

# E-Mobility and EV Battery Tech Solutions

Metal Stamping and Comprehensive Product Development, Manufacturing and Assembly

Wiegel supports multi-millionpiece, high-volume manufacturing of precision metal stamped components, product assemblies and custom-developed battery products.

Custom-developed solutions for complex and unique product specifications

Advanced manufacturing technologies

Sophisticated quality controls

Operating on 207,000SF of production space



HIGH CURRENT BATTERY BUSBARS



BATTERY PACKS AND BATTERY MODULE COMPONENTS

Series Terminal busbars Current collector assemblies



**BATTERY CELL COMPONENTS** 

Cathode collectors Anode collectors Battery cell can lids



#### BATTERY COMPONENT PRODUCTION AND ASSEMBLY MANUFACTURING SERVICES

# STAMPING AND FORMING OF PARTS

- Progressive-die heavy and high-speed stamping systems
- Transfer stamping systems

## PLATING AND SURFACE COATING OF PARTS

#### ROBOTIC JOINING AND ASSEMBLY OF PARTS

- Welding systems
- Bonding systems
- Glue stations
- UV curing systems
- Rollout stations

# AUTOMATED MATERIAL STACKING AND LAYERING PROCESS

# CAMERA DETECTION AND INSPECTION OF PARTS

- In-process and post-process camera vision systems (2-D and 3-D camera detection and inspection)
- Safe lauch procedures

## AUTOMATED CLEANING OF PARTS

AUTOMATED PACKAGING AND LASER MARKING OF PARTS



POWER PACK TERMINALS AND CONTACT INSERTS



SHIELDS AND TERMINALS FOR ELECTRIC CONNECTOR PLUGS



DIELECTRIC INSULATED

Dielectric insulation materials:

**BUSBARS AND COMPONENTS** 

- Epoxy powder coating
- Nylon powder coating
- PVC powder coating
- Polyethylene powder coating
- Polyurethane powder coating
- Polyester powder coating
- Vinyl powder coating
- Vinyl plastisol liquid coating
- Heat shrink tubing



INSERT MOLDED AND OVERMOLDED COMPONENTS



PRECIOUS PLATED COMPONENTS

Pre- and post-plating finishes:

- Copper
- Nickel
- Tin-lead
- Tin
- Palladium
- Palladium-nickel
- Silver
- Gold
- Zinc



BATTERY EYELET TERMINAL AND WIRE CABLE CONNECTORS



TERMINALS, TABS AND CONNECTOR CONTACTS

# Our Capabilities

- Progressive die heavy stamping
- · Progressive die high-speed stamping
- Transfer stamping
- Battery component manufacturing
- · Custom product development and manufacturing
- Robotic automated assembly services
- Waterjet services
- Pre-production tool and die design and manufacturing
- Pre-production rapid prototyping

#### Parts We Produce

Anode collectors

**Asseblies** 

Cathode collectors

**Current collectors** 

**Battery components** 

**Busbars** 

**Brackets** 

**Lead frames** 

Shields

Terminals, contacts and connectors

Wire cable connectors

#### **Industries We Serve**

**Aerospace** 

**Appliance** 

**Automotive** 

**Electric vehicles** 

Electrical

**Electronics** 

Insert and injection molding

Lighting

Medical

Military and defense

Solar

Structural building components

**Telecom** 



die metal stamper, product assembler and battery component manufacturer supplying Original Equipment Manufacturers (OEM) and tier manufacturers across the globe with custom product solutions for over 80 years.

We are a team of over 230 employees, operating on 207,000-sq-ft of manufacturing space in 4 locations in Illinois. Wiegel supports multi-million-piece, high-volume manufacturing of precision metal stamped components, product assemblies and custom-developed battery products.

We're known for investing in advanced manufacturing technology and implementing sophisticated quality controls to meet new and evolving industry product developments.



