



# Electronic and Smart Technology Solutions

Metal Stamping and Comprehensive Product Development, Manufacturing and Assembly

## Electronic Manufacturing and Assembly Services

Wiegel produces a range of precision electrical components from a variety of materials and various sizes. From computer components and household appliances to smart technology in vehicles and delicate components in consumer intelligent devices, we have the experience and advanced manufacturing technology to manufacture intricate parts and complete product assemblies for a range of electronic subsets.

Electronic stamping components are primarily manufactured on high-speed progressive die stamping machinery, in which we integrate the best in-line production technologies for quality assurance. We incorporate our very own custom-developed vision system and in-die camera sensor technology to monitor and carefully inspect running parts in production even at high speeds of up to 1500 SPM (stokes per minute).

Custom-developed solutions for complex and unique product specifications

Advanced manufacturing technologies

Sophisticated quality controls

Operating on 207,000SF of production space



LIGHTING COMPONENTS



CLIPS, FASTENERS AND SENSOR/SWITCH COMPONENTS



MINIATURE STAMPING COMPONENTS



TERMINALS, TABS AND CONNECTOR CONTACTS



INSERT MOLDED AND OVERMOLDED COMPONENTS



SHIELDS AND TERMINALS FOR ELECTRIC CONNECTOR PLUGS

Wiegel can produce loose piece and reel-to-reel parts at incredibly tight tolerances and satisfy the most complex designs and specific dimensions. We are highly experienced in automation and robotics to supply manufactured stampings joined into multi-component final assemblies, along with unique pre- and post- product applications and processes required by our customers.



**REEL-TO-REEL TERMINALS AND ELECTRICAL CONNECTORS** 



#### **PRECIOUS PLATED COMPONENTS**

Pre- and post-plating finishes:

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



#### **BUSBARS AND COMPONENTS**

Dielectric insulation materials:

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



WIRING AND CABLING **COMPONENTS** 



**BATTERY EYELET TERMINAL AND WIRE CABLE CONNECTORS** 

### Our Capabilities

- Progressive die high-speed and heavy stamping
- Transfer stamping
- Battery component manufacturing
- Custom product development and manufacturing
- Robotic automated assembly services (welding, bonding, gluing and UV curing systems)
- Automated cleaning, packaging and laser marking of parts
- 2-D and 3-D camera detection and inspection of parts
- Waterjet services
- · Pre-production tool and die design and manufacturing
- · Pre-production rapid prototyping

#### **Parts We Produce**

Anode collectors

**Assemblies** 

**Battery components** 

**Busbars** 

**Brackets** 

Cathode collectors

Clips/fasteners

**Current collectors** 

**Lead frames** 

Lighting components

Miniature stamping components

Sensor and switch components

Shields/housings

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

Solai

Structural building components

Telecom



Wiegel is a leading North American-based progressive 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 product modules and systems.

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



