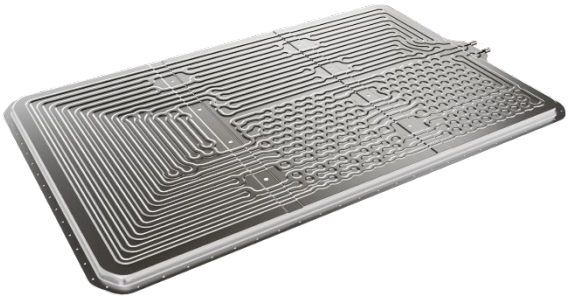
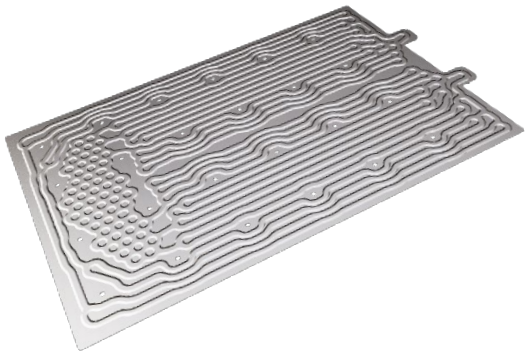
SUCCEED IN TRANSFORMATION

Mubea



Rollbonded Cooling Plates and Tubs





Innovation:

- Continuous rolling process for production of battery cooling plates and tubs

Customer Benefit:

- 100% leak tightness due to homogeneous bond of the two layers
- Forming of 3D cooling structures (tubs/lids) and component integration possible
- Huge portfolio of aluminum alloys: 1xxx - 5xxx
  - Superior structural performance through application of 5xxx grades
  - Light weight potential with 5xxx grades
- Simple modification of channel pattern without tool cost
- No cooling liquid contamination with flux residues
- Large design space: Thicknesses (1.0 - 4.5 mm), Widths (up to 1,600 mm for finished part)
- Weldability without risk of layer delamination
- Low CO2 emission production plants using highly recyclable alloys

Status:

- Rollbonding facilities in Slovakia and Turkey (EU)
- China presence in preparation
- R&D prototype line in Germany
- Global finishing locations (Mubea or partner) fed with European rollbonded blanks possible