



Aerospace

Case Study: High-Precision, Tier 1 Aerospace Parts Manufacturer Increases Tool Life 234% with Master Fluid Solutions

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A European manufacturer specializing in high-precision parts for the aerospace industry is a top-ranking supplier to major companies, including Airbus. It operates eight different sites across the continent and is dedicated to providing reliable, on-schedule production and innovative parts, as well as meeting the comprehensive requirements of its customers.

THE CHALLENGE

Like all metalworking shops, aerospace part manufacturers are constantly striving to produce quality parts in an increasingly competitive environment. Lowering production costs through reduced usage of consumable items, such as cutting tools or increasing productivity through reduced part production cycle time, are well known methods.

THE SOLUTION

Master Fluid Solutions® recommended that the aerospace parts manufacturer run a trial of HyperSol® 888NXT in parallel with their incumbent metalworking fluid product. HyperSol 888NXT is an innovative, water-soluble metalworking fluid that Master Fluid Solutions specifically designed for the aerospace industry, particularly for working with harder alloys such as titanium, Inconel, and steel alloys. HyperSol 888XT was installed into two CNC lathes machining 35NCD16 steel alloy.

THE RESULTS

For four months, the aerospace parts manufacturer used HyperSol 888NXT for its steel alloy machining and turning applications in two machines. It proved to be a huge success; tool life increased **234%**, while running at a higher speed and much lower top up concentration. HyperSol 888NXT also produced no foam or odor, an added bonus for employees.

Based on the company using HyperSol 888NXT in just these two machines for a one-year period, it would be able to decrease spending on metalworking fluid by **7.6%**. Due to increased tool life and productivity gains, it would save an additional **20.2%** or **\$69,900** in costs.

For the high-precision aerospace parts manufacturer, using HyperSol 888NXT proved to be the solution it needed to increase tool life.

THE NUMBERS

- 234% increase in tool life
- 7.6% reduction in fluid spending over one year
- 20.2% or \$69,900 yearly savings in overall costs for just two machines

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