

NuSol® ALUMAX

METAL WORKING FLUID



CUSTOMER: INDUSTRIAL DIE CASTING AND FORGING 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	Industrial
Product Type	Metal Working Fluid
Product Number	27023F0000
Machinery Involved	Sawing and Spade Drilling Applications
Description of Environment	Sawing and Spade Drilling Applications
Volume Used	24 drums per year
Date of Use	December 2013 to present
Documented Cost Savings	\$45,000 per year

▷ DESCRIPTION OF PROBLEM

Previously used a competitor's metal working fluid (heavy duty semi-synthetic) Sawing 4140, 4130 alloy forgings. Spade drilling holes into flanges. Customer was looking for better results.

▷ SOLUTION

Installed NuSol® Alumax which we had already been using at their machining division. Customer saw a decrease in consumption and an increase in saw blade life. Also saw an increase in the life of the spade drill operation.

▷ CUSTOMER TESTIMONIAL

In twelve month period, customer spent \$90,000 on saw blades. After all saws were changed with NuSol® Alumax coolant, business volume slightly increased the following twelve months, however, only spent \$45,000 on saw blades giving them a \$45,000 savings. Comparing twelve month periods on spade bits, NuSol® Alumax saved an additional \$30,000 - \$40,000 per year.