

# APPLICATIONS IN BATTERY CELL PRODUCTION

**With decades of expertise in automation and dosing technology within the automotive industry, Polyplan offers its know-how for the following battery manufacturing applications.**

- Cavity preservation for coolant connections, screw heads, etc., using established Airless and Air-Mix technology – low-pressure polyurethane dosing process
  - Application of potting material – high-pressure polyurethane dosing process
  - Battery housing volume measurement using a VMT vision system for precise dosing of the required potting material (available)
  - Polyurethane (PU) bonding systems for securing module packs to the battery base – high-pressure polyurethane dosing process
  - Gap measurement between module and base using the VMT LineRunner for precise dosing of the required PU adhesive
- **Additional applications available upon request**



A wide range of mixing heads, dispensers, material conditioning, and material supply systems available and configurable.



Various viscosities and discharge rates can be implemented.

## Optimized wax technology for battery cells

- Transitions between coolant connections and the battery housing are particularly prone to corrosion
- Wax is applied precisely to the designated areas
- The robot efficiently moves the applicator from one coolant connection to the next
- Suitable for applying liquids with viscosities from 0.6 to 200 mPas
- See also our factsheet: *Targeted and Efficient Application of Preservation Waxes – Minimal-Quantity Cavity Preservation*

Application time per coolant connection:

approx. **1.5 SEC**

Robot movement time between connections:

approx. **1.5 SEC**

Target cycle time for 20 coolant connections:

**< 105 SEC**



Contact us for detailed information on optimizing your processes and boosting efficiency.

