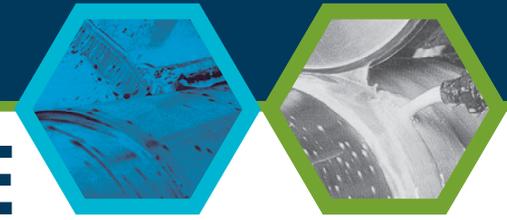


NuSol® 21 HIGH PERFORMANCE

METAL WORKING FLUID



CUSTOMER: PRECISION PARTS MANUFACTURER

PRODUCT

NuSol® 21 High Performance is a completely new technology that Chemtool Incorporated is introducing to the metalworking industry. NuSol® 21 High Performance is like no other metalworking fluid on the market today. NuSol® 21 High Performance is manufactured using a proprietary process that incorporates into the product many unique characteristics which promote very high productivity and minimal downtime for the end user.

NuSol® 21 High Performance is formulated utilizing a preformed emulsion of very small and stable particle size (average particle size of one micron). This small particle size provides a very durable and uniform lubricant film (based upon synthetic boundary lubricants), enhanced cooling, a very clean running fluid, and exceptional hard water stability. The incorporation of this leading edge PAO technology enables NuSol® 21 High Performance to exhibit superior lubrication comparable to existing synthetic technologies with the advantages of superior surface cleanliness, improved deposit control and outstanding hydrolytic stability.

PROCESS AND EQUIPMENT

Industry/Market	Industrial
Product Type	Metal Working Fluid
Product Number	2707500000
Machinery Involved	CNC Machines
Description of Environment	Multiple machining centers, machining titanium, high carbon steel, cast
Volume Used	\$50,000
Date of Use	October 2015
Documented Cost Savings	\$15,000

▷ DESCRIPTION OF PROBLEM

Customer was using competitors metal working fluid, product was very thick, operators could not see inside machine, excessive amount of chips sticking to machine walls, excessive chip carry off forcing the customer to drill holes in chip bins to drain off excessive coolant and causing an increase in disposal fees. Misting problems. Paying \$24/gallon.

▷ SOLUTION

Implemented NuSol® 21 High Performance, which ran much cleaner allowing the operators to see their machining surface and they were able to adjust speeds and feeds to increase productivity. Chip carry off was minimal, ceramic tool life increased. Cost saving of \$7/gallon plus an increase in tank life by an additional two to four months.