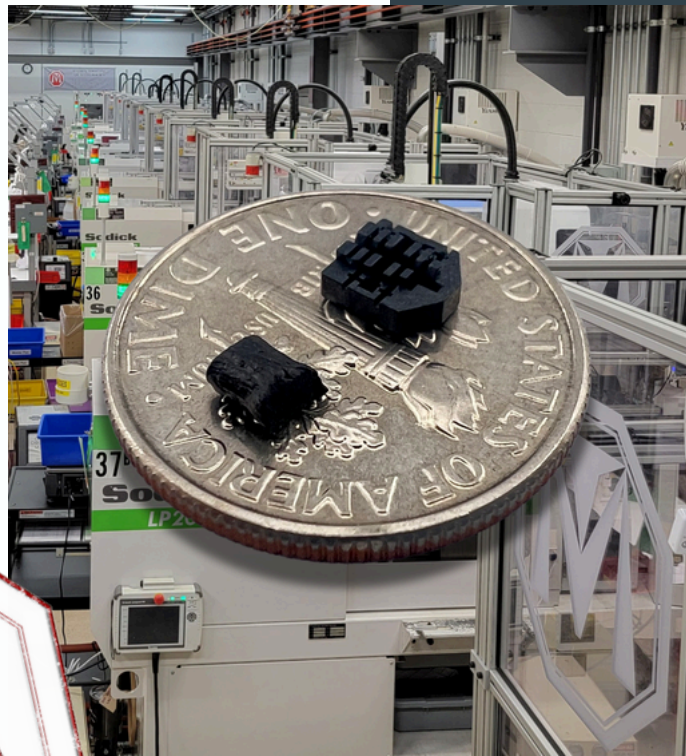




THE RISE OF MINIATURIZATION

in medical devices, electronics, robotics, automotive, appliances, & beyond.

SOLVING YOUR TOUGHEST TOOLING AND MOLDING CHALLENGES



Part Weight: 0.024g = Less than 2 Pellets



CUSTOMER PROBLEM

- Industry Shift: Need for smaller, tight-tolerance, micro molded components.
- Customer Request: A highly-intricate 16-cavity micro injection mold with an aggressive cycle time target.
- Challenge: Concerns that traditional methods and equipment may not achieve the quality and repeatability needed.

Part Size: 4.18mm x 4.61mm Resin: 30% GF LCP

MATRIX APPROACH

- Innovation: We proposed an 8-cavity mold with a creative layout to improve throughput and further reduce waste.
- Benefits: We offered a tooling solution that was simpler but more repeatable at a reduced cost.
- Outcome: We delivered on all stretch goals, removing any remaining customer doubt while earning their trust.

Innovative Approach

Reduced number of cavities by **50%** while improving throughput with a simpler mold, resulting in a significantly lower capital investment and increased ROI.

Reduced Material Waste

Our tool design saved **\$109,500** annually in excess material waste compared to the customer's supplied design, resulting in immediate and sustained direct cost savings.

Reduced Cycle Time

Through innovative engineering, we achieved a **> 50%** reduction in our customer's target cycle time.

Explore the complete details and results of the project in our in-depth write-up [here](#).

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