



ADVANTAGE CONVERTING

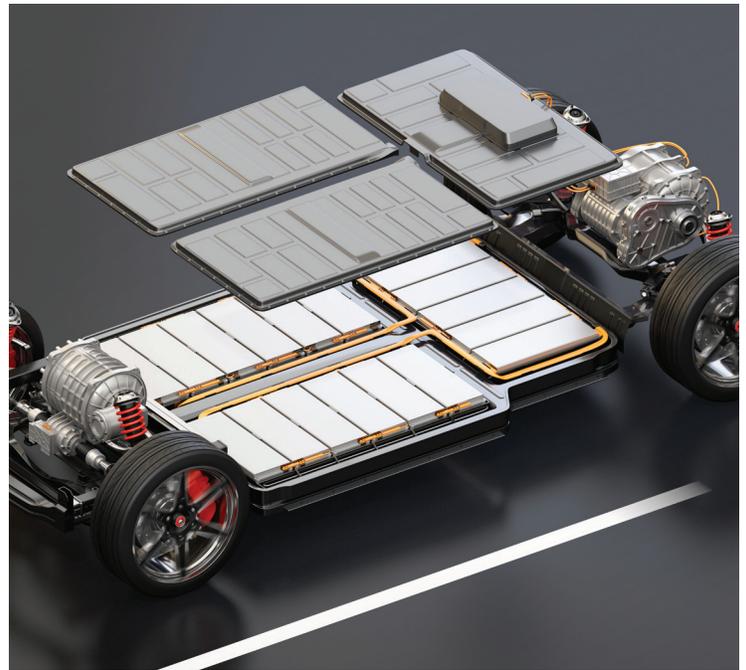
## Electric Vehicle Manufacturer Maintains Production and Obtains a Zero-Failure Rate with the Help of Advantage Converting

**Industry:** Green Energy

**Application:** Batteries, Electrical Insulation, Surface Protection, Thermal Management

**Services:** Laminating

**Materials:** Films & Plastics, Tapes & Adhesives, Thermal Management



# Case Study

### Challenge

A leading EV manufacturer was awaiting the arrival of a custom built machine designed to laminate insulation material around cooling tubes for battery temperature control in its vehicles. The machine, built overseas, was delayed by 12 months. In the meantime, to maintain its supply of EVs, the company sought a manufacturing partner to develop a method for laminating the material and to maintain production pending the arrival of the equipment.

### Solution

Advantage Converting created custom tooling to heat, fold, and wrap a thin insulation film around 20-foot-long aluminum cooling tubes. We built a custom thermal lamination fixture on our existing lamination equipment that provided a consistent encapsulation around the cooling tubes. To address the difficulty of obtaining a consistent bond, Advantage Converting plasma-treated the insulation film prior to lamination. This process increased the strength of the material bond and resulted in zero voids, ensuring a successful product.

Advantage Converting then pot tested, palletized, and shipped the finished tubes to various manufacturing plants where they were formed into giant serpentine patterns.

### Results

- Working closely with the EV manufacturer's engineering team, Advantage Converting applied decades of experience to develop an innovative solution to a unique problem
- Plasma-treating the film resulted in a zero-failure rate, which reduced the scrap rate, improved yields, and instilled confidence that the cooling tubes would consistently meet quality standards
- We successfully produced and shipped thousands of cooling tubes, allowing the EV company to push forward with production while awaiting delivery of the custom-built machinery

Tell Us Your Challenge: [info@advantageconverting.com](mailto:info@advantageconverting.com)

Call Our Team: 650.802.6800

Come See Us: 266 Industrial Rd. Suite A · San Carlos, CA 94070

[advantageconverting.com](http://advantageconverting.com)



## Our Mission

Advantage Converting strives to serve our customers' every need. You're our lifeblood. We value every opportunity to learn about you, collaborate, and build a lasting relationship. From A to Z, our team is dedicated to understanding and realizing your challenge.

### Our customer commitment:

- Produce the highest quality products at a fair cost
- Provide exceptional product turnaround time
- Offer unsurpassed customer service and support
- Ensure sensitivity to all customer privacy needs

We want to contribute to your success. By partnering in all steps from product development to delivery, Advantage Converting will make every effort to ensure you accomplish your goals.

## Our Services

- Custom Die Cutting
- Precision Slitting and Rewinding
- Multi-layer Laminating
- Thermal Laminating
- Cleanroom Manufacturing
- Controlled Environment Printing
- RF Welding
- Island Placement
- Packaging and Assembly
- Engineering and Prototyping



## Our Process

No matter what stage you're at, we can help you. Whether it's a scratch of inspiration on a napkin, or a fully designed and blueprinted idea, our creative engineers will work with you to make your idea a reality.



### Building Relationships

Our customers are our lifeblood. From our initial consultation, and through each step of the process, we value every opportunity to learn about you, your business, and your challenge.



### Engineering & Prototyping

Our highly skilled R&D team collaborates with your top engineers on the most difficult design challenges and incorporates your application, quality and cost requirements into a streamlined process and solution.



### Manufacturing

To meet your quality, cost, and delivery expectations, we use our comprehensive capabilities, from basic assembly to the highest levels of automation and clean room expertise.



### Quality Control

With over 30 years of experience, we incorporate the uppermost quality standards and unparalleled process management from initial consultation to final delivery.



### Packaging & Distribution

We utilize our broad logistical knowledge and industry resources to ensure we meet your packaging and distribution requirements, regardless of type and scope.



### Service & Support

Our customer service team is committed to providing you highest-quality support and satisfaction for every inquiry and request, whether it's broad or specific, about designing, manufacturing, or shipping.