

NuSol® ALUMAX

METAL WORKING FLUID



CUSTOMER: ALUMINUM ALLOY DIE CASTING FOUNDRY

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	CNC Machine Centers
Description of Environment	Foundry Job Shop
Volume Used	Prior product two drums per month, with NuSol® Alumax one drum in six weeks
Date of Use	March 2016
Documented Cost Savings	\$28,000

▷ **DESCRIPTION OF PROBLEM**

The customer was using three drums of a competitor's metal working fluid every month. Due to the facility layout they have challenges properly cleaning the machine centers. The competitor's fluid would begin to go rancid within a few weeks of the new charge. The machine centers were developing a thick black oil residue on the surfaces.

▷ **SOLUTION**

The machine centers were charged with NuSol® Alumax and a machine cleaner was not used, yet NuSol® Alumax has already lasted two times longer and is still running without any rancidity. NuSol® Alumax is also breaking down and cleaning the machine center surfaces.

▷ **CUSTOMER TESTIMONIAL**

The customer is switching all fifteen machine centers over to the NuSol® Alumax.