High Temperature Stability
High Vibration and Fatigue Strength
Superior Weld Strength and Reliability

COPPER ALUMINUM INLAY CLAD METALS
For Electric Vehicle Battery Technologies
COPPER ALUMINUM INLAY CLAD METALS

Materion has 30+ years of copper and aluminum cladding expertise for automotive applications. Our materials provide unmatched electrical, thermal and fatigue performance.

THICK INLAY CLAD SOLUTIONS

Thick inlays provide a reliable bus bar solution for partial penetration laser welding. Now we offer thick inlays that are up to 50% of the base metal thickness.

COPPER CLAD ALUMINUM

ALUMINUM CLAD COPPER

DESIGN OPTIONS

Work with our cladding team to create a thick-inlay clad metal solution that meets your exact specifications: www.materion.com/dovetail.
Laser welding Cu to Al can result in weak, brittle welds.

CHALLENGES OF MIXED METAL LASER WELDING

COPPER-TO-ALUMINUM DOVETAIL CLAD® SOLUTIONS
Same-metal laser welding can be achieved with Dovetail Clad metal for bus bar or pouch cell lead tabs. It provides low electrical resistance and high joint strength.

DOVETAIL CLAD BUS BAR

DOVETAIL CLAD POUCH CELL LEAD TABS

Anode Cathode

For more about Dovetail Clad metal visit www.Materion.com/Dovetail or call +1 216.383.6823