

Product Description: This contact is used for reading light switches in an automotive application.



The product shown here was produced utilizing our precision progressive die stamping capabilities. Designed as a contact for an automotive lighting application, this component required precision as well as high speed.

Because of our highly reputable stamping capabilities as well as our in-house Die maintenance department, a customer asked if we would take in their existing tooling. We brought the die in-house and groomed it to produce first article inspection samples which were provided to the customer for approval. Utilizing our 30 ton Bruderer punch press, we now produce 2.3 million of these parts annually. Our Customer requires the parts to be placed on a Reel-to-Reel fashion in order to support their assembly process.

Because the contact is composed of Pre-Plated .008" thick CA521 phosphor bronze, our customer was able to save money. Instead of the traditional post stamping process, we were able to have a master coil of .008 CA521 Phosphor Bronze plated to our customers specifications and then re-slit to our specified tooling material width for stamping. This process significantly cut the plating cost. Quality control is provided through a vision system which allows us to maintain a  $\pm .0005$ " dimension with zero defect to the customer. We also provide a race track system for other critical dimensions.

To aid the customer's inventory needs we provide a Just-in-Time (JIT) delivery program. To learn more about this precision die stamping project, please see table.

**Precision Progressive Die Stamping Capabilities Applied/Processes** 

Primary:
Progressive Die Stamping
Secondary:
Special Packaging
• Reel-to-Reel

**Special Process** 

• Automatic Packaging for Accurate Count

and Protection of Parts

**Equipment Used to Manufacture Part** 30 Ton Bruderer

Overall Part Dimensions .303" Diameter (Excluding Carrier)

**Tightest Tolerances** ±.0005"

Material Used .008" Thick Pre-Plated CA521 Phosphor

**Bronze** 

In process testing/inspection performed Vision System

Production Inspection Plan

**Optical Comparator** 

First Article Inspection (FAI) Race Track for Critical Dimensions

Batch Sample Retention Sensors for Die Protection Raw Material Certification

Certificate of Conformance (COC)

**Industry for Use** Automotive

Volume 2,300,000 Annually Delivery/Turnaround Time Just In Time (JIT)

**Delivery Location** USA

Standards Met/Directives Met ISO 9001 REACH

QMI-SAI Global ASTM ANAB MIL-SPEC RoHS Dodd-Frank

DFARS (Conflict Materials Act)

**Product Name** Flex Finger Contact

File Format SolidWorks

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