

 **METALTEC-1**  
METAL CONDITIONER

HIGH-TECH  
MILITARY  
NANO  
TECHNOLOGY



# METALTEC-1® PROFESSIONAL PRODUCTS

NETHERLANDS POLICE PRESENTATION



## WHAT IS METALTEC-1® PROFESSIONAL LIQUID?

METALTEC-1® is a clear golden synthetic liquid resembling an SAE 10-weight oil. When METALTEC-1® is added to the primary lubricant of any machine, it will increase operating efficiency, extend equipment life, reduce downtime and cut unscheduled maintenance. Even though METALTEC-1® is added to the oil, it is not an oil additive. METALTEC-1® contains no viscosity enhancers or other oil augmentation compounds. It does not modify the primary lubricant in any way. Instead, METALTEC-1® is a metal conditioner. METALTEC-1® simply uses the circulating oil as a means to reach the critical hot spots and metallic friction surfaces within the machinery. When the oil carries METALTEC-1® to these areas, METALTEC-1® exits the oil, leaving the oil completely unaffected and unchanged.

## WHERE IS METALTEC-1® PROFESSIONAL LIQUID USED?

METALTEC-1® can be used in all types of machinery. Typical uses include both two- and four-cycle diesel and gasoline engines of all sizes; Automotive and industrial transmissions and differentials; Compressors of all types including refrigeration; assembly line speed reduction gears; electric motors; pumps; etc. It is also an excellent cutting fluid for the most difficult lathe and mill work. From Nuclear powered subs to dental drills, rock crushers to bicycles, air conditioners to sewing machines, METALTEC-1® literally works anywhere two pieces of metal contacts together.



POLITIE

## HOW DOES METALTEC-1® PROFESSIONAL LIQUID WORK?

When METALTEC-1® is applied to a metal surface, it chemically reacts with, and is adsorbed by, the metal. The chemical reaction takes place at temperatures between 100°F and 150°F (38°C - 66°C) depending on friction and load conditions. The effect of the chemical reaction is a stiffening (not hardening) of the metal surface - approximately seventeen times stiffer when the reaction is complete. The increased stiffness dramatically reduces friction and parasitic drag, just as when an underinflated tire is pumped up.

### Reduced friction yields many benefits:

- Wear rates are greatly reduced. METALTEC-1® treated machines last longer.
- Lubricating oil becomes more effective and efficient. Piston rings seal better against cylinder walls for better compression and reduced tailpipe emissions. Bearings spin more freely. Gears mesh more effortlessly. METALTEC-1® treated machines run cleaner and use less energy to do the same work.
- Less heat is generated in the moving parts. METALTEC-1® treated machines run cooler. Additionally, the bond between METALTEC-1® and metal is remarkably durable. METALTEC-1® - treated machines are protected and will retain adequate lubrication for extended periods in extreme out-of-parameter temperature variations, or even if the primary lubricant is completely lost.

## WHAT IS METALTEC-1® PROFESSIONAL LIQUID?

METALTEC-1® is a chemically-reacted synthetic-based hydrocarbon derivative. At the start of the manufacturing process, METALTEC-1® is composed of a blend of several extreme pressure lubricants, natural anti-corrosion ingredients, extremely stable chlorate esters, anti-wear components, and anti-oxidant compounds. This blend is then introduced into a chemical reactor. When METALTEC-1® emerges from our proprietary chemical reaction process, it is no longer a blend. It has been organically bound into a unique, pure, uniform single substance. In its finished form, METALTEC-1® is completely stable, so it does not require agitation before use.

Just as important as knowing what's in METALTEC-1® is knowing what isn't. METALTEC-1® does not contain chlorinated paraffin's, PTFE, fluorine, solvents, carrier oils, viscosity enhancers, metals, molybdenum Disulphide, zinc, Sulphur, graphite powders or other solids. It's also important to realize that METALTEC-1® is non-hazardous, non-toxic, and non-combustible. It is so safe that METALTEC-1® was even approved environmentally by the U.S. Navy Medical Command for use aboard nuclear-powered submarines.



## BENEFITS OF METALTEC-1® PROFESSIONAL LIQUID

- Reduction of harmful tailpipe emissions in all gasoline, diesel and two cycle engines.
- Twenty-four-hour lubrication to all metal surfaces.
- Reduced operating temperatures at all metal friction points.
- Increased power using the same energy.
- Reduced oxidation, thermal decomposition, corrosion and wear.
- Greater efficiency in electric motors, alternators and generators.
- Less energy required in engine start-ups, regardless of weather conditions.
- Does not adversely affect the viscosity of the primary lubricant.
- Long lasting -- Remains bonded to metal surfaces even after several oil changes.
- Protects for extended periods even if primary lubricant is lost, or is contaminated by fuel, anti-freeze or combustion by-products.
- Reduces material build-up. Contaminants and wear metals cannot cement themselves to METALTEC-1® -protected surfaces.

# Benefits



## METALTEC-1® PROFESSIONAL LIQUID IS NOT OIL!

If you want to check the product for authenticity yourself, pour a small amount of the product into pure water. METALTEC-1® Professional liquid will settle at the bottom due to its specific weight, which is higher than that of water. In contrast to this, any oil poured in water remains (floats) on the water level. METALTEC-1® Professional liquid general instructions for application: METALTEC-1® Professional liquid is compatible with crude oil, petrol, all transmission oils (both synthetic and mineral), hydraulic fluids, permanent greases (e.g. graphite grease).



# METALTEC-1® PROFESSIONAL LIQUID USED FOR FIREARMS:

## General Instructions:

1. Disassemble the firearm and remove grease, carbon and dirt.
2. Apply METALTEC-1® Professional liquid to inside and outside surfaces of the barrel and all mechanisms (only a very thin layer will suffice to get into surface molecular bonds of material. Where the manufacturer specifies grease to be used for the firearm, mix METALTEC-1® Professional liquid into the grease at the prescribed ration and apply the mixture to specified surfaces treated with METALTEC-1® Professional liquid only before. We do not recommend that grease should be used for Mouser-type and similar breeches, where the grease prevents them from operating reliably under freezing conditions. In hunting, competition and business arms, METALTEC-1® Professional liquid is an equivalent substitute of grease. We recommend that you should consult concrete conditions with us. It is optimal and the most economical carry out the application about 24 hours before the firearm is to be used. It is appropriate to use synthetic (nonabsorbent) fabric for the application.

During the period above, the firearm may be either disassembled or assembled, as the action of METALTEC-1® Professional liquid surface layer is not disturbed by contact of firearm parts.

There is no need to wipe the barrel and mechanisms of the firearm treated in this manner (firearms treated with METALTEC-1® Professional liquid do not need “degreasing”). After firing and heating the firearm, it is necessary to wipe METALTEC-1® Professional liquid out of the firearm, which does not worsen efficiency of METALTEC-1® Professional liquid . We recommend that you should check the firearm by sighting-in. To protect firearms when stored for a long time, apply a thin layer of METALTEC-1® Professional liquid to all inside and outside surfaces, including the barrel and its mechanisms, until after you have clean them thoroughly. A very thin layer will be sufficient. We recommend that you should wipe the firearm dry before actual firing – the lubrication effect of METALTEC-1® Professional liquid will not be lost. After firing, wipe the firearm (which is much simpler after previous treatment with METALTEC-1® Professional liquid , because dirt and carbon do not get deposited on METALTEC-1® Professional liquid - the firearm is not attacked by corrosion) and apply a thin layer of METALTEC-1® Professional liquid again.

**BEST  
SELLER**



# METALTEC-1® & USAGE AREAS

POLICE ONLY



**A FIREARMS** Rifles, Shotguns, Handguns, Magazine, Revolvers, Pistols , Machine Guns

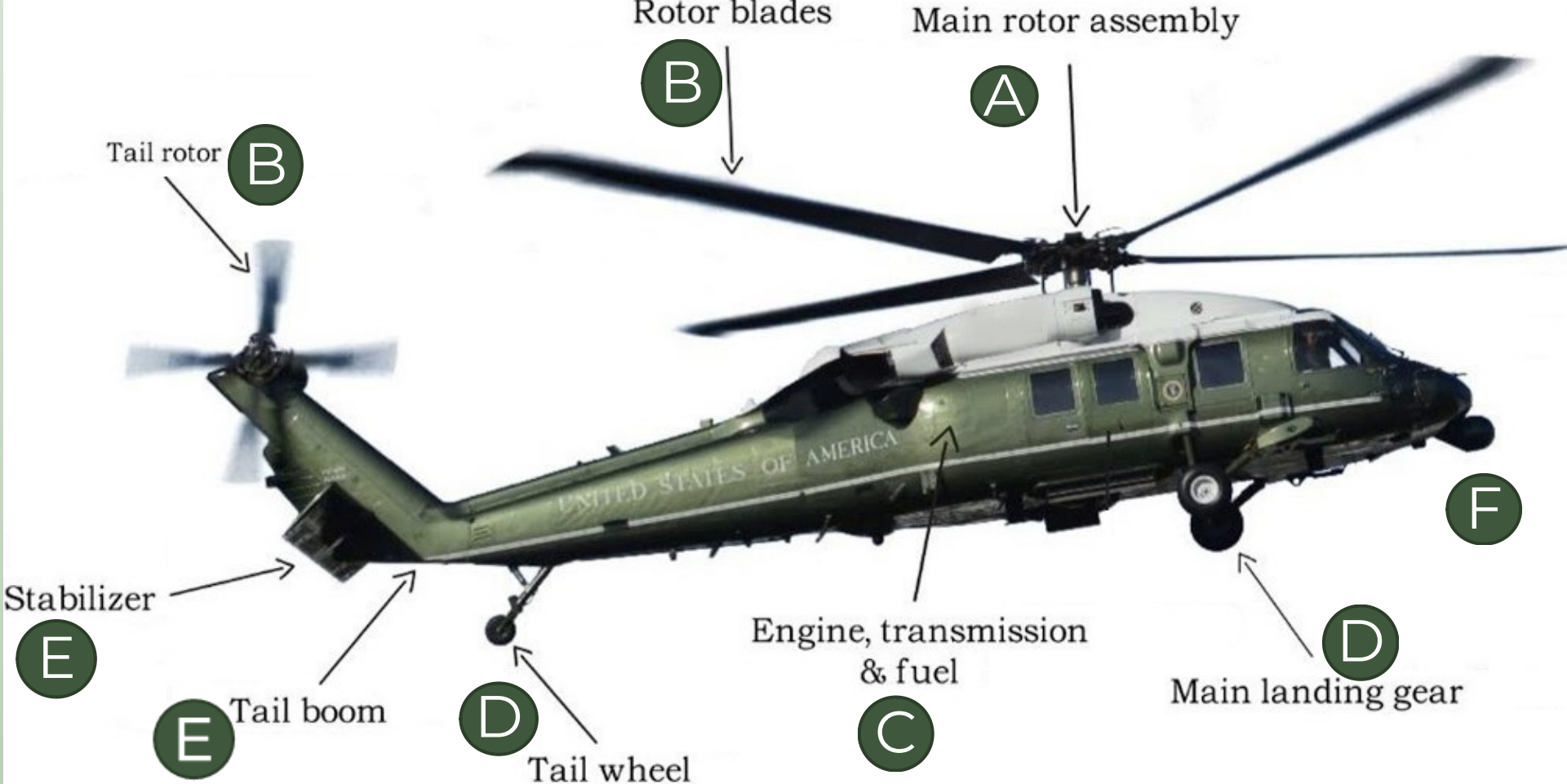
**B LAUNCHERS** Rocket Propelled Grenade Launcher, Bazooka, Hummer, Cougar, Missile launcher

**C VEHICLES** Excavators, Cylinders, Machining, Trucks, Cars, Busses, Cranes, Forklifts

**D WATER VEHICLES** Boats, Ships, Submarines

**E AIR VEHICLES** Airplane, Helicopters, Radars, Drones





## (A) MAIN ROTAR

With the maneuver of the rotors there is high speed of friction which could cause problems in balance. Wear & tear may cause rust in future in rainy days if not treated well.

Normally rotors use:

- Normal grease use (Rotors):  $-40^{\circ}\text{C}$  +  $100^{\circ}\text{C}$
- METALTEC-1® 16 is:  $-50^{\circ}\text{C}$  +  $150^{\circ}\text{C}$  (  $180^{\circ}\text{C}$  Short terms)
- METALTEC-1® 16 ultra is:  $-40^{\circ}\text{C}$  +  $180^{\circ}\text{C}$  (  $220^{\circ}\text{C}$  Short Terms)

## (B) ROTAR BLADES

With main and tail rotor blades, it's a high spinning and open to air and one of the most important parts of the helicopters. There is a high risk of rust, corrosion, wear & tear problems. There is not much to do for the blades besides cleaning and or keeping it dry. Cleaning or care products used normally has either Alcohol, Petroleum, Acid, PTFE and many more METALTEC-1® Professional Liquid: Does not contain none of the above. Besides it's %100 Eco Friendly and %100 Synthetic Liquid. Once wiped cleaned or soaked in METALTEC-1® Professional Liquid, min. of 24 hours later the place where it has combined will protect the metal and cancel rust and corrosion issues till next time

## (C) ENGINE TRANSMISSION & FUEL

For every 1 litre of engine oil, adding 60ml METALTEC-1® Professional liquid.

For every 1 litre of trans oil, adding 60ml METALTEC-1® Professional liquid.

For every 70 litre of fuel adding 250ml METALTEC-1® Professional liquid.

- By adding METALTEC-1® Professional Liquid to fuel will decrease the usage of fuel and keep it clean and running smoothly.
- By adding it to Hydraulic fluid will increase and perform high quality and ease of use on hydraulic equipment's.
- By adding it to the engine oil, it will extend the life of the engine oil usage. It will keep the heat under control and by increase the life of the engine life.

## (D) LANDING GEAR & TAIL WHEEL

On landing gears and or the tires of the helicopters as METALTEC-1® we recommend to put a layer of METALTEC-1® Professional 3 or 6 Grease for the  $-30^{\circ}\text{C}$  +  $150^{\circ}\text{C}$  for cold or hot weather conditions and recommend one of the five different grease products for the ball joints to Wheel bearings.

## (E) TAIL BOOM & STABILIZERS

For stabilizers and tail booms it is highly recommended to use one of our 5 types of grease for its purposes.



## (F) WEAPONS

For weapons best look in weapons section for best results.



A

K

Transmission and hydraulic fluids can be used in many parts of the Ship's. As for hydraulic fluid it is recommended to use for every 20 litres adding METALTEC-1® Professional liquid 250ml will last the life time and performance in huge differences. Not only extending the life span of the fluid it will keep the equipment where the hydraulic is pumped thru and save on service and parts.

B

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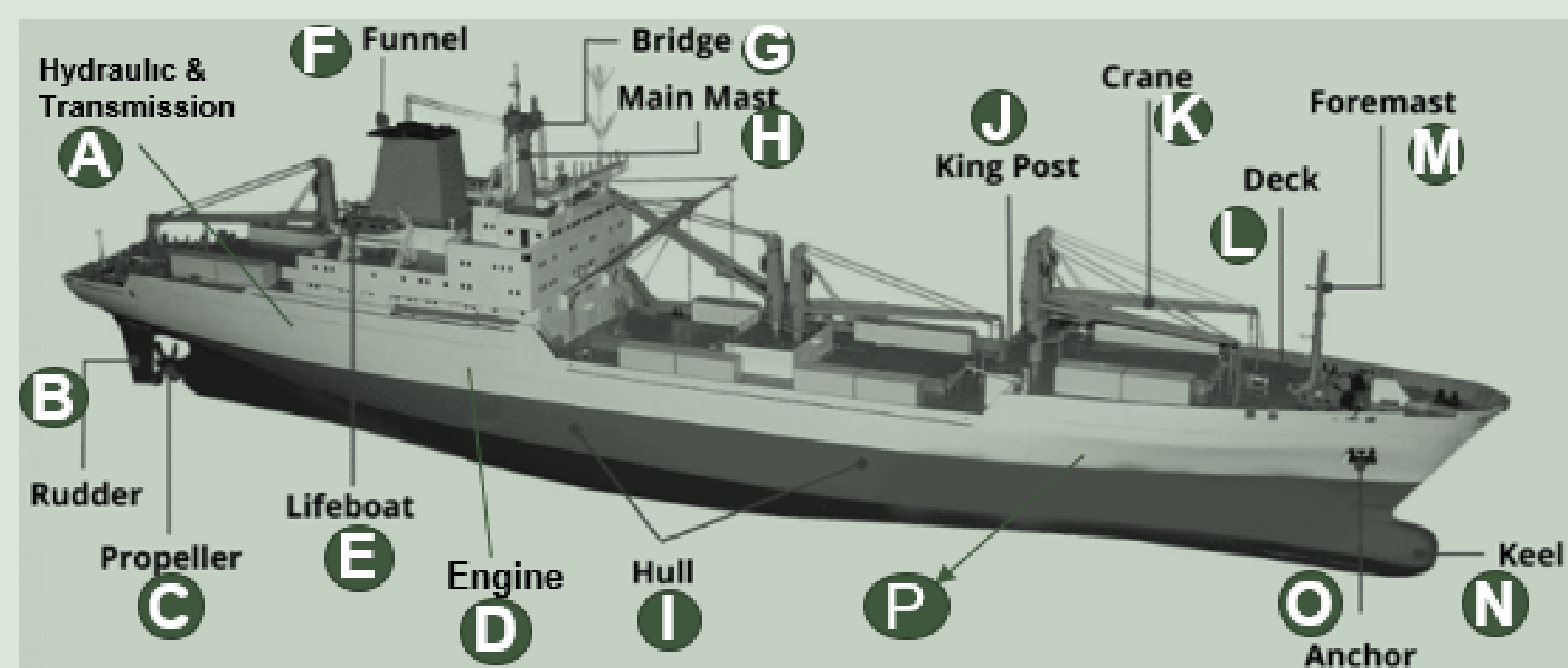
K

O

Our wide range of grease is perfectly suitable for all weather, environment and machines. Our lowest to highest centigrade for greases varies between -30°C +150°C -40°C + 180°C from Bearings to high speed electric motor bearings, lithium plastic lubricant for bearings, lithium plastic lubricant for central lubrication, lithium plastic lubricant with MoS2. Apart from grease METALTEC-1® Professional Liquid can be used on its own or mixed with the already used grease for high quality performance to rust free, from corrosion to water resistant. Most of all our METALTEC-1® Professional Liquid is %100 Synthetic and %100 eco friendly.

D

One of the most important if not the most is the engine of the ship. Due to movement and performance and the heart is the engine of the machine. For every 1 litre of an engine oil adding METALTEC-1® Professional liquid will not only produce quality performance it will keep the engine clean and the life span of the oil that has been used for minimum of Four times of next oil change. This will decrease the amount that is spent on changing oil to service, from spending money on oils to extending more time on sea rather than a port.



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By treating the unpainted, untreated metal frames, parts, from deck to Hull and Keel by METALTEC-1® Professional Liquid on a warm weather, will keep the treated area rust free even under water to extreme hot weather. Not only keeps it rust free it will longer last the treated area for a life span of the equipment. Most of all and most importantly, its %100 Eco friendly so their will be no environment hazard for the sea world.

P

According to our past and present customers from shipping industry there has been a test done (Company and request details hidden due to customer regulations on purchase). If a very small amount of METALTEC-1® Professional Liquid added to the fuel, savings of -7% - %15 is been performed.



Tanks are World wide military arm for a very long time in our history. It is one of the must of every country and every army for land vehicles. Since it is very important for a military its care must be in top shape. From the tracks of the Tanks to its Hatch for a driver, from its main gun ammunition to its Drive sprocket, mostly there is different types of grease used if not hydraulic liquids for a new era Tanks.

Because of its harsh use of environment, it is easy to rust or cause corrosion on harsh weathers. As for Road wheels causing wear and tear with pressure it causes friction problems. Plus not to forget the environment where it is used like; Desert, Storm, on or in water, snow the muddy environment.



NASA formulated and on its 5th generation our product METALTEC-1® Professional Liquid and our various grease products are easily over calm this product with ease. These instructions are same with heavy machines like Excavators, Cylinders, Trucks, Busses, Rocket launchers on trucks to every machines used on military grounds.

Note: Please look on descriptions on following pages for details of use.



# FIREARMS APPLICATION INSTRUCTIONS: SELF - LUBRICATION

## CHARACTERISTICS:

METALTEC-1® Synthetic METALTEC-1® Professional liquid has the unique ability to create a complex, molecular compound within the surface of heated gunmetal. This causes METALTEC-1® to become part of the metal, not merely a temporary coating or a boundary film. There are two main characteristics of this safe new compound. First, it seals and conditions the metal by stiffening (not hardening) the metal surface. Second, it makes the gunmetal self-lubricating under all environmental conditions.

## SELF-LUBRICATION:

After a complete application, a METALTEC-1® conditioned firearm is self-lubricating. Self-lubrication gives the firearm's gunmetal the dry lubricity that is required for sustained fire under all environmental conditions. If exposure to dust, sand, or extreme cold is a concern, all excess METALTEC-1® must be wiped away, leaving the firearm's surface metal clean, dry, and constantly lubricated.

*Please note:* Complete corrosion protection and self-lubrication is attained only after both Step One and Step Two (below) are completed.

## PREPARATION:

To take full advantage of METALTEC-1®'s unique properties, start with a clean firearm. Although METALTEC-1® contains a mild detergent that will help with subsequent cleaning, there are no solvents or other hazardous materials in METALTEC-1®, so it cannot remove old caked-on fouling and build-up from other lubes. Thus, if a firearm is dirty, you must clean it with a solvent before you proceed. Normal field strip cleaning should be perfectly adequate. If possible, remove the hand grips, clean and prepare.

## INITIAL TREATMENT:

Applying METALTEC-1® to a firearm for the first time is a two-step process: (1) Application and (2) Firing.

**STEP ONE: APPLICATION.** Now that the firearm is clean and dry, apply a light film of METALTEC-1® to all surfaces, including the bore. Burnish/polish METALTEC-1® into exterior surfaces by rubbing rapidly using a cloth lightly dampened with METALTEC-1®. Sparingly apply drops into the action, concentrating on springs, moving parts and metal-to-metal contact areas. If your firearm has a magazine, be sure to apply METALTEC-1® both inside and out. Leave a very light film of METALTEC-1® on all surfaces during reassembly. Now proceed to STEP TWO.

**STEP TWO: FIRING.** Once you fire your weapon enough times to reach operating temperatures, the heat and friction will activate TCTEK®, strengthening the bonding process that was started in Step One. While firing, METALTEC-1® creates a self-lubricating, water-repelling, dry compound within the gunmetal.

**Additional Application Instructions:** If Step Two is not immediately possible, consider applying low heat to the firearm to facilitate the bonding process until you can perform Step Two. In field conditions, place your lubed firearm in the sun underneath black plastic or a similar ventilated heat source for at least two hours. Alternatively, you may use a heat gun, hairdryer, burnishing or polishing tool to heat the gunmetal. In heat controlled environments, do not exceed 150°F (65°C). In all applications that require heat to condition the firearm, always insure proper ventilation and wear protective clothing. Please consult our MSDS for additional information.

**ULTIMATE PROTECTION:** To maximize the effects of METALTEC-1®, repeat Step One and Step Two while the firearm is still hot from the first firing session. TCTEK's impregnated molecular bond intensifies during the next 2-3 applications on hot gunmetal. METALTEC-1® has now become a physical part of the gunmetal.

**SUBSEQUENT APPLICATIONS:** It is important to continue using METALTEC-1® to lubricate your firearm throughout its normal service life. Consistent use of METALTEC-1® will maintain the self-lubricating effect, maximize corrosion protection, and minimize wear on all friction surfaces. Fouling, deposits and metallic debris do not adhere as easily to gunmetal surfaces conditioned with METALTEC-1®. Use a safe, inexpensive cleaner or solvent to detail the firearm, if necessary. For maximum corrosion protection, and especially if long-term storage is anticipated, leave a very light film of METALTEC-1® on all surfaces, after both steps or field application procedures are completed.

**APPLICABILITY:** METALTEC-1® is recommended for all pistols, shotguns, rifles, automatic weapons, tank guns and artillery of all calibers and sizes.

**Note:** METALTEC-1® will alleviate jamming due to tight tolerances.



# POLICE IN USE

US  
ARMY



NATO  
MILITARY



CZECH  
ARMY  
  
POLICE  
ARMED  
SECURITY



HIGH-TECH  
MILITARY  
NANO  
TECHNOLOGY



# WORLD WIDE MILITARY AND ARMS REFERENCE



## US MILITARY:

- SPECIAL RECOGNITION & AWARDS (MILITEC-1)
- DEPARTMENT of NAVY
- US COAST GUARD
- USAOPS
- BP MARINE
- BERETTA USA CORP



## CZECH ARMY:

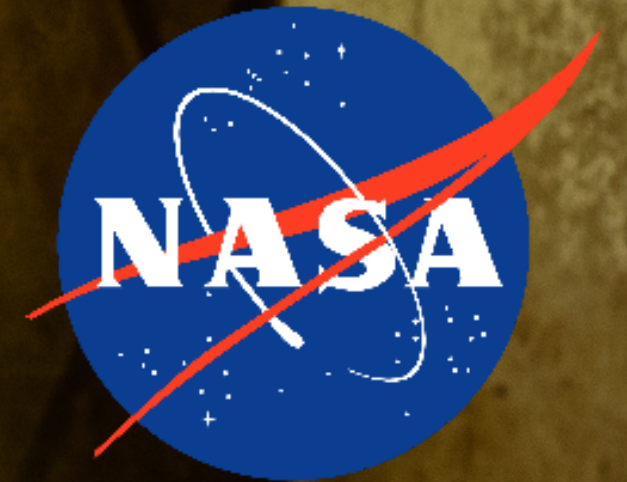
- CZECH ARMY USE
- CZECH FIRE DEPARTMENT
- POLICE
- ARMED SECURITY



## NATO:

- NATO STOCK NUMBERS

CONTENTS WILL BE  
GIVEN IN REQUEST  
DUE TO PRIVACY



# METALTEC-1® PROFESSIONAL LIQUID

01

Purchasing in large quantities will save as much as half or the retail price in markets and savings on delivery, tax and time.

02

Reading the instructions and following the descriptions will assure the performance stated by METALTEC-1®.

03

Ask for technical support from the METALTEC-1® company for the sight by Technical support team or go thru an induction by METALTEC-1®.

04

Using the product at the right area with right amount of quantity will guarantee the quality as stated by METALTEC-1®.

# THANK YOU

For more information please contact  
our distributor:



[www.range-technology.com](http://www.range-technology.com)

Main Supplier:



[www.tctek.com.tr](http://www.tctek.com.tr)

