



Stamped/Coined out of material 2x thickness of new part

OLD PART

Stamped with offset out of thinner gauge material



NEW PART

LOCK HARDWARE - CAM

APD STORY NINE

The original Cam was produced on a 500 ton press at a traditional metal stamping company. The original part was the result of coining the cam feature from a starting thickness of .180" (4.57 mm) material, to a thickness of .090" (2.29 mm). With such a thick material, the previous supplier had difficulties maintaining tools due to heavy wear. Late deliveries were commonplace due to frequent downtime for tool repair and press issues. With our new design, we were able to extrude the center hub from a base metal thickness of .090" (2.29 mm) to a thickness of .180" (4.57 mm). This greatly reduced the amount of tonnage needed to produce the component, while lowering material costs. Deliveries are now 100% on-time and our customer is enjoying a 50% cost reduction.

COST REDUCTION & THROUGHPUT IMPROVEMENT

Trans-Matic is a highly developed metal stampings company that uses deep draw stamping methods to create world-class metal stampings. At Trans-Matic we utilize our capabilities to produce deep draw metal stampings to serve the automotive industry in braking, oxygen sensor, fuel delivery, air bag, bayonet socket, and sensor markets. Our non-automotive deep draw metal stampings capabilities serve the lock hardware, compressor, appliance, fire prevention, pharmaceutical, HVAC, and plumbing markets.

Value Engineering is ingrained into Trans-Matic's ongoing quest to help our customers reduce cost, improve quality, and increase performance. In the late 90's, we realized that many of the components we produce were being used in long-standing product lines with only incremental change. It was at that point where we began to focus on our customers' end product to ensure that the designs were streamlined for cost efficiency, with improved performance. In 1999, we instituted a separate VA-VE department to focus specifically on our customers' products. Since that time, we have become very product development savvy by engaging our technical team to dissect the functional elements of those products. The result, and continuing objective, is the creation of solutions that optimize the design intent of the product and the development of new products.

Reverse Engineering

Trans-Matic APD activities have focused on the redesign of costly screw machine parts into lower cost deep drawn stampings. Trans-Matic VA/VE activities have redesigned multiple piece assemblies into complex, one-piece deep drawn stampings. Our reverse engineering efforts have reduced or eliminated components within an assembly many times creating a more reliable metal structure.

Trans-Matic produces automotive deep drawn metal stampings:

- Using cold rolled steels (1006 to 1050), pre-coated steels, stainless steels (300 & 400 series), Inconel, brass, bronze, copper, and aluminum (1100, 3003, & 5052).
- With overall length up to seven inches.
- With thickness ranging from .005" (0.127mm) to .150" (3.81mm).
- With in-press capability to produce stampings with both coarse and fine threading, wall ironing, multiple side piercing, knurling, embossing, rectangular shapes, coining and marking, extruding and many other required features.
- To serve automotive markets including braking, oxygen sensor, fuel delivery, air bag, bayonet socket, and sensor markets.
- To serve non-automotive markets such as lock hardware, compressor, appliance, fire prevention, pharmaceutical, HVAC, and plumbing.
- In compliance with quality standards ISO/TS 16949
- In compliance with environmental standards TS 14001

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Additional PDF Examples and Information on Lock Hardware Stampings:

- | Lock Hardware - Dead Bolt Lock Bar | Lock Hardware - Drive-In Casing | Lock Hardware - Threaded Hub |
- | Lock Hardware - Spring Cage Assembly | Lock Hardware - Spring Return Mechanism |
- | Lock Hardware - Knob Catch |

More information on Lock Hardware Stampings | Cam