



Precision Stamping Manufacturer Cuts Tooling Costs by 67% with HyperSol™ 888NXT



A precision stamping manufacturer for the automotive, aerospace, and defense industries designs and builds progressive dies in their facility in California. They use these dies to produce high-quality, customized stampings for clients.

THE CHALLENGE

A longtime Master Fluid Solutions™ customer, this manufacturer works with Inconel® 718, a nickel-based alloy used to produce parts and components for jet engines and high-speed airframe components. These parts, such as buckets, wheels, and spacers were previously machined using TRIM® E906, a premium, high-lubricity low-foaming cutting fluid known for extending tool life on challenging materials.

While using E906 at high concentrations and three-edged grooving inserts, the company achieved a tool life of 50 parts per edge. At this rate, tool costs equated to \$0.33 per part. However, the customer sought a way to increase throughput, reduce fluid consumption, and further minimize the cost per part.

THE RESULTS

The advanced performance of HyperSol 888NXT allowed the customer to cut their coolant concentration by more than half, from approximately **35% to 15%**. In a three-day period, the company tripled tool life from 50 parts per edge to 150 parts per edge — simply by upgrading the cutting fluid. This translated to a reduced tool cost to \$0.11 per part, a **67%** decrease.

Previously, the customer spent \$6,666 on inserts to produce 20,000 parts. Using tool life-extending HyperSol 888NXT, the customer reduced costs associated with the edge inserts down to \$2,222, saving the end-user more than **\$4,000**.

Now, the precision stamping manufacturer has ordered HyperSol 888NXT to use on other machines in their shop.

THE SOLUTION

Master Fluid Solutions provided the manufacturer with a trial of TRIM HyperSol **888NXT**, a patented, environmentally friendly, low-foam, low-odor, neo-synthetic coolant, which provides exceptional performance on Inconel® and other difficult materials. It excels with its superior lubricity, which is necessary for the most challenging applications and customers looking to maximize productivity.

THE NUMBERS

- Reduced coolant concentration from 35% to **15%**
- Tripled tool life from 50 parts per tool edge to **150**
- Reduced tool cost per part by one third from \$0.33 to **\$0.11**, a **67%** decrease