

CASE STUDY FOR IMMEDIATE RELEASE

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ATK – CCI Speer **Global Metalworking Fluid Solutions** **With ITW Rustlick and Accu-Lube** **Increase Productivity and Reduce Costs**

Glenview, IL – June 15, 2004 - ATK-CCI Speer, a division of ATK, Alliant Technical Systems headquartered in Edina, Minnesota, is a major U.S. aerospace and defense contractor with sales of approximately \$2.2 billion. ATK-CCI Speer



Division, located in Lewiston, Idaho, manufactures ammunition and related products.

Success with Rustlick Ultracut 370R, biostable Semi-Synthetic Fluid

Choosing the proper fluid has always been a primary focus at ATK-CCI Speer. There are so many issues related to it, not only direct purchasing cost but more importantly maintenance cost and workers health



issues. The particular shop that makes the tooling, to form the cups and bullets, shifted its fluid to Rustlick

Ultracut 370R in May 2003. Rustlick Ultracut 370R, a bio-stable semi-synthetic fluid, is used for various applications in the plant. ATK-CCI Speer machines all types of metals, mainly brass aluminum and tool steels. The versatility of Rustlick Ultracut 370R allows it to be used for any type of materials. Rustlick Ultracut 370R offers very high lubricity and rust protection. It is



a bio-stable heavy-duty semi-synthetic coolant formulated to provide optimum performance for a wide range of ferrous and non-

ferrous metals.

Substantial Cost Savings

The machinist running ATK-CCI Speer's Hardinge CNC Lathe and GN-600 Super Slant CNC Lathe, explains "We were previously using a competitor's product. Within 30 to 60 days the old fluid in the sump would sour especially in the summer. Tramp oil skimmers were not helping. The tank had to be cleaned and new fluid added every 4-6 weeks, even with the use of wheel skimmers. Each machine has a bar-

feeder which tends to allow oil into the machine's coolant area. Rustlick Ultracut 370R did not provide cost savings upfront but savings got substantial as soon as we started using the fluid. Using a biostable semi-synthetic fluid is the key to the success. If outside moisture goes up and down in the air, water soluble coolant will oxidize, while the bio-stable product will maintain the proper pH."

Better Finish



Vaughn Robertson from Melbran Distributing, Inc., ATK-CCI Speer's supplier, adds "Another benefit of using Rustlick Ultracut 370R is

an improvement on ATK-CCI Speer's part finishes. ATK-CCI Speer is required to get an 8 finish and they now no longer need to use an additive or spray fluid to get a better finish. This allows them to better control the coolant."

Better Surface Speed

ATK-CCI Speer's machinist explains; "The finish speed has improved substantially. Our machines are older models and our parts are small for the most part. This complicates getting good finishes on them, mainly on tool steel. Rustlick Ultracut 370R allowed us to increase the feed and decrease the spindle to floor time by 50 to 60 percent.

Our coolant dilution ratio, with the previous coolants had to be 10:1 or heavier. With Rustlick Ultracut 370R our ratio has stayed at 20:1; with ample rust protection and minimal clean up on the parts prior to the next process. Make-up of the coolant is also reduced to a 40:1 ratio when adding, due to evaporation in warmer weather. In

the past ATK-CCI SPEER used 30 gallons during a six months period and performed a complete change of fluid every 30 to 60 days. Now they only use 6 gallons of Rustlick Ultracut 370R for make-up and



only change the coolant every six months. ATK-CCI Speer's has a total of about 15 machines and is now looking at switching them all

to Rustlick Ultracut 370R."

For more efficient coolant management, ATK-CCI Speer continues to use Rustlick Wheel Skimmers to control tramp oils. It is set on a timer for easier maintenance. This process coupled with the use of Rustlick Ultracut 370R ensures the elimination of bactericide and fungicide in the coolant tanks and machine cavities.

Rustlick G-1066-D Synthetic Fluid for Successful Grinding

ATK-CCI Speer process a lot of high speed steel, carbide grinding - removing .100" diameter in 3 passes: on .375" diameter stock, rough, semi-rough, finish. The material is used in the manufacturing of punches, machine parts and various other items. ATK-CCI Speer was having



problems producing enough parts per day. After changing to Rustlick G-1066-D, ATK-CCI Speer, has increase its production ratio

significantly to meet expectations.

Eliminate mist

Vaughn Robertson from Melbran Distributing, Inc., ATK-CCI Speer's supplier, explains: "ATK-CCI Speer started

using Rustlick Synthetic Fluid G-1066-D a few months ago. Prior to that time they used an oil based fluid that gave a good finish but was causing a lot of mist problem in the plant that has a low ceiling. That was a critical environmental concern. Rustlick G-1066-D does not leave mist in the air, settles better in the tank, goes to the bottom, and leaves a cleaner fluid to grind with a smoother finish while grinding faster. These grinders have a 40 gallon sump and use a mix ratio of 20:1. The machinists check the concentration regularly using the Rustlick Refractometer and add fluid according to the reading; that's usually less than a pint per week."

Increased coolant life

The coolant life used to be 1 to 2 months with the old product. It is 10 months to a year now with Rustlick G-1066-D.

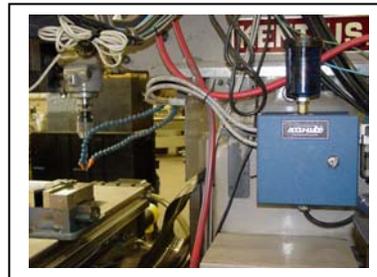
Proper Coolant Management

Vaughn Robertson adds: "Coolant Management is the key to the success of the coolant ATK-CCI Speer uses in the plant. They check the Refractometer reading twice a week and use the Rustlick Skimmer weekly to remove tramp oils. They are currently considering adding a tramp oil separator, the Rustlick SC3000 CNC Skimmer. They have had no bactericide, or fungicide growth since they switched to the Rustlick fluids. We have eliminated "Monday Morning Odors" and stopped skin irritation problems."

Accu-Lube – The success of Near Dry Machining

ATK-CCI Speer has been using Accu-Lube, near-dry machining system, for over a year for drilling – boring – facing – milling and profile cutting. It is used on three axis CNC and conventional mills when machining tooling, plates, blocks, fixtures, and prototype cutters used in production.

It is also used on a wide variety of materials, plastic, aluminum, high carbon, stainless steels and exotic materials, including hardened materials. As Andy Feucht, ITW Rocol North America Sales Representative explains "Before Accu-Lube they were using straight oil, and sometimes air "chillers". The chillers were too expensive to have one for each machine. That created some major problems: contamination, hard to maintain proper pH



factor, expensive disposal costs, and sometimes chips being blown off the tools or condensation, leaving water spots. The

advantages of using the Accu-Lube system are: cleaner air, cleaner parts, better finishes, rust control, no contamination, and longer tool life and no more machine downtime. When reaming, Accu-Lube provides excellent finishes, especially in deep holes as well as a cleaner operation."

Environmentally safe - Vegetable Base Oil

Accu-Lube® offers a complete line of natural-based, vegetable-based lubricants along with specially developed, patented micro-lubrication systems for Near Dry Machining. Accu-Lube eliminates flood coolant for easier, safer and more profitable operations. Accu-Lube lubricants are non-toxic, environmentally safe and can be applied to a variety of materials without fear of contamination and discoloration. As a result, the production process becomes more efficient, worker safety is increased and the bottom line is improved. It is biodegradable, and hazard free.

Increase tool life and Improve Performance

Accu-Lube® lubrication systems increase the tool life by at least three times. Accu-Lube® applicators carry Accu-Lube® fluid to the cutting edge, preventing heat build-up and enabling tools to perform better. Accu-Lube eliminates flood coolants and the risk of contamination. The Accu-Lube systems are very easy to install, maintain, and operate.

A division of Illinois Tool Works headquartered in Glenview, IL, ITW Rocol North America is a leading supplier of high-performance coolants and environmentally safe lubricants and applicators. Rustlick offers a full line of metalworking fluids and accessories for coolant management. Accu-Lube is the leading manufacturer of Micro-Lubrication systems for Near-Dry Machining.