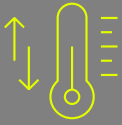


# Lamination Technology

ENNOVI's lamination technology is built with a robust combination that enables cost-effective design and production of the current collectors in cell contacting systems (CCS) for EV batteries to last the entire lifetime of an EV.

# ENNOVI™

## CHOICE OF HOT OR COLD LAMINATION



ENNOVI's extensive research on adhesives, foils, and processes enables tailoring of best choices for each project.

## FASTER DEVELOPMENT TIME



Our proven technology, vertically integrated production and precision processes lower costs, simplify logistics and reduces development time.

## END-TO-END PARTNERING



Instead of starting from scratch with each new design, our proven best practices and core technologies provide a head start on fast time-to-market.

## APPLICATIONS

- + Electric vehicles
- + Commercial transportation
- + Energy storage system
- + Personal mobility

### 01. LAMINATION LAYER

- + Typical material: PET.
- + Thickness: 0.1mm.
- + Precision cut to match collector layout.
- + UL 94 rated dielectric insulation layer.

### 02. ADHESIVE

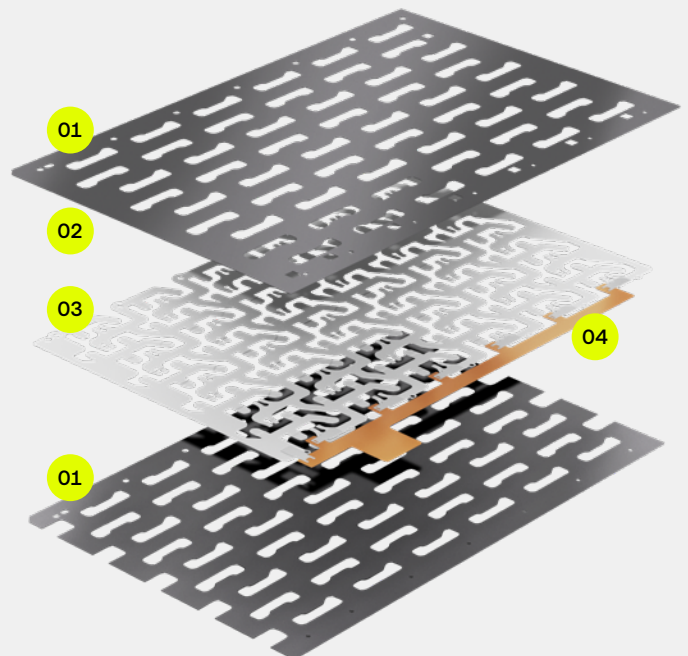
- + Choice of hot and cold bonding adhesives.
- + Pre-tested performance for CCS application.

### 03. CURRENT COLLECTOR

- + In-house high-precision stamping.
- + Different materials such as aluminum and copper.
- + Integration of cell-level fuses.
- + Utilize ENNOVI's U-Turn technology to achieve excellent current density spread.

### 04. FLEX CIRCUIT

- + Signal connection for voltage and temperature sensors.
- + FPC or die-cut FDC technology alternative.
- + Part of laminated assembly.



	PLASTIC TRAY	HOT LAMINATION	COLD LAMINATION
CCS >1M	Does not support	Support	Support
INSULATION CONCEPT	Distancing	Lamination	Distancing
TOLERANCES & SWELLING	Tolerancing of collector pockets	Provides some resistance	Stretching of glue & foil
APPLICATION	Cell positioning	Small cylindrical cell sizes	Larger cell sizes