



Case Study:

BIOPSY JAWS

Introduction

Biopsy jaws are the very small parts that provide the biting action necessary to capture tissue for evaluation. These precision parts were originally made from titanium, and now stainless steel, and are fabricated using progressive stamping dies. The cup shaped jaws are cut then formed into position that requires a high maintenance die components to ensure proper sharpness and the right tooth mismatch. This process has been perfect over decades of use and relies on expensive and masterful die makers to run and operate, skills that even we at Micro fight to keep alive.



Michael Tucci,
CEO and President

Micro in Action

Because it's such a critical component, changing manufacturers is something medical businesses are often reserved to do, and with good reason. Micro was approached by such a company with the challenge – how could we improve it to the point where it would make sense to entertain a new supplier? Our response was simple. Why not make it out of plastic? It was a simple approach, but our core values prioritize simplicity as genius. Aside from the 50% cost savings over millions of components used each year, the peculiarities of the process and inherent "art" that accompanies the science of metal stamping could be replaced with a simple and more predictable molding process that doesn't require the same journey toolmakers to support.

10 days after the idea we had a working sample made from ultramid (a high-grade plastic that is very strong and very difficult to work with) in front of the client for review.

The outcome

The sample we created achieved never-before-seen symmetry, and perfect alignment. While the solution is still being evaluated and geometry changes will need to be addressed to accommodate the change in material, the design holds promise in both functional improvement and cost reduction.



“

10 days after the idea we had a working sample made from ultramid (a high-grade plastic that is very strong and very difficult to work with) in front of the client for review.



Contact us today

Every innovated solution is backed by the uncompromising pursuit of excellence at every phase of our manufacturing process.

Call us Toll-Free: (888) 386-4270
Phone: (954) 973-6166
Fax: (954) 973-6339
Email: info@mic-tec.com

Follow us online

