

# Innovative Klebandlösungen für Batteriezellanwendungen

tesa SE  
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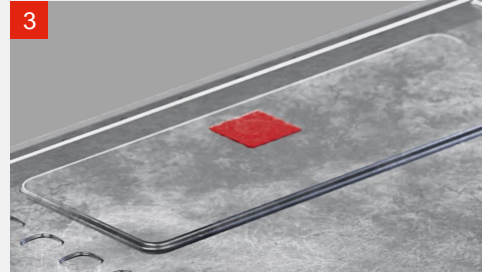
# Tape applications in EV batteries



1  
Pack sealing



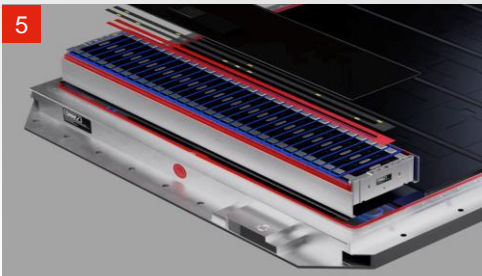
2  
Venting



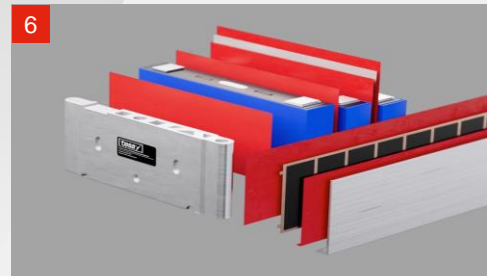
3  
Fireman access



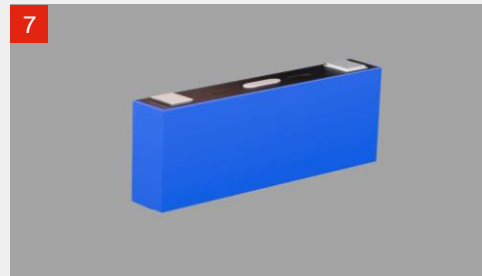
4  
Lid protection



5  
FPC mounting,  
electrical insulation



6  
Fire protection,  
mounting, labeling



7  
Cell wrapping



8  
In-cell applications

# Tape applications in EV batteries



Venting



# tesa<sup>®</sup> VentGuard

1

## Simplification

No need for screws, milling of battery pack or special hole geometries.

2

## Range booster

Ultra-compact (0.5mm height) & ultra-lightweight (up to 90% weight reduction) design.

3

## Automated application

Maximizing efficiency and process safety while saving resources.

4

## Perfect sealing

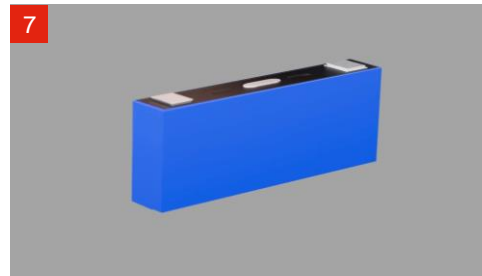
IPX7 and IPX9K (100 bar) resistance without additional sealing material.

5

## Instant degassing

Complete hole opening enables instant pressure release during thermal runaway. Burst pressure is customizable between 200 mbar and 450 mbar.

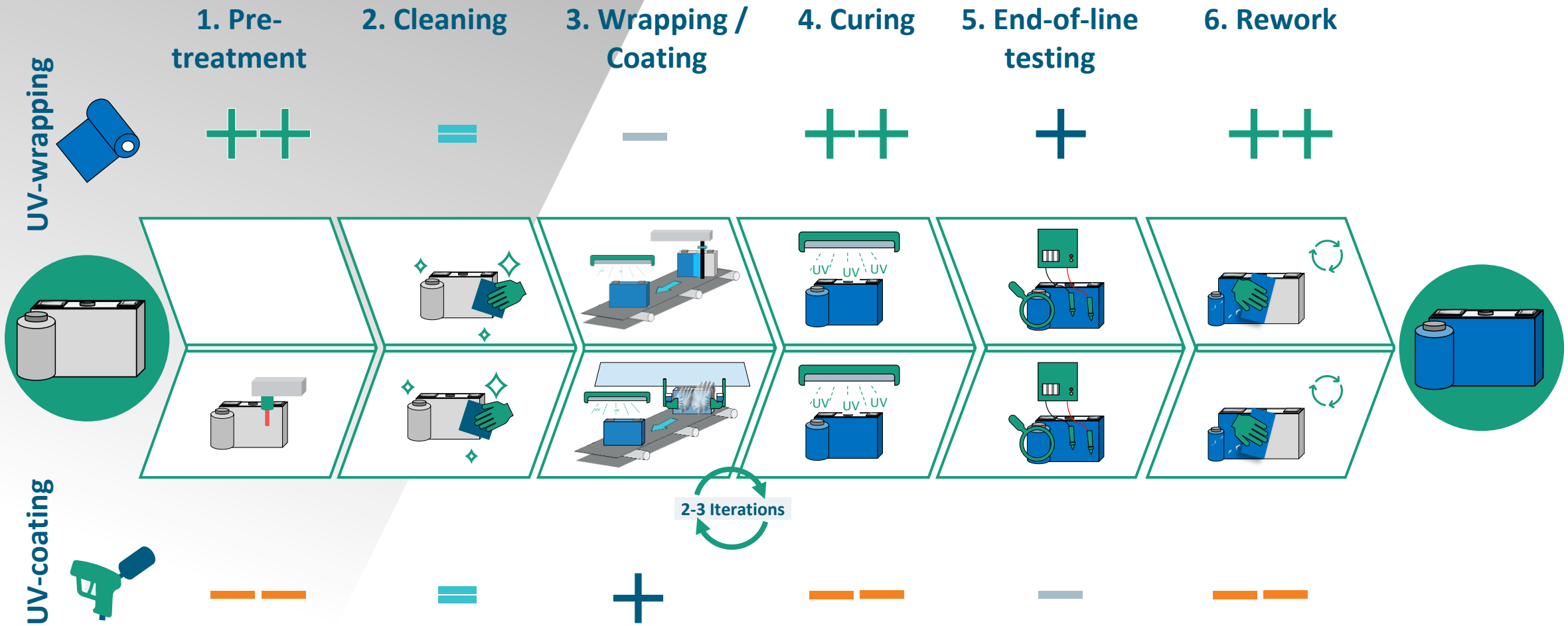
# Tape applications in EV batteries



Cell wrapping



# Process overview: UV cell wrapping vs. UV coating



## Whitepaper: UV cell wrapping vs. UV coating

Available now:

[battery-solutions.tesa.com](https://battery-solutions.tesa.com)

→ Design Freedom

Thank you to FFB authors:

**Jan-Darius Plöpst**

**Miha Podbreznik**

**Marcel Diehl**

Powering innovation together

**Electrical insulation  
for battery cells:**  
Comparing UV epoxy  
tape with UV coating



# Tape applications in EV batteries



In-cell applications



## In-cell applications in EV batteries

### Key characteristics

- Application: stack fixation
- Electrolyte resistance
- Single-sided tape
- Polypropylene backing
- 45  $\mu\text{m}$  thickness
- Laser writable





# An overview of our sustainability targets for 2030



1

Reduce emissions



2

Source responsibly



3

Rethink materials



4

Push circularity



5

Enabling sustainability

Together we can  
make things happen

