



## PRODUCT INFORMATION

# Consistent, Affordable, and Fast Production-Intent Stamped Prototypes from NUCAP



NUCAP Industries is pleased to offer production-intent STAMPED PROTOTYPE parts to the Tier 1 Brake Systems and Friction supply base. While stamped prototypes are not new to the industry, long tooling lead times have historically forced customers to purchase their prototype plates from local machine shops. While this has been effective for small orders, it is neither time nor cost effective for larger prototype builds.

#### Advance Development with Production Tooling

Utilizing in-house engineering support, NUCAP can work with the systems and friction companies during the earliest stages of design to help develop new concepts for disc brake applications. And with a complete tool and die facility, NUCAP is able to provide sample parts for early engineering evaluation, thus proving out both the manufacturing feasibility and performance characteristics of new designs.

#### Higher Volumes, Shorter Lead Times

NUCAP's goal for new stamped prototypes is to deliver parts within 3 to 4 weeks of receipt of order. Once the stamping die has been built, lead times can often be reduced to days instead of weeks.... Regardless if the customer needs 500 pcs or 5,000 pcs.

By using a process designed for mass production, OE tolerances are held consistently for up to 15,000 prototype parts.

#### "Apples to Apples"

The prototype process is critical to both the friction and systems suppliers, sometimes making or breaking their chance to win future business. During development, it is always preferred that the individual components be representative of production parts. As the "backbone" of the finished brake pad, it is critical that the prototype backing plate be as close to a production part as possible and that it be consistent from supplier to supplier.

- Stresses in the Steel - While a machined prototype part may meet all of the dimensional requirements, the stresses and strains that exist in a stamped backing plate are missing. Instead, the plate may exhibit internal stresses as a result of several machining operations, thus providing a different net effect on the final friction pad.
- Friction Evaluation - When friction pads are competitively evaluated, the steel backing plate should be from a common, consistent source.

#### For Further Information contact;

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