

Li-ion Prismatic can shape

Li-ion button shape

Li-Ion pouch cell shape

Pouch Cells Swelling at Extreme Temp.

Cell Validation at Extreme Temp.

Extreme Temperatures Performance Test Plan

Extreme Temperatures Safety Test Plan

High Temperature Li-Ion Pouch Cells

Review of 28 cell makers to offer high Charge and Discharge temperature li-ion cells (> 45 Deg C for

Charge, >60 Deg C for Discharge).

Report to include some cells data sheets

Contact us for purchasing a copy - shmuel@sdle.co.il

Research files type: Power Point