

# eMOBILITY

MATERIALS AND ENGINEERED SOLUTIONS

EV Motors | Batteries | Charging Stations

# EIS



# PRODUCT DEVELOPMENT

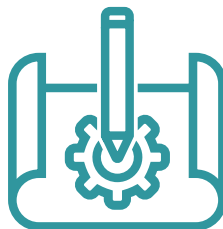
EIS' New Product Development Team will pilot your project in close collaboration with your team through the stage-gate process to mitigate risks, develop, and deploy supply chain with our extensive partners to ensure timely and successful product launch. We work with your engineers end-to-end with problem solving processes aligning to your objectives and constraints, prototyping for product testing and evaluation, and manufacturing for both small batch and high volume output. EIS is the strategic partner that will enable your ideas to succeed in a highly competitive market.



IDEATION



PRODUCT  
DEFINITION



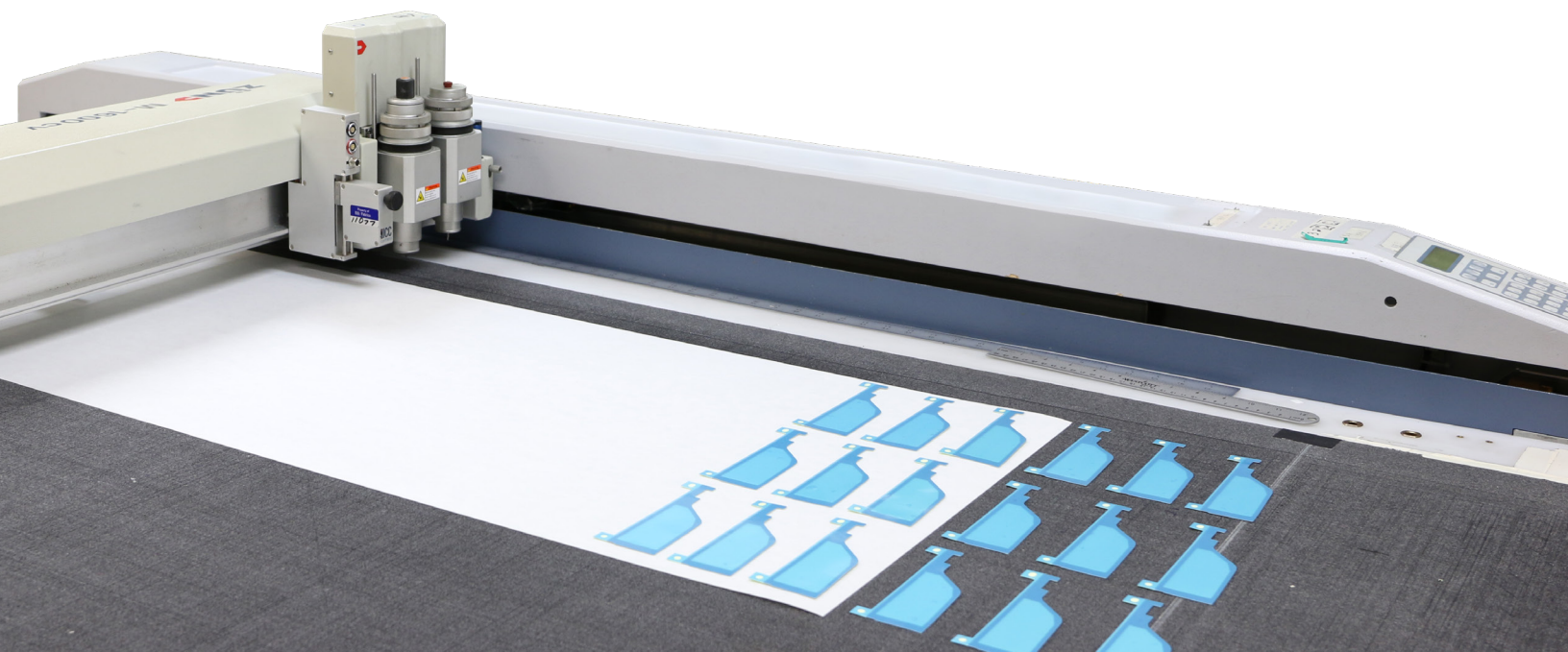
DESIGN &  
PROTOTYPING



DEVELOPMENT

## RAPID PROTOTYPING

Creative ideas are the driving force of innovation. Our rapid prototyping team can take your ideas and turn them into a working design using our expertise in material science and customer applications. We will work in step with your team through each milestone, providing testing and validation throughout the entire life cycle to ensure your product performs as designed.

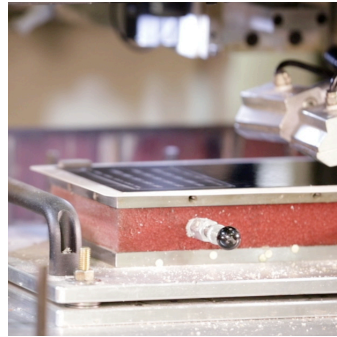


# CONVERTING SERVICES

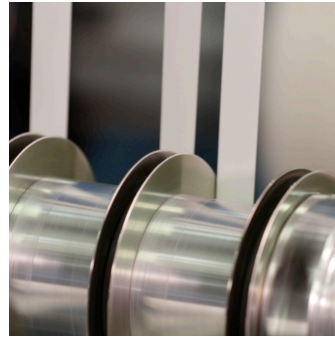
EIS' cutting edge fabrication and converting services will make your design a reality no matter how challenging the tolerance, geometry, and material selection. Being experts in substrate converting and precision tooling allow us to achieve the tightest manufacturing tolerance at the best output from trial to full volume production. Our fabrication facilities run the latest technologies in equipment for flexible and rigid converting and our continuous improvement ethos will ensure that we offer our customers best in-class services and solutions. EIS is ISO 13485:2016 , ISO 14644-1:2015(E), and ISO 9001:2015 certified and ITAR Registered.



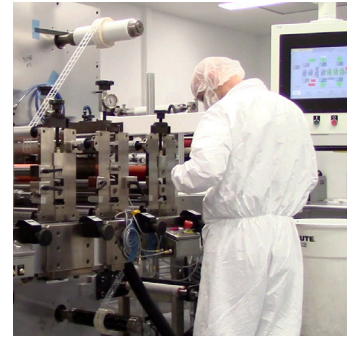
Rigid Converting



Flatbed Laser



Hi-speed Slitter



Clean Room

# SUPPLY & DISTRIBUTION

EIS is an industry leader in providing world-class fabrication and converting services complemented by new product development with our engineering & design solutions. With 20+ facilities across North America and the Caribbean including strategically located fabrication facilities and distribution hubs across the US and Mexico, EIS is uniquely positioned to serve our base of automotive customers and charging station infrastructure.

Sourcing and distributing materials can consume valuable time in researching, pricing, vetting, and managing vendors. EIS has formed strategic partnerships with top-tier suppliers and manufacturers to build a robust supply chain to overcome industry challenges, leverage long standing supplier relationships, and mitigate supplier risk when sourcing raw materials. EIS can assist with technical product expertise and distribution channels so no time is wasted and lead times are kept at bay.

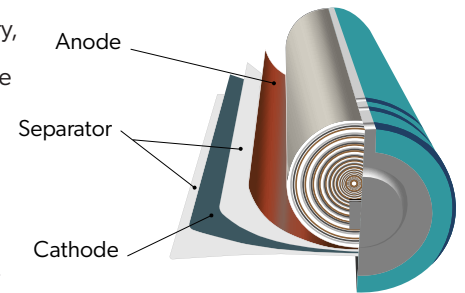




# BATTERY

## Battery Manufacturing for Electric Vehicles

Battery technology is the driving force behind eMobility. The key characteristics of today's battery, including safety, range, performance, and life cycle, are essential considerations. Achieving these characteristics both singularly and cohesively in one design takes an experienced team with the proper expertise in material selection and fabrication capabilities. These systems are highly complex and require novel design ideas and advanced materials. EIS has been at the forefront of these efforts since the genesis of EV, focusing not only on crucial components such as anodes, cathodes, and separators, but also on innovative thermal management solutions and converting capabilities to ensure optimal performance and longevity.

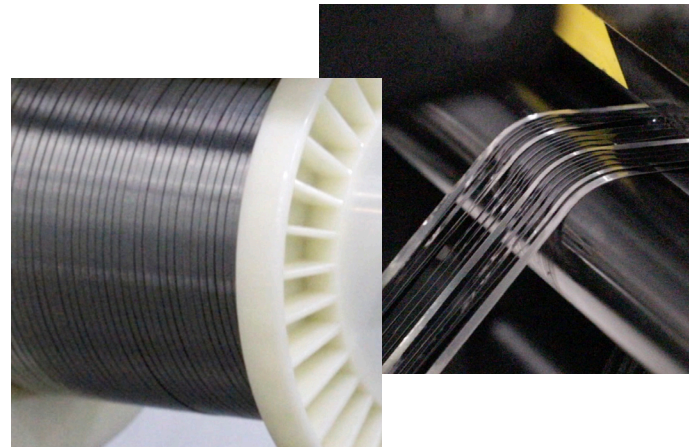
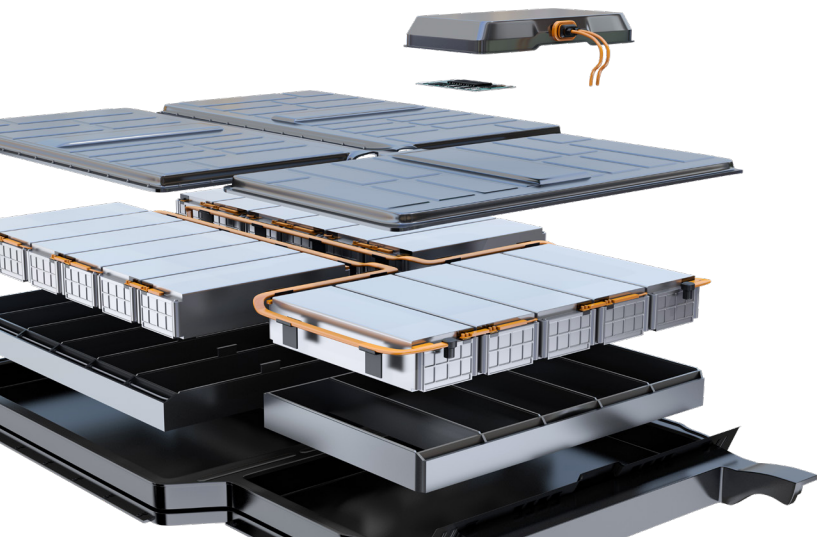


## APPLICATIONS

From cylindrical, prismatic, and pouch configurations with the various chemistries creates nuances in design that can be a challenge to surmount for even the most seasoned engineers. With a safety first mentality, flammability and thermal runaway propagation is always top of mind for pack design. And with real estate in the chassis becoming more constrained, designs and material application are becoming more critical than ever. EIS' legacy experience with our eMobility customers has allowed us to stay ahead of these challenges offering solutions to the toughest problems in thermal management while retaining performance and life cycle characteristics.

### SAFETY

- Flexible insulation to control heat and improve anti-propagation
- Rigid non-metallic barriers for thermal management
- Impact resistance and cell expansion prevention
- Reduction of flammability
- Corrosion protection



### PERFORMANCE & ASSEMBLY

- Busbar and dielectric materials to improve conductivity
- Non-metallic rigid material for structural support and framing
- Weight reduction and assembly efficiency
- Non-mechanical fastening

# ELECTRIC MOTOR

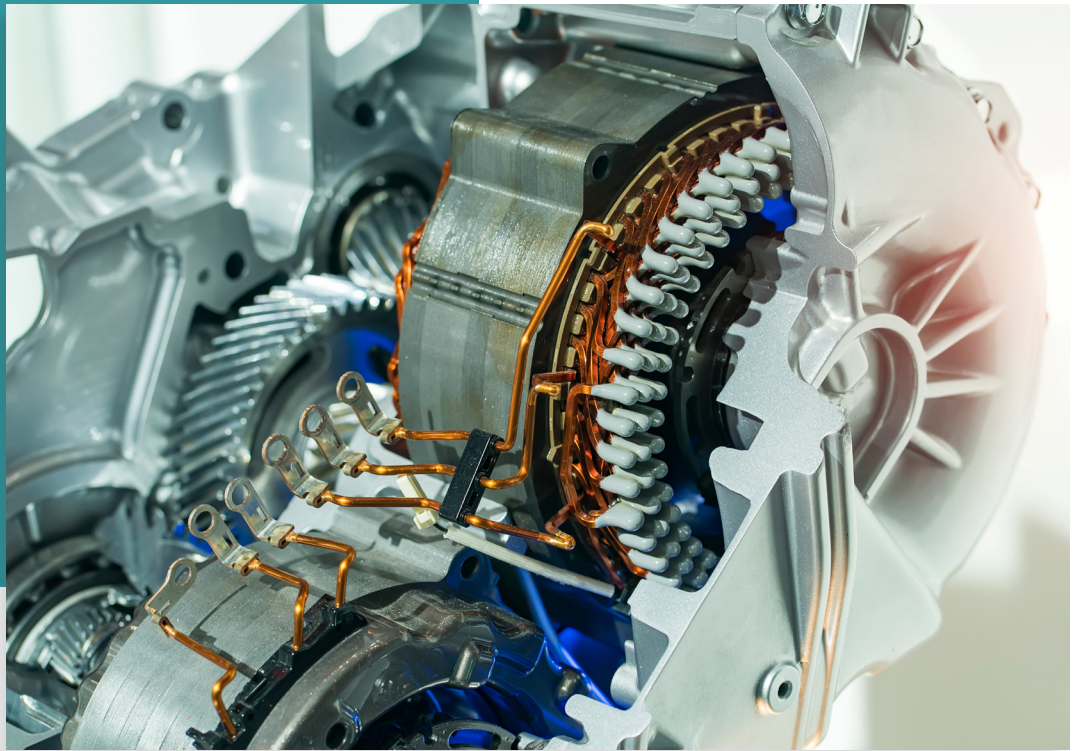
## EIS is a Leader in Supplying Materials for the Electric Vehicle Market

The electric motor is the heart of the EV, and EIS is at the core of this market. Our company was founded to support this segment and is deeply rooted with vast experience in providing process materials to original equipment manufacturers. EIS plays a leading role in developing innovative technology for the devices that create horsepower in today's eMobility products.

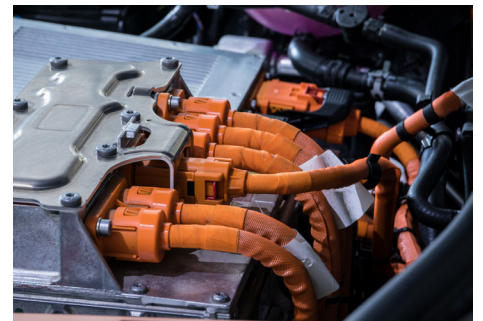
EVs are powered by systems that require a high level of performance without sacrificing size, safety, and reliability. From brushed to brushless induction motors, permanent magnet synchronous motors, electrically excited synchronous and switched reluctance motors, all these devices are being pushed to their limits and required to operate in more compact and much harsher environments.

### EIS supplies:

- Wedges
- Slot Separator
- Lead Wire
- Connection Tape
- Lead Sleeve
- Epoxy / Adhesive
- Tie Cord
- Phase Separator
- Coil Nose Tape
- Lacing
- Slot Liner



Our engineers lead the industry in developing the best applications for new products, continuing to improve performance through our subject matter experts in materials sciences and the expertise to convert these materials for their designed applications. As insulation, barrier, vibration, and thermal systems become more critical in the development and success of these motors, EIS plays a significant role in bringing them to market.



High Voltage Cable / Lead Wire

# CHARGING STATION

## Charging Station Materials Provided by EIS

Charging devices are the fuel stations for the electric vehicle. The burgeoning demand for charging networks, specifically Level 3 & 4 ultra fast chargers, to support the increase in EVs on the roads has created a challenge for OEM suppliers and partners to successfully support the need for continuity in travel for an EV.

EIS' expertise over the past 75 years in high voltage motors and generators, and the controls and systems to support them, provides us with the knowledge to support the successful design and development for fast chargers. These high voltage devices are unlike anything ever deployed for self-service by the public and therefore must meet stringent regulations and specifications that pushes the limit for designers, engineers, and manufacturers. High voltage devices requires a higher level of components, with thermal and voltage protections to keep them safe while servicing the vehicles they are charging.

## ELECTRIC VEHICLE SUPPLY EQUIPMENT



### AC/DC CONVERTER

- Engineered Insulation
- Tape
- Diodes



### Printed Circuit Board

- Solder Materials
- Conformal Coating
- Adhesives & Sealants



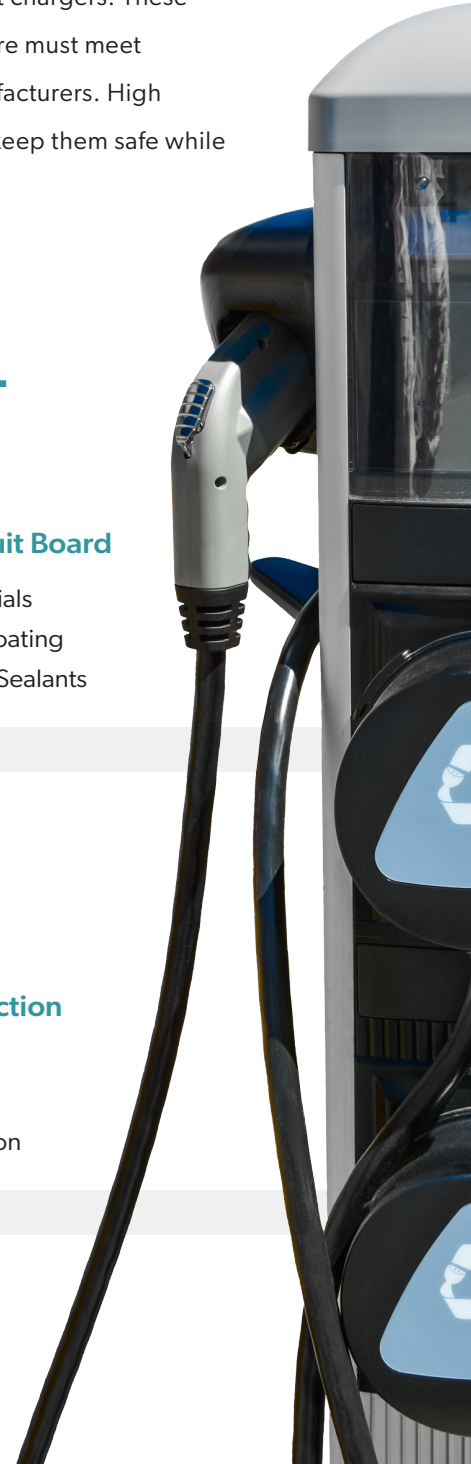
### Thermal Barriers

- Rigid & Flexible Insulation
- EMI/RFI Shields
- Structural Framing



### Power Protection

- Breakers
- Fuses
- Rigid Insulation





# AUTOMOTIVE LABELS

## High Performance Automotive Labels for Interior and Exterior Applications

EIS utilizes a variety of specialty adhesives and facestock materials to stand up to the harshest conditions in under-the-hood and other exterior applications on today's vehicles. The ability to bond to low surface energy plastic and powder coated metal surfaces provided by our label's high strength acrylic adhesives mean that the automotive OEM and tier manufacturer can be confident that their labels will stay in place and readable for many years of service. EIS has label products that can resist the harsh chemicals, oils, moisture exposure and high temperatures that are present in under the hood applications as well.



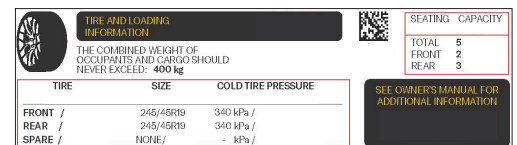
Certification Label



ESD Label



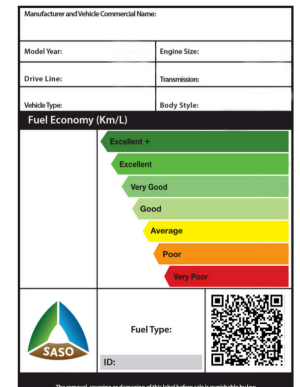
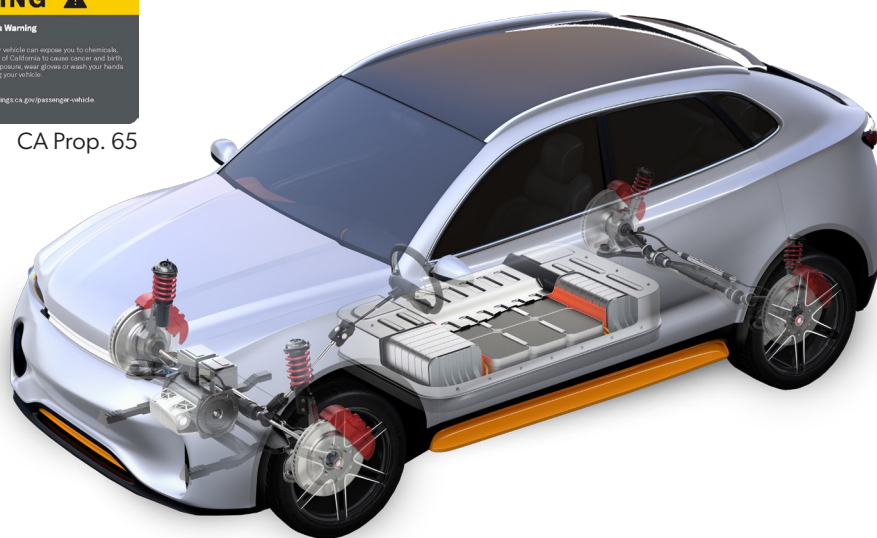
High Voltage Label



Multi Language Tire Labels with QR



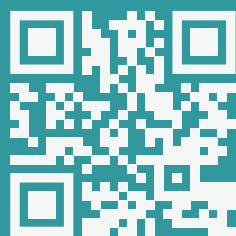
CA Prop. 65



EV Performance Label

## LABEL EXAMPLES

- Air Conditioner Warning Labels
- Under Hood Barcode Labels
- Sun Visor Warning Labels
- Engine Components Labels
- VIN Door & Dash Labels
- Airbag Warning Labels
- Auto Information and VIN Labels
- Radiator Labels
- Tire Pressure and Information Labels
- EV Performance Labels
- EV Identifier Labels (Window Decals)
- CA Prop 65 Labels
- Multi Country/Language Labels
- Printable or Blank Certification Labels
- QR Codes
- Destruct Upon Removal Labels
- No Tow Labels
- Emergency Door Release Tags
- 12v & Emergency Rescue Labels
- VECI Labels
- Battery Enclosure Labels
- Battery Danger Labels
- Battery Info Labels
- Battery Warning Labels
- Motor Name Plate Labels
- Inverter Nameplate Label
- Vehicle Emission Control Label



**EIS**  
[eis-inc.com](https://eis-inc.com)