

NuSOL[®] ALUMAX

METAL WORKING FLUID



CUSTOMER: OIL FIELD SERVICE COMPANY

PRODUCT

NuSol[®] Alumax is a non-chlorinated technology for the machining of non-ferrous metals and exotic alloys. NuSol[®] Alumax is formulated for all machining operations on all metals but is specifically designed to machine today's tougher non-ferrous and aluminum alloys. NuSol[®] Alumax is manufactured using a proprietary blending process that incorporates many unique characteristics into the product that will promote high productivity rates and minimal downtime for the end user.

NuSol[®] Alumax is formulated using a blend of unique preformed emulsions that possess a very small particle size and which demonstrate outstanding boundary lubrication. This small particle size provides a very durable and uniform lubricant film, enhanced wetting and coverage, a very clean running fluid, and exceptional hard water stability for enhanced machining performance on non-ferrous and aluminum alloys. NuSol[®] Alumax preformed emulsions are further complemented with the presence of a surfactant package, offering enhanced boundary lubrication and fluid detergency and cleanliness.

PROCESS AND EQUIPMENT

Industry/Market	Energy
Product Type	Metal Working Fluid
Product Number	27023F0000
Machinery Involved	Mazak CNC Lathes, Mills
Description of Environment	Machine Shop
Volume Used	660 gallons per year
Date of Use	March 2016 - Present
Documented Cost Savings	\$26,400 per year

▷ **DESCRIPTION OF PROBLEM**

Customer was using Ashburn 7700-EP semi-synthetic (10% chlorinated MWF) and was having rancid odors issues, oily residues and was looking to improve tool life.

▷ **SOLUTION**

Tool vending machine tracks tool cost for all machines in the shop. Since switching to NuSol[®] Alumax total monthly tool cost have dropped from \$9,000 to \$6,800/month. This is a \$2,200/month savings, or an estimated \$26,400 in yearly savings. Increased tool life by over 24%. Also removed Chlorinated Paraffin which pleased HSE department from a health aspect.

▷ **CUSTOMER TESTIMONIAL**

Customer said decision to make change a “no brainer”. Besides the incredible cost saving due to tool life increase, better productivity, and lower consumption; the operator acceptance of the NuSol[®] Alumax has been high because of the ease of maintenance, no odors, and no skin irritations.