



MIL-COMM PRODUCTS COMPANY

Anti-friction metal Treatment (A-FMT) products that improve and extend the life of your equipment.

Extreme Performance Chemistry
for Critical Operations Worldwide



About MIL-COMM

Founded in 1985 by a former United States Naval officer and a chemical engineer, MIL-COMM Products Company is a global provider of extreme performance lubricants and cleaners for critical industrial, military and consumer applications.



MIL-COMM engineers, manufactures and markets specialty formulations designed to work in the harshest operating environments and on critical parts under stress.

More than two decades of development and testing have created best-of-breed, superior-performing products built with proprietary technology and custom-engineered base materials.

MIL-COMM is a leading supplier of extreme performance lubricants to the U.S. Military and to U.S. allied forces worldwide. The Company also serves a rapidly growing, global customer base of manufacturers, industrial facilities and consumers.

MIL-COMM products are trusted by the world's leading industrial companies and military forces in 25 countries.



Aerospace Defence Technology



What We Do

MIL-COMM engineers and manufactures specialty anti-friction metal treatment formulations in close collaboration with our clients, including the United States military.



The formulations are designed to operate at the highest standards in the harshest operating conditions in the world.

In extreme heat and cold, in heavily corrosive marine environments, under heavy load and extreme pressure, in desert sand and dust conditions, in all climates, at all altitudes and temperatures.

MIL-COMM products serve a rapidly growing, global customer base of armaments and munitions manufacturers, and other military/defense related applications.

The Company serves a diverse range of industrial segments:

- ✓ **Building Maintenance**
- ✓ **Manufacturing**
- ✓ **Mining and Drilling Operations**
- ✓ **Transportation**
- ✓ **Vessels and Maritime Equipment**

Companies spend nearly \$60 billion worldwide on commercial lubricants, including high-performance oil.



Yet multiple billions are lost every year because of excessive friction on commercial and industrial machinery.

Oil formulations create a protective film on the surface of a part to prevent friction and protect against water.

But oil has a limited useful life, breaking down over time and migrating away under pressure leaving metal exposed and troublesome or dangerous residues behind.

Hydrocarbon-based lubricants can also be messy, attract dust and other contaminants, further complicating the maintenance process.

Hydrocarbon-based lubricants may not kill industrial equipment.

But the way in which they reduce friction between materials lays the groundwork for friction-related wear, resulting in reduced equipment life.

Increased maintenance frequency and associated downtime increases cost to operate, reduces efficiency, and accelerates the need to replace equipment sooner, resulting in lower ROI.





Leading U.S. companies and military use MIL-COMM anti-friction treatments (A-FMT) to boost equipment performance and extend useful life.

Our products penetrate metal surfaces and leave behind a semi-dry film coating. The MIL-COMM micro-particles take hold in the metal and cling to the surface of the parts, perfecting and protecting the surface of the metal.

MIL-COMM metal treatment materials seal the metal surface in a way oil can't, creating a smoother surface than polishing.

The coating allows for parts to function smoothly.

The life of a part is extended.

MIL-COMM metal treatment formulations and greases significantly reduce friction and associated degradation in performance.

They outperform traditional hydro-carbon based lubricants, lasting 6-10 times longer.

MIL-COMM formulations:

- ✓ Allow closer tolerances
- ✓ Extend maintenance intervals
- ✓ Reduce maintenance costs
- ✓ Minimize downtime
- ✓ Improve and extend the useful life of equipment

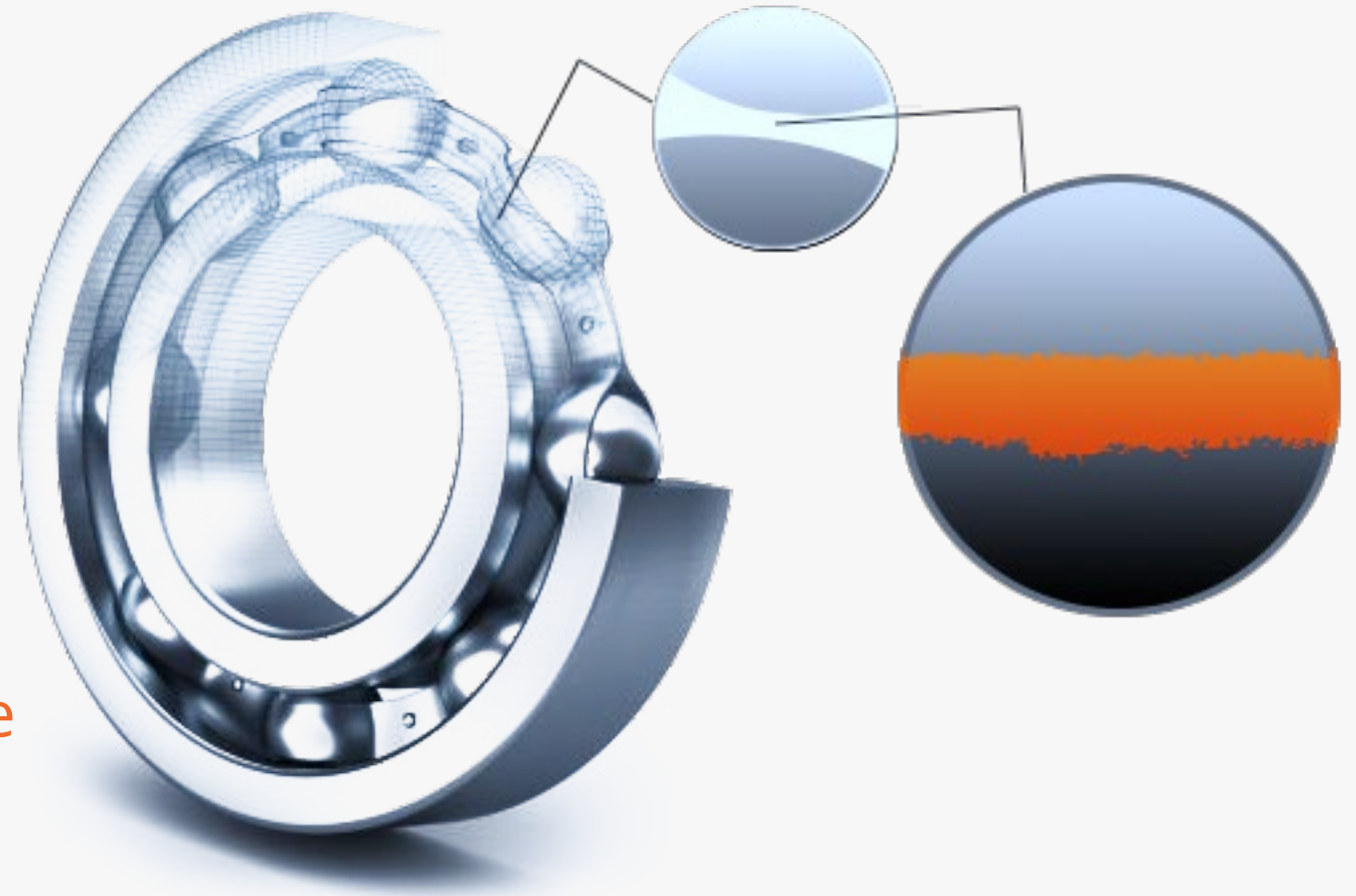


The Mil-Com Difference - Extreme performance anti-friction metal treatments

Each treatment is engineered with our proprietary PTFE micro-particle technology.

This process allows us to create treatments that leave a sub-topical footing on metal surfaces.

100% synthetic, used safely worldwide since 1987.



Use MIL-COMM products in any environment... when machine failure is not an option.

- High and low temperatures (-90 to +450 F)
- Desert: Sheds sand and dust with no gummy build-up
- Corrosion protection beyond 500 hours of constant salt spray
- Handles heavy wear, high pressure and loads without galling
- Resists wash-off, wear-off, burn-off



MIL-COMM Formulations can be used on anything that slides, turns or has close tolerances, under the harshest conditions.



- High-value machinery with high downtime costs
- Big, heavy, expensive machinery
- Machinery that runs continuously
- Conveyers, farm, mining, Oil and Gas equipment
- Factory machinery, garment business sewing machines
- Ball bearings, chains, cables, axles, drive shafts and universal joints
- Saltwater environments
- As a fast barrier against corrosion after metal is cleaned

MIL-COMM products make the entire maintenance process easier, cheaper and more effective.

- ✓ Increased machine reliability
- ✓ Reduced maintenance time and labor
- ✓ Lower operational costs
- ✓ Easier to clean than other lubricants
- ✓ A “tool-box” of different lubricant products
- ✓ Engineered in a range of viscosities for different applications
- ✓ 10 packaging and dispensing variations



TW25B® synthetic grease significantly reduces friction and wear on all working parts, penetrating metal surfaces and leaving a semi-dry film coating for smooth functioning and extended life of metal parts.



Engineered to meet the harsh conditions of the most extreme operating environments and the extreme stress applications of military hardware.



LOCK SAVER® lubricant/protectant delivers pinpoint lubrication to critical parts, first flushing dirt and debris from metal surfaces, then leaving a semi-dry coating of lubricant protection that resists debris-collection, wear and corrosion.



A next-generation cleaning solution used on heavy armaments and ideal for shop and factory heavy cleaning maintenance.



	Load-Carrying Limit - PSI	Operating Temperature Range - Farenheight	Operates within Published Parameters	Comments
CLP (MIL-L-63460)	16,000	-60F to +160F	NO	Runs off surfaces within hours, leaving critical surfaces unprotected. Published low temperature range is also at variance with many anecdotal accounts of guns freezing at much higher temperatures than the published low temperature threshold.
LSA (MIL-L-46000A)	20,000	-65F to +260F	NO	Water molecules cling to LSA and under certain conditions represent a freezing hazard. LSA does stay in place longer than CLP, but LSA still migrates off gun part surfaces unnecessarily soon, leaving the parts unprotected.
MIL-COMM TW25B	140,000	- 90°F to + 450°F	YES	Weapons treated with MIL-COMM's TW25B and MC2500 are protected for years yet can be fired without removing the lubricant-protectant. Use of TW25B reduces scheduled maintenance by 25% and has superior corrosion inhibiting characteristics.

Testimonials

Adhesives Manufacturer

We run large milling machines that contain a bearing unit under heavy load at all times. These bearings cost us about \$18,000 to replace, and we've been able to significantly increase the life cycle of these bearings by using MIL-COMM's MC1210 heavy grease, saving us several bearing replacements in the past few years.

- **Joe Estrada** - Plant Manager, Royal Adhesives

Biomedical Device Manufacturer

Our machinery operates in a high humidity environment. We tried using a number of high-grade lubricants, but they didn't hold up well enough on the sliding parts.

We learned about MIL-COMM from the naval research base in our area, and it immediately eliminated the problem of failure to lubricate. Now we include a tube of MIL-COMM TW25B with every machine we sell, and it gives us complete confidence that we can stand behind our product warranty.

- **Brock Stiffler** - Brooks Life Sciences Systems

Testimonials

Highway Barrier Manufacturer

We provide solutions for the construction industry, where objects need to be anchored in cement and later removed. MIL-COMM supplies us with a proprietary product that is the only lubricant we've found that enables us to unscrew our bolts from our anchoring adhesive ("Keligroust/Keligroust 101"). It enables us to provide a unique solution for temporary anchors that no one else can!

- **Ken Ginsky** - Kelken Construction Systems

Small Caliber Weapons Cleaning Tests

TW25B was not only an effective lubricant for the small caliber weapons, but it also had the potential to reduce the amount of labor hours required for machine gun cleaning by eliminating the practice of stripping down the weapons at the end of each firing day.

-**Naval Facilities Engineering Service Center**, Port Hueneme, California

Testimonials

Aerospace Defense System

My experience with MIL-COMM lubricants began with my work as a U.S. Air Force Weapons Load Crew Chief (462/2W1) responsible for the reliable operation of high-cyclic M61A1 20MM gun system originally manufactured by General Electric and currently produced by General Dynamics. Few machine parts endure more extreme pressure, heat, trauma or system stress than the 20MM M61A1 gun system. A combination of MIL-COMM lubricant formulations keeps this critical system firing reliably at all temperatures, altitudes and in all harsh operating environments. Simply put, MIL-COMM synthetic lubricants work far beyond where others quickly fail.

General Dynamics Weaponry Program

-- **Jeff Hamburg**, F-16 Maintenance Crew Chief, United States Air Force

Testimonials

Military Training Range

On weapons TW25B has reduced stoppages with the SAW, M4 and M16s to a point that it is highly noticeable, even when using blanks or sub- munitions. This is a training multiplier and feedback from several units that have deployed overseas is that the same results were realized during combat operations in a high dust/ blowing sand environment. The "Army standard" lubricant had a tendency to "gum-up" in this environment; TW25B did not. Several units reported switching to TW25B to avoid stoppages due to sand/ dirt build up on a "wet lubricant."

Combat Marksmanship Instructor and Industry Consultant

There are a lot of lubes on the market, but I still like TW25B for a grease type lube... The grease type lubricants require more effort to apply but tend to stay put longer. TW25B is superb for crew served weapons like belt feed machine guns and is the best lubricant I have ever seen for sandy or wet environments.

In my old unit, we affectionately call it "desert jizz" because once we started using it the reliability of our belt fed weapons increased dramatically in extreme environments such as the desert. Highly recommended... With wet lubes like Militec you have to lubricate your weapon more frequently than with a grease like TW25B.

- **Larry Vickers** - Vickers tactical

Testimonials

Army Weapons Pool

M60 machine guns: Since then I have treated the weapons with TW25B spray, i.e. spray, fire, wipe down, re-apply TW25B spray, etc. Guns # 13, 14, 18, 19, and 21 fired a total of 11068 rounds. There were no malfunctions except those caused by mechanical design. For my purposes, the use of TW25B has made cleaning much easier.

The pieces were cleaned in less than fifteen minutes each and most of the carbon (propellant residue) merely wiped off all the major parts (bolt, operating rod and barrel sockets) with a dry rag. When CLP and solvent are used it takes 45 minutes to 1 1/2 hours to clean each machine gun. Much less time and effort with TW25B and no rust.

- **Jim Lane** - WG 6 S/A Repairman 3/81 Weapons Pool Ft. Knox KY 40121

Testimonials

Military Training Range

Weapons treated with TW25B are far easier to clean, and rust is no longer an issue even after a week of solid training in the rain and fog. Those in training spent more time training instead of weapons cleaning.

On-site equipment, including battle effects simulators, paint markings systems cannons, mortars, and small arms), moving parts of special effects including the blow-up bridge and moving/ burning cars, and where we use cables and pulleys to operate special effects, reduce wear and maintenance demands have been realized.

We have been able to reduce scheduled maintenance by 25% saving critical man-hours and facility downtime.

- **Andy Andrew** - Range Manager, Zussman Urban Combat Training Center Fort Knox, Kentucky

Soldier of Fortune

LUBE THE METAL, NOT BETWEEN THE METAL

Weapons treated with MIL-COMM's TW25B and MC2500 are protected for years yet can be fired without removing the lubricant-preservative. SIG SAUER applies these products at the factory, Glock USA uses them as final treatment for everything run through their repair shop, and they're becoming the preservative-lubricants of choice among military users.

Adventure Quartermaster

Testimonials

Jane's Ammunition Handbook Jane's Infantry Weapons

...the temperature was -17 F with the wind chill. Small arms from many manufacturers were being demonstrated and many of them failed because their lubricants thickened due to the extreme cold that caused stoppages. One manufacturer's weapons did not fail, however, and their representative told me that his company had used TW25B for over 10 years and had never had a weapon failure attributable to lubricant.

I have used TW25B ever since on all my test and personal firearms and can personally attest to the fact that when the factory lube is replaced by TW25B, the operation of every firearm I have tested is noticeably smoother.

I use TW25B on every test firearm and on all my personal firearms. Nothing else even comes close!

Charles Cutshaw - Co-Editor, Jane's Ammunition Handbook Jane's Infantry Weapons

Testimonials

Army Small Arms Repair

...I replaced all parts and springs as the weapons had been cleaned, and not lubricated. I decided to treat the weapons with TW25B that had been mixed with denatured alcohol. I told the range personnel not to oil the weapons as I was testing a different lubricant.

When I came to work at 0500, I looked for Poorman's round count sheet, 3 M60 machine guns # 13, 14, and 19, had fired 1200 rounds each, with no malfunction (new parts). I did an 80% clean on the weapons by merely wiping off what little residue remained.

- Jim Lane - Small Arms Repair, WG 6 Ft. Knox KY
40160, 3-81 WPNS Pool

S.W.A.T.

I just wanted to let you know that your grease and oil are the best I've ever used. The entire SWAT team is now using it on all of our small arms including automatic rifles, long range rifles, carbines, shotguns, Glock pistols and 1911 pistols.

We have tried burning it off, leaving it applied in extreme heat, freezing it, and subjected carbines with it applied to adverse debris like mud and sand and it proved superior to anything else we have tried. Also very positive that field application is not messy, and even the oil does not leave a greasy residue on the weapon or your hands or any noxious odors.

- Dep. Jack Vemmer - Volusia County Sheriff's Office
SWAT

Testimonials

Texas Wings and Clay

.... after cleaning with MC25 and lubrication with MC2500 in mid-February, I submerged one slide and barrel in a bucket of saltwater and left them in the garage for two weeks. When I removed them, they looked just the same as when I first put in the water. I blew them dry with an air hose and placed them on a shelf to see what would happen. I took the other slide and barrel and placed them in a corner of a flowerbed and covered them with mulch.

I completely forgot about both barrels and slides until the last week in June, when I discovered the slide and barrel in the corner of the flowerbed while doing a little weed pulling. Much to my amazement, neither component had any visible rust. With this discovery, I went to check on the barrel and slide that was on the shelf. They were immaculate except for some dust.

I was astonished that the slide and barrel in the flowerbed were not covered in rust, having been exposed to the elements and covered with mulch from the end of February to the end of June.

I am not recommending that you should neglect your firearms in any way, but when a product works like this, I don't think a day of duck hunting in salt marsh will ever again cause me worry about rust problems.

- **Steve Schultz** – TF&G Shooting Sports Editor

Start using MIL-COMM Anti-friction metal Treatments (A-FMT) to increase the return on investment of your capital expenditures.

MIL-COMM Products Company

Contact info@mil-comm.com
Find Local Sales Agents at www.mil-comm.com