

AR2000

LINE OF FLUID SYSTEM CLEANERS & LUBRICANTS

LUBRICATE, PROTECT & MAINTAIN DEPOSIT FREE LUBRICATION SYSTEMS

AR2100 was developed to remove and prevent carbon build-up in hot oil systems. Using Nano-borate technology in an ester matrix the carbon is dissolved and the newly cleaned surfaces protected with a Nano-borate coating with a coefficient of friction down to 0.037 making it impossible for carbon to adhere to the surface.

AR2100 will dramatically reduce maintenance costs, extend oil drain cycles, and eliminate the potential of carbon negatively affecting the flash point.

AR2300 is formulated from organic esters as an advanced additive to dissolve carbon, varnish and sludge in engines, gearboxes, automatic transmissions, differentials and power steering systems whilst revitalizing the seals.

AR2300 is made up of three ester groups that impregnate the surface of varnish and carbonaceous deposits, effectively cleaning all surfaces whilst transporting removed deposits to the filtration media. Additional esters provide extreme pressure capability to the host oil. Utilizing heat, pressure, and flow generated within the oiling system, AR2300 safely and effectively dissolves deposits. Because these deposits were formed slowly over time; they are cleaned and removed slowly and methodically.

AR2400 is a multipurpose, Nano tungsten disulfide (WS₂) based dry film lubricant. WS₂ is one of the most lubricious substances in the world. It offers far superior performance to Molybdenum, graphite, Teflon® or boric acid in every application. AR2400 dry film lubricant penetrates and bonds to metal, wood, rubber, plastic and most surfaces. The lubricating, micro thin film features an ultra-low coefficient of friction (0.03 dynamic; 0.07 static) that prevents sticking and wear. It is ideal for sliding mechanisms and heavy load lubrication in dusty environments. AR2400 repels dirt, dust and oil to maintain cleaner operating conditions and will not run, pool or contaminate in-process materials.

AR2400 can also be used in high temperature and high pressure applications. It offers temperature resistance from -450° F (-270° C) to 1200° F (650° C) in normal atmosphere and from -350° F (-188° C) to 2400° F (1316° C) in vacuum. Load bearing ability of coated film is extremely high at over 300,000 psi.

AR2500 is a multipurpose parts assembly lube utilizing the Nano tungsten disulfide (WS₂) technology in AR2400 but in a synthetic PAO base. AR2500 offers substantial protection in the build of equipment and engines.

AR2600 is a multipurpose lubricant, cleaner and corrosion inhibitor. AR2600 is a unique formulation of synthetic oils and additives specifically formulated to provide exceptional protection against wear, rust, saltwater corrosion and fouling.

AR2600 utilizes Nano tungsten disulfide (WS₂) which is one of the most lubricious materials known to science with a coefficient of friction measured at 0.03. AR2600 forms a dry and extremely hard surface with a load carrying ability of 300,000 + psi and with a temperature range of -54°F to over 1200°F.

AR2600 is superior to PTFE, moly, graphite and silicone based oils. Nanotechnology reduces elements to the level of parts per billion thus providing enhanced coverage and performance characteristics.

ARCHOIL

THE COMPANY

ARCHOIL®
DYNAMIC NANO ENGINEERING
EFFICIENCY REDEFINED

ARCHOIL® is a Nano Science based company incorporating the latest developments in Nano solid boundary lubricants and other related formulations to reduce friction, eliminate corrosion, reduce energy costs and extend equipment life.

ARCHOIL® is the development of a team of professionals expanding years of experience in the field of lubrication, fuel, engineering and surface treatments.

ARCHOIL® successfully partners with organisations all around the world. Whether its to prolong the life of commercial engines, incorporate a class leading corrosion inhibitor into wire rope manufacturing or eliminate production downtime in thermic oil systems, we deliver where others fail.

ARCHOL® is universal in scope and constantly researching and developing with chemists and tribologists the most efficient solutions for all lubrication and fuel challenges.

ARCHOIL® is committed to product investment and specializes in custom formulations using innovative nano technology to meet any lubrication challenge.

ARCHOIL®

Utilizes nanoscience solutions to meet industrial lubrication challenges and also address the latest developments in corrosion control and fuel enhancement for transportation, marine, industry, and heavy equipment.

ARCHOIL®

Supplies nano additives for lubricant and grease manufacturers to enhance their products by evolving from toxic and inferior EP/AW additive packages to a more efficient and cost effective nano technology.

ARCHOIL®

Offers technology made from nano potassium borate, hexagonal boron nitride (hBN), tungsten disulfide (WS₂) plus other advanced complex nanoparticle solutions.

Nanotechnology has become one of the fastest growing scientific and engineering disciplines.

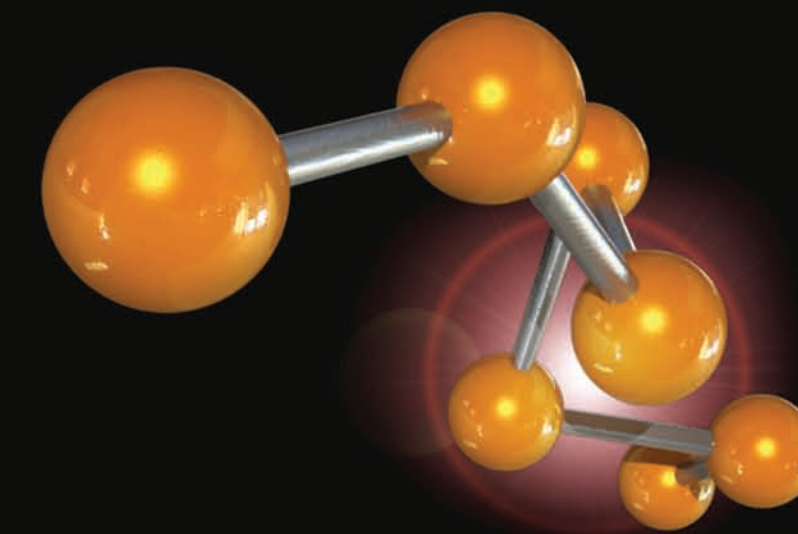
New nano advancements in bioscience, medicine, engineering, pharmacology, and material science is replacing micron technologies.

Nano technology gives scientist the ability to work and manipulate materials at the atomic and molecular level to achieve desired characteristics.

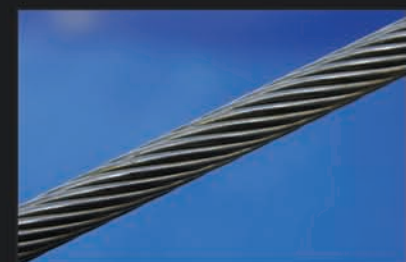


DYNAMIC NANO ENGINEERING - EFFICIENCY REDEFINED

"In the world of Nano everything is intensified with greater efficiency and efficacy"



WIRE ROPE



Environmental friendly products to reduce friction and wear. Offering great corrosion protection.

FIREARMS



Highest quality cleaners and lubricants that maintain and improve the performance of any firearm

CONSTRUCTION



Durable solutions to prolong the lifespan of equipment, preventing downtime and wear.

WELCOME TO THE LATEST DEVELOPMENTS IN NANO TECHNOLOGY

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AR5000

LINE OF NANO RUST REMOVAL & SEALANT

THE MOST ADVANCED
NANO RUST REMOVAL AND
PROTECTION PRODUCTS TESTED

AR5100 is an organic, industrial grade corrosion remover that dissolves the heaviest corrosion from metals. It quickly and efficiently removes rust/corrosion from steel, iron, aluminum, brass, copper, chrome and other metals and alloys. It will effectively remove corrosion and work its way to the bare metal while leaving other materials – plastics, rubber, paint etc. unharmed.

AR5100 will work its way into the tightest areas that may otherwise prove impossible to reach by grinding, blasting, or other mechanical means.

AR5300 is an indoor environmentally safe, water-based industrial corrosion preventative, that provides unmatched protection from corrosion for all ferrous and non-ferrous metals. It replaces all oil-based preventatives.

AR5300 forms a dry hydrophobic film over the surface of metals and provides complete protection from corrosion during sheltered shipping and storage. It will work its way even into the tightest areas for full protection.

AR5500 offers our most advanced rust protection available in a thin film product that is free of barium and heavy metals. This rust preventative is petroleum solvent based, offering excellent water separation and water displacement properties, ensuring film consistency in dip tank applications.

AR5500 is excellent for structural protection in

corrosive manufacturing environments and its exceptional salt spray performance makes it ideal for metals that are to be shipped overseas.

AR6000

LINE OF NANO FUEL TREATMENTS

FOR ALL FLUID HYDROCARBON
FUELS & BIODIESEL

AR6200-EU is a revolutionary fuel additive specifically designed to address fuel challenges not adequately addressed at the refinery. It has been engineered to increase the surface area of fuel molecules and lower the ignition point by as much as 400° F, and therefore, provide a more complete and thorough burn. This improved combustion efficiency helps maximize the BTU (energy) availability of fuel, which in turn can increase horsepower and torque whilst reducing fuel consumption and harmful emissions.

AR6200-EU has been extensively tested in the field using the EPA CMB test (the most accurate EPA test for MPG) and averaging an 8% improvement in economy on an already clean fuel system.

AR6200-EU is suitable for all liquid hydrocarbon fuel types of varying quality including gasoline, ethanol, biofuels, heating oil, 2-stroke mixes and heavy oils such as bunker fuel and will help maintain storage fuel integrity. It is successfully used worldwide in every type of application including consumer vehicles, fleets, power plants, ships, mining equipment and more. AR6200-EU is the only fuel treatment needed to address the major limitations inherent in fuel.

AR6300 is a 50% diluted version of AR6200-EU and is designed for the treatment of smaller tanks of fuel or where treating at 5,000:1 is easier to measure than

treating at 10,000:1. AR6300 is thus used at double dose to achieve the same results of AR6200-EU.

AR6400 Professional PEA Concentrate is a accelerated fuel system and carbon cleaner. Also a Nano Technology, it is designed to remove all fuel system and combustion deposits in one tank of fuel. AR6400 quickly reduces excessive emissions, restores lost engine performance, increases fuel economy in addition to having unique properties that help protect surfaces from further deposit build-up.

AR6400 is blended from the latest high-strength polyetheramines that quickly and safely remove gum, varnish and carbon deposits from the fuel system and engine. An added patent-protected combustion modifier then maximizes combustion performance to help remove post combustion hydrocarbon build-up whilst rapidly reducing harmful exhaust emissions.

AR6400 quickly restores lost engine performance and fuel economy in addition to unique properties that help protect surfaces from further deposit build-up. Molecule by molecule deposits are safely removed from intake valves and piston tops thus improving combustion efficiency and reducing the propensity for pre-ignition.

AR6400 contains the highest safe amount of PEA and accompanying chemistry to safely remove deposits in a single treatment.

AR6400-D Professional PEA Concentrate is the same as AR6400 but formulated for diesel engines and fuel systems.

AR6500 Professional DPF & CAT Cleaner safely cleans the combustion area and emission control system components such as the diesel particulate filter (DPF) and catalytic converter, thus helping such systems regenerate naturally and prolong their usable life. Vehicle age combined with higher bio-fuel content in today's diesel fuels is making DPF regeneration more difficult. Saturated particulate filters risk being rendered inoperable with costly replacement and in some instances, additional recoding of the engine management system the only resolution. AR6500 will help prolong the life of the entire emission control system and combat the adverse effects of stop/start driving.

AR6500 contains a combustion modification technology that bonds to and removes hydrocarbon particulates. This catalyst also reduces the temperature threshold at which carbonaceous deposits can burn thus enabling them to burn off more readily. Molecule by molecule deposits are safely removed thus restoring any lost performance and/or efficiency of the diesel particulate filter and catalytic convertor.

AR6500 can be safely used on blocked systems or as a preventative treatment to ensure components continue to run at optimum efficiency.

AR8000

LINE OF NANO HIGH PERFORMANCE GREASES

FAR SUPERIOR TO PTFE,
MOLY & GRAPHITE

AR8100 Nanoborate Biosyn Synthetic Grease is a high performance grease delivering a nanoborate ester matrix to the host alloy. Made from the highest grade PAO Durasyn 148 and fumed silica as a thickener it is safe to use in water and has a water washout of .05. It is also readily biodegradable and non-toxic.

AR8200 NLT High Performance Grease with nanoborate is designed for extreme pressure and temperature applications. It is made with the latest in thickeners, calcium sulfonate complex and thus offers superior corrosion protection, heavy load carrying properties and high temperature properties. Very reasonably priced, considerably less than moly grease, graphite or boric acid yet out performs them in every application.

AR8300 Nano Ceramic grease is the culmination of 10 years of extensive research and development. It contains an array of complex minerals, each chosen for their

characteristics when reduced to nanometres in size. The base oil is the highest quality PAO Durasyn 148 selected for its extreme temperature capabilities.

AR8300 actively restores worn surfaces in areas where friction is present. The minerals interact with each other and the host metal creating a chemical reaction for the bonding and reconstructive process, resulting in a surface with a friction coefficient of 0.003 and 5 times stronger than the host metal. AR8300 remains active on the surface under heavy loads rated at 1,813,000 PSI. This is a tribological breakthrough.

AR8300 forms a new surface on the host metal and is for use in extreme environments such as heavy load bearings, curved rail tracks, wind turbines, or wherever the present grease is over-challenged or exceptional lubrication and performance properties are desirable.

AR9000

LINE OF NANO FRICTION MODIFIERS

ADD TO ANY FLUID SYSTEMS TO
REDUCE FRICTION AND HEAT

Friction Modifiers also referred to as solid boundary lubricants are used in oil and greases to reduce friction. ARCHOIL nano friction modifiers serve multiple functions – friction reduction, anti-corrosion and extreme pressure agent; they also maintain a clean fluid system. The toxic chemicals used in most oils are becoming obsolete and at some point will be replaced with a superior, non-toxic alternative. Replacing the AW/EP package with one of ARCHOIL nanoparticle compounds saves on the bottom line and produces a superior finished product. ARCHOIL friction modifiers may also be directly added to any engine oil, gearbox, hydraulic system to greatly reduce wear, increase performance and save on energy cost.

AR9100 Nanoborate is a patented Potassium Nanoborate lubrication technology that dramatically reduces operating friction protecting equipment from wear, extending operating life and reducing energy consumption. As an ideal replacement for conventional AW/EP additives, its main purpose is to reduce friction and wear; maintain a deposit free fluid system, extend component life and to dissipate frictional heat. The Nanoborate reduces friction to a coefficient of 0.037, which is half again the friction coefficient of 'micro boron', and a fraction of traditional lubricants such as zinc, phosphorous and other additives presently used in popular oil and grease formulations.

AR9100 contains various esters which dissolves carbon and varnish enabling the Nanoborate to chelate to the host metal. It has several times the load capacity of traditional chemistries, testing at up to 4000 lbs. on the Falex Pin & Vee Block test.

AR9100 is introduced into the oil and the esters totally dissolve deposits allowing the Nano-borate to form a strong chelate bond. Friction and wear are reduced at rates of up to 75%. AR9100 greatly exceeds the challenges presented by today's tightened fluid system tolerances and the significant reductions in friction have the highly desirable side effect of increasing the system's fuel efficiency.

When combined with AR6200-EU, AR9100 can lower engine noise, vibration and improve fuel economy and power.

AR9300 Complex Nano Ceramic contains the same technology as in the AR8300 grease and is suitable for most automotive applications as well as extreme environments where the current lubricant is over-challenged.

The minerals interact with each other to actively restore worn surfaces in areas where friction is present, resulting in a surface with a friction coefficient of 0.003 and 5 times stronger than the host metal.

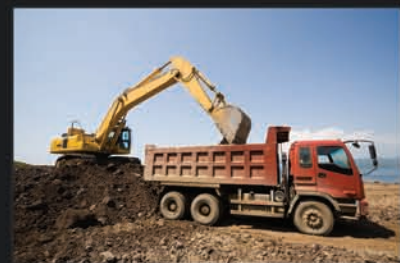
AR9300 remains active on the surface even under heavy loads, rated at up to 1,813,000 PSI, for around a year or much longer if used in sealed applications.

INDUSTRIAL



Professional solutions that push lubrication, cleaning and protection to new levels

EQUIPMENT



Solutions that reduce running costs, downtime and maximise the ROI on your equipment

MARINE



Proactive treatments that address the challenges of fuel quality, lubrication and corrosion

AGRICULTURAL



Carefully selected and proven products that lower fuel and maintenance costs

OEM



Tailored technologies that deliver high quality, predictable and consistent results

MOTORSPORT



Bespoke products and solutions that give our customers the competitive edge

FLEET



Exclusive energy and maintenance saving protocols designed for your fleet

AUTOMOTIVE



Innovative range of products to keep your vehicle running longer and more efficiently

ENERGY



Highest quality in lubricants and anti-corrosives to minimize downtime and provide maximum protection