

Case Study: Reducing Costs with a Progressive Stamping Die



Customer

Motorcycle Manufacturer

Part

Fuel Filler Cup

Manufacturing Issue

Production costs were increasing when a splash guard and SIX drainage slots were added to the part's design to meet safety requirements.

Customer's Goals

Lower production costs for the fuel filler by utilizing a more efficient production process.

Ensure the new features maintain the overall functionality of the fuel filler cup.

Redesign Process

It was determined that utilizing a progressive stamping die to produce this part would cost less per part versus the customer's current hand-fed manufacturing process.

Ultra designed and built a new progressive die with multiple stations that produced the overall deep draw, threads and drainage slots of the fuel filler cup. In fact, it required two separate stations to accurately form the threads into the cup. The six drainage slots were pierced from the inside to eliminate burrs and meet the customer's cosmetic standards. With our **800-ton press and its 168" bed,** we were able to design this die to perform a majority of the operations during stamping. This **reduced the time and money** spent on secondary operations.

The final operation was the installation of the splash guard that was critical for safety purposes. Our smaller, hydraulic press accurately placed and secured the splash guard using less labor.



Customer Outcome

Ultra's customized manufacturing process reduced costs and even increased production rates.

The fuel filler cup matched the customer's safety requirements.

The customer trusts our expertise and services to metal stamp two different sizes of this design for their assembly needs.

