



# Complex needs.

# Simple solutions.



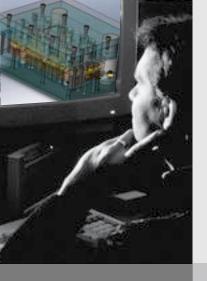
Over nearly half a century, Kenmode has built a reputation for producing complex high-precision, custom metal stampings and assemblies with the highest efficiency and quality. The Kenmode engineering and design team works to simplify and streamline the process for our customers to save both time and expense.

Kenmode facilities employ the most advanced equipment for design, production, inspection, packaging and shipping – to ensure precise conformance to customer requirements, anywhere in the world.

Our ability to handle a wide range of materials and component parts – from microelectronic stampings with precious metals to large automotive parts made of steel – allows our customers to meet a variety of needs with just one supplier. We even make the customer interface easier, with a single point of contact for the entire production process.

We not only make the complex simple. We make it right.

SIMPLE



### **Meeting and exceeding industry specifications**

Kenmode specializes in the high-precision, tight-tolerance custom stampings and assemblies required by the automotive, consumer goods, electronics, insert molding, and medical device industries. We understand the industry standards and production demands unique to each field, and we earn high-level certifications to ensure the highest quality.

Kenmode has a long track record of success in producing parts to the most exacting industry standards—whether it's a large complex part for a stylized windshield wiper system or a micro-miniature stamping for an insert molding, medical or electronics application. Often, our engineering and tool and die experts are able to improve the design of the part to significantly exceed initial customer specifications.

We are proud that our customers represent some of the biggest brand names in their industries, in the U.S. and around the globe.



## Streamlining the design

The experienced designers and engineers at Kenmode are adept at streamlining part design and eliminating unnecessary costs. From the very beginning, when a customer submits a request for proposal, our engineering staff looks for ways to reduce time-to-market and obtain the highest quality level for the lowest production cost. We use 3-D CAD to design for manufacturability and repeatability, and build our own tools to the most exacting standards, so that you can count on the same results on every production run.

The depth of our engineering and design team allows us to produce fully functional prototypes quickly to provide accurate evaluation and validation of the new part and the production process and tooling. We invest time in the planning process to prevent mistakes, encompassing every phase of production, from design review to mistake-proofing the tools to ensuring the right sequence of operations to packaging requirements. Making sure the process runs smoothly from the start helps to avoid costly tooling and production problems and delays down the road and results in seamless on-time launches of new products.



## Advancing the technology

At Kenmode, we continually monitor product quality and performance using Advanced Quality Planning tools. By combining state-of-the-art equipment with mistake-proof processes at every stage of production, Kenmode can meet your quality specifications and on-time delivery demands. We employ the latest technology available in the industry throughout our design and production process, including robotics, in-die sensors and video inspection systems. We are also continually upgrading our professional resources, bringing more skilled people on board and training our staff to meet new industry needs. In fact, Kenmode has one of the largest technology departments in the business, with more than 60 engineers and tool and die makers on staff, each with industry-specific experience.

We can handle everything from a micro-miniature part made with very thin material to the strongest steel components together with custom packaging requirements. And we are constantly upgrading and expanding our equipment assets to provide even greater automation and accuracy.



## **Delivering award-winning service**

At Kenmode, we have streamlined our customer service to run as smoothly as our production processes. Each new project is assigned to a project manager, who serves as a single point of contact for the customer from initial tool build to production. On the business side, we assign one customer service representative to handle all the details from the first production run through billing to ongoing production.

The entire Kenmode team is ready to respond to your needs and put your mind at ease throughout the entire production process. We promise to keep you informed with detailed reporting. As a result of our commitment to outstanding customer service, Kenmode has received awards for excellence from our customers.

## Making the complex simple for you

Whatever your specific needs, Kenmode stands ready to assist. We provide custom solutions from the initial design to the final destination, with attention to detail at every step along the way. With some 50 years of experience behind us, you can count on Kenmode to deliver the best design for your application along with the most cost-efficient, streamlined production available.



### **Kenmode Capabilities**

#### **Tool & Die Equipment**

- · Designed in 3-D
- Complete tool build operation from electronic files
- · High-tech machining centers
- 3D CNC mill
- Wire EDM machines with robotics for reduced time to market
- Multiple EDM machines to reduce lead-time

#### **Materials**

- Stock thickness ranges from .0015 to .125+
- Stock width ranges from 1/4" up to 23-1/2"
- · Ferrous and non-ferrous
- · Stainless steel
- · Aluminum clad copper
- Aluminum
- · Titanium and noble metals
- Preplated
- · Postplated
- Anodized
- Mylar
- Wire

#### **Press Operations**

- 1,800 SPM capabilities from 22 to 200 ton capacity
- Bruderer and Minster
- Electronic servo feeds to reduce set-up time and prevent misfeeds
- Bed sizes up to 84" in length

#### **Manufacturing Services**

- Trimming, tapping and threaded inserts
- In-die assembly
- Custom packaging
- · Hand stacking
- · Pre- and post-plating
- Precious, non-precious and spot plating
- Assembly
- · Heat-treating
- · Cleaning and deburring
- Secondary tooling to form and singulate at our location or yours
- Prototypes
- Parts supplied on a bandolier

#### **Quality Control**

- Statistical Process Control (SPC) data ensures optimum production performance
- Advanced Quality Planning (AQP) tools
- FMEAs per AIAG
- Control plans

#### **Sensor Technology**

- Die detection systems ensure longevity of die and prevent costly repairs
- Provides consistent high quality production parts

#### Vision System

- In-line vision inspection equipment measures critical areas of part to eliminate non-conformances and ensure quality
- Non-contact video measurement system (Video CMM)

#### **Packaging Options**

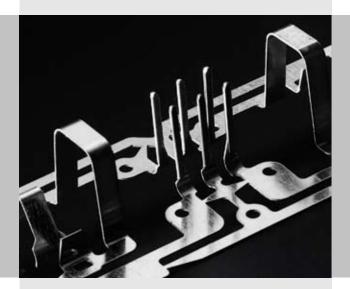
#### Parts can be supplied in several options:

- · Reel-to-reel
- Loose piece
- Custom packaging
- Assembled components

We welcome your inquiry.







820 W. Algonquin Road Algonquin, IL 60102 (847) 658-5041 www.kenmode.com