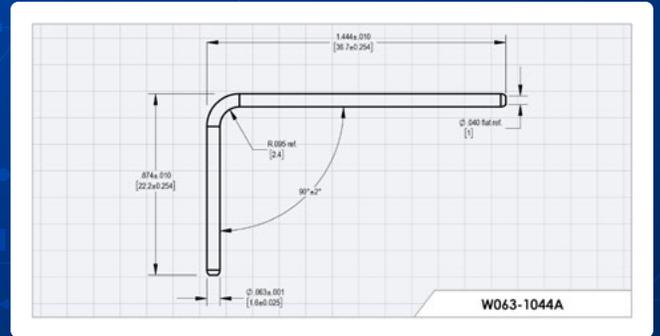


Custom Pin For Insert Molding

Solving a Manufacturing Challenge with Precision Engineering



CUSTOMER

U.S. based custom injection molder

END CLIENT

Global leader in motion and control technologies



CHALLENGE

A well-known U.S. based plastic molder needed a right angle pin to be insert molded with a leg length longer than any commercially available option. **No off-the-shelf solution existed**, and the standard bending process was not viable, as the long pin leg would hit the machine bed.



SOLUTION

Bead Electronics created a custom bend method using a different machine and punch setup to accommodate the length and 90° angle of the pin. Through careful testing, engineers discovered the brass pin required a 2–3° over-bend to achieve a true 90°. Because the die was so large it filled the entire bed, **the engineering had to be flawless to ensure perfect alignment** of breaking and bending points.



OUTCOME

Bead Electronics successfully produced **5,000 custom right-angle pins**, turning an “impossible” design into a functional component. Through innovation in tooling, bending techniques, and precision measurement, Bead delivered where standard solutions fell short, demonstrating our strength as a strategic engineering partner in custom pin manufacturing.

Interested in Custom Pins for Insert Molding?

Talk to our engineering team today.

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