



# Case Study

MANUFACTURING SOLUTIONS SINCE 1911 – NATIONAL BRONZE MFG. CO.

## Tooling Manufacturer Cuts Costs and Cycle Time with Custom Cast Aluminum Bronze

**Problem:** A leading automotive tooling manufacturer was looking for ways to decrease cycle time and lower material costs.



**Background:** The tooling manufacturer utilized C95900 Aluminum Bronze bar stock to manufacture a key component in their specialized tooling. The component was machined out of C959 Aluminum Bronze flat stock. Due to the net shape of the finished component, this required 2 separate

processes on 2 different machines. These processes were used because of the limited size options that are industry standards for C95900 Aluminum Bronze bar stock.

C95900 Aluminum Bronze is used prominently in die applications due to its wear and anti-galling properties. In these applications the finished products are generally flat in shape. Due to this fact C959 Aluminum Bronze is commonly cast in flat stock. The product made by the tooling manufacturer was round. In order to machine a round finished product from flat bar stock, multiple processes on different machines were required.

**Solution:** After an onsite visit from National Bronze Mfg. Sales Engineers, it was determined that a bar stock with a round shape and small diameter would be ideal for this product. Unfortunately this was not a standard

size and would require larger quantities to be economical. The tooling manufacturer's requirements for this product were smaller quantities spread throughout the year.

Sales Engineers at National Bronze Mfg. analyzed the tooling manufacturer's annual usage of the flat stock. Based on their findings National Bronze Mfg. set up a customized inventory program specific for this customer. The round small diameter bar stock was cast in volumes that would be used over a year's time.



Utilizing National Bronze Mfg. large warehouse, this blanket order was stocked and released in smaller quantities throughout the year. The tooling manufacturer is only invoiced for the releases as there are shipped. Not for the entire blanket order up front.



**Result:** National Bronze Mfg. was able to provide the tooling manufacturer a C95900 Aluminum Bronze bar stock that is much closer to their finished component size at an economical price. The machining processes to manufacture the component were reduced from 2 processes to 1. The consolidation of the processes not only cut the costs for the manufacturer, but also reduced their lead times for their customers. Using National Bronze Mfg.'s Inventory Program gave the manufacturer lower material costs without the need to tie up cash or use up their limited storage space.

The tooling manufacturer was able to cut their costs and machining time as well as allowed them to service their customer better. The customized solution from National Bronze Mfg. made the tooling manufacturer a more efficient and competitive company.

Find out how customized programs from National Bronze Mfg. can help improve your company by contacting us today.

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