MILITEC-1

Metal Condition Technique

Developed by US Navy & NASA

From 1989

PLS 千兆國際有限公司 Power Link System International Co.

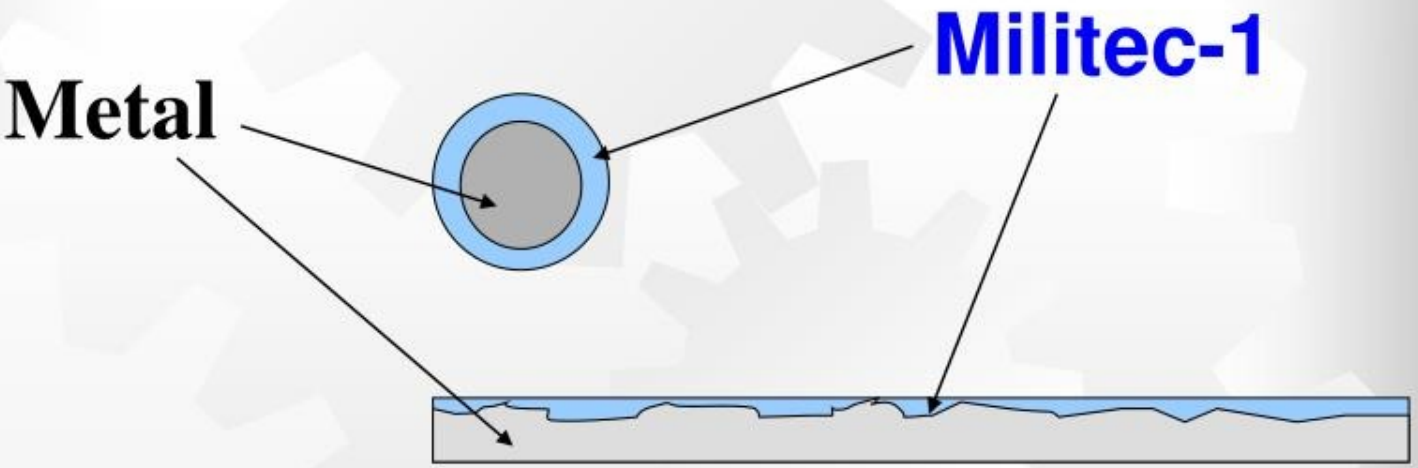
MILITEC-1

What Product Concept is the Militec-1, we are selling

Militec-1 is compound metal

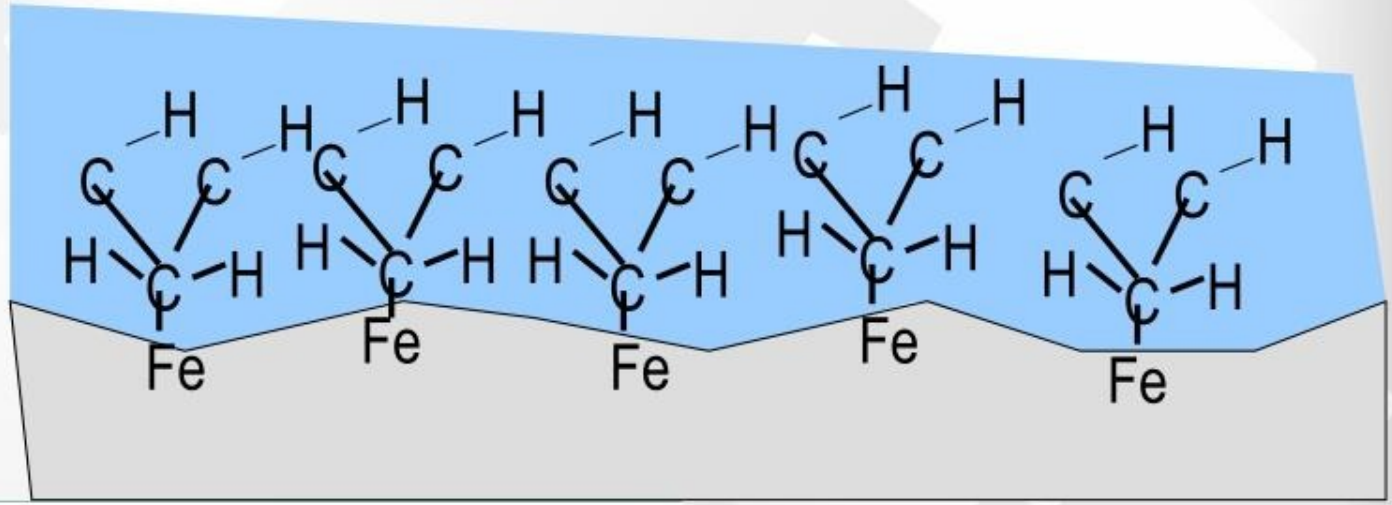
not an engine oil only

Militec-1 is applied to metal surface, it chemically reacts with, and is absorbed by, metal. The chemical reaction takes place at 38 ℃- 66 ℃ . The reaction stiffen metal surface, and tightly surround the metal.



MILITEC-1

- **Extreme Pressures**
- **Chemical Reacted**
- **Unsurpassed Lubricant**



MILITEC-1

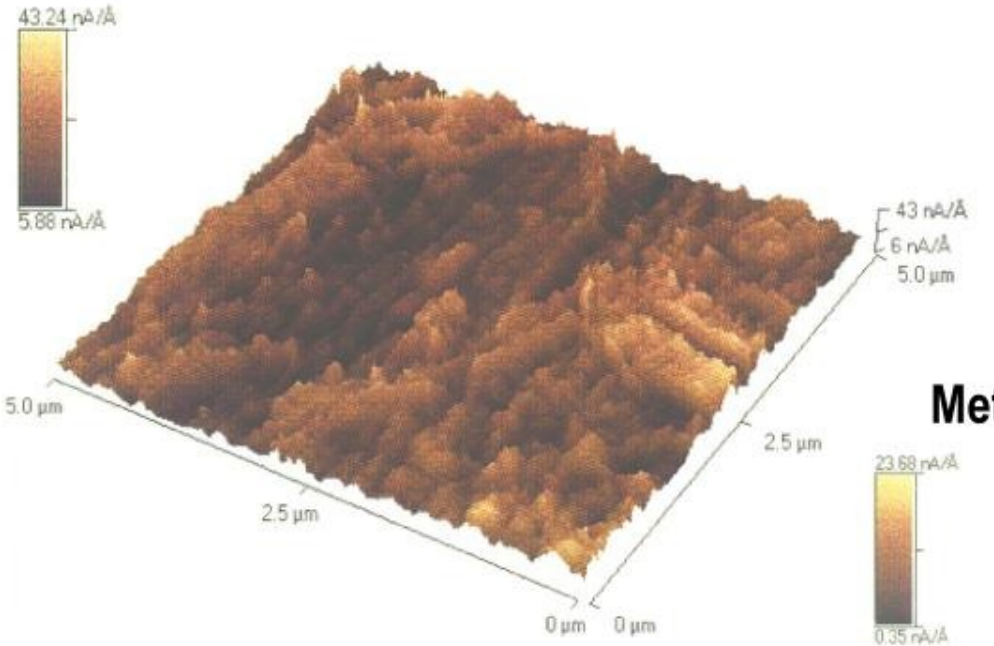
INCREASE

Stiffness of the metal by 17 Times

Metal Surface Test of Militec-1

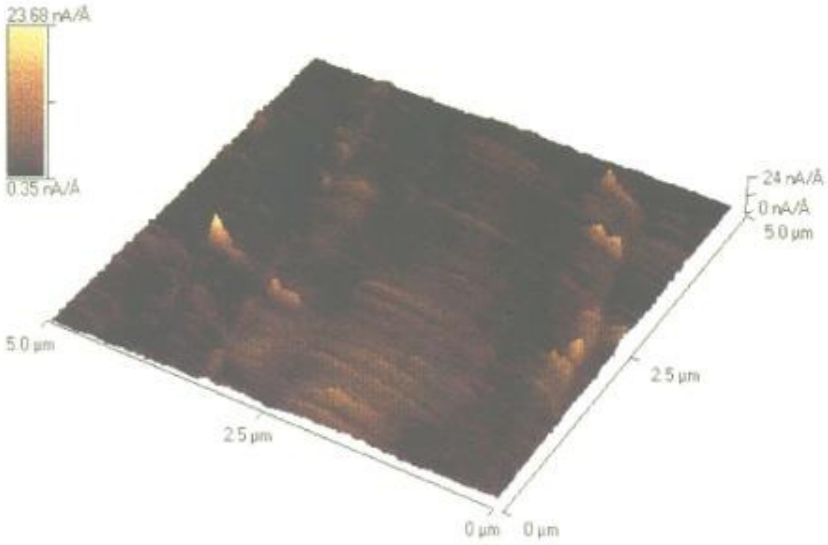
- **Laboratory :** Materials science Laboratory of University of florida
- **Metal Used :** Carbonized 8620 , Hardness rockwell C58-63
- **Item Tested :** Metal surface analysis by
  1. Scanning Probe Michroscopy
  2. Infrared Spectroscopy
- **Metal Treatment :** A film of the Militec-1 was applied to the metal surface of the testing sample and was heated at 104 ℃ for 50 minutes. The metal was allowed to cool to ambient temperature ane the remaining Militec-1 oil was wiped off.

What You see the Militec-1
by Automatic Force Microscopy



Metal Surface treated by Militec-1

Metal Surface not treated by Militec-1



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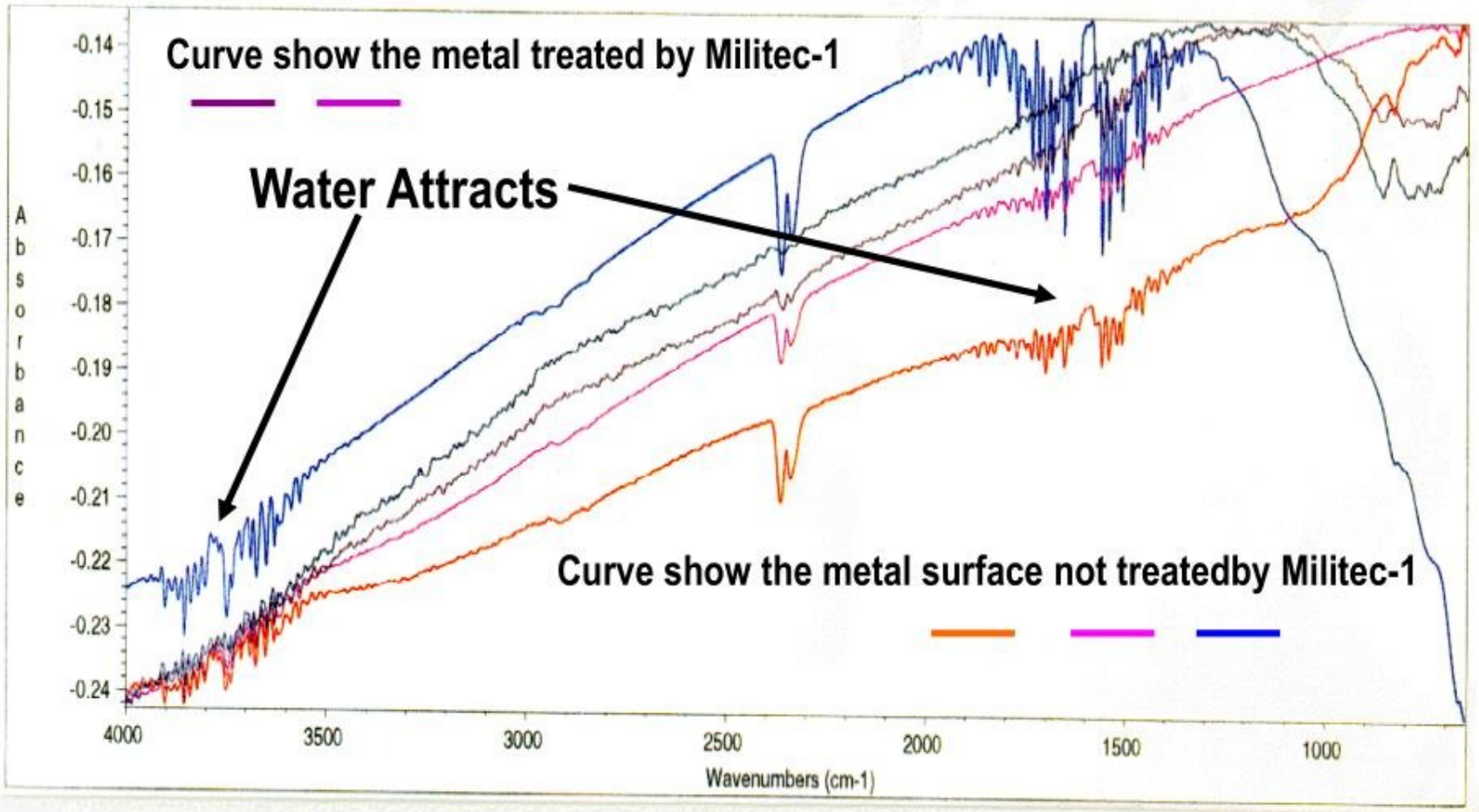
Metal Surface Analysis
by infrared spectroscopy



Benefits of Militec-1

- 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 MILITEC-1-protected surfaces.

What is in Militec-1

- Unique, Pure, Uniform Single Substance
- Synthetic-based Hyrocarbon Derivative
- Completely stable liquid
- Compatibility to all type of the basic lubricant, engine oil, freezing oil, and coolant R11,R22,R134A
- Not contain chlorinated paraffin, TFE,fluorine,solvents, carrier oils, viscosity enhancer, metal, molybdemun disulfide zinc, sulfur, graphite powders or other solids

How to use Militec-1

- **ADD-to-Oil : Militec-1 is easily added into most of the oil. The oil will carry the Militec-1 to reach metal for reaction**
- **Pre-Coating : If no oil environment, Militec-1 is recommended to be pre-coated on metal surface**

Militec-1 is added to oil

BUT not an oil additive

oil is a carrier to reach metal

Militec-1 Treatment Guideline

Diesel / Gasoline Engine	2 Ounces Per Quart/ Liter
Transmission ：Manual	2 Ounces Per Quart/ Liter
Automatic	1 Ounces Per Quart/Liter
Power stiring	1 Ounces Per Quart/Liter
Gear Box, Gear Reducer, Crankcase	2 Ounces Per Quart/Liter
Bearing Shaft	Mix Militec-1 (30%) with grease
Air Compressor	3 Ounces Per Quart/Liter
Air Condition / Freezer system	2 Ounces Per Ton / Refrigeration Capacity
Hydraulic Machine	8 Ounces to every 5 gallons
Metal machining	Pre-coation by treated by Militec-1 and pre-heated (60℃) for 30 minutes and over

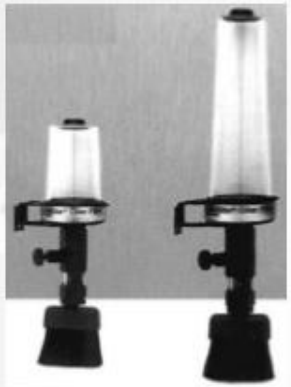
Pre-Coating DIP-POT

Pre-Coating Procedure

Pre-heated Oven (90 ℃)

Metal parts dipped into Militec-1 pot (60 ℃) for at least 30 minitues

Chain and Metal plate brush



Auto Oil Supplier

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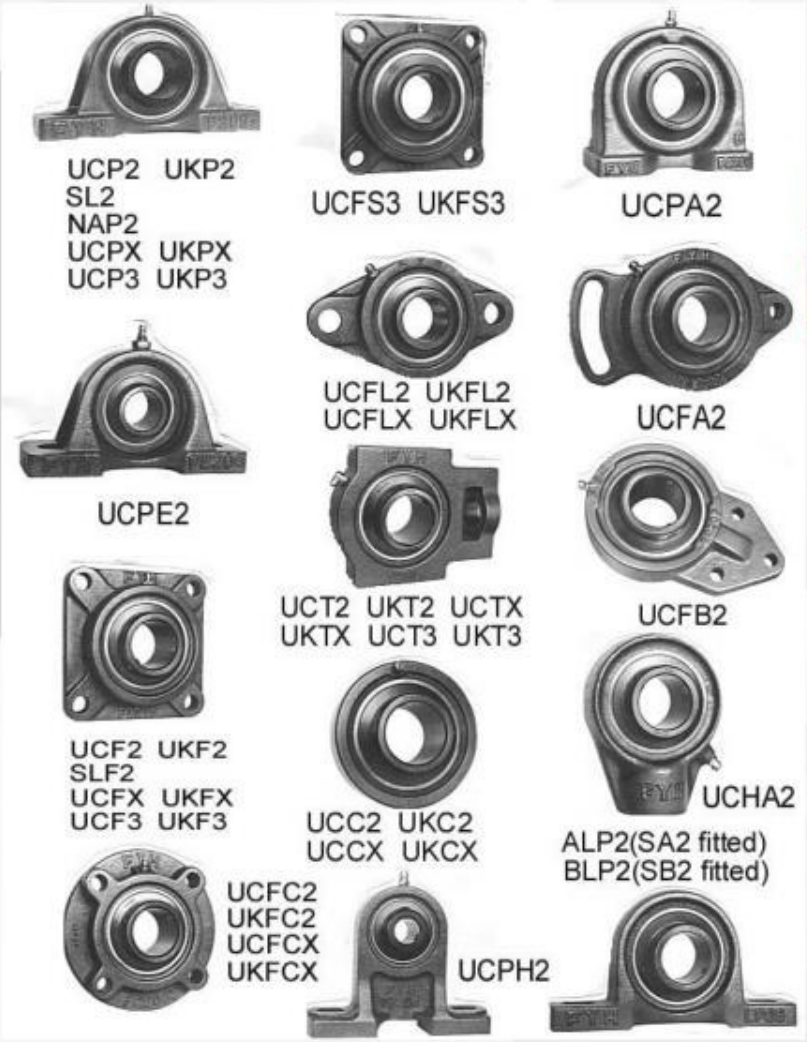
MILITEC-1

Militec-1 Treatment

BEARING and HOUSING



Pre-Coating Militec-1 before assembly

Add Militec-1 by injection into bearing when bearing is in operating

1. The **Maryland Transit Authority** ran several successive tests of MILITEC-1 over the course of nearly **six years**. They initially started with only seven Flxible Transit Buses. However, positive results caused them to widen the scope of the tests until there were finally 302 busses involved.

Test results were reported in two categories: engine wear metals as determined by oil analysis; and numbers of engines requiring replacement. Engine oil analyses in the MILITEC-1 treated busses showed **63% less iron and 79% less copper**.

In the control fleet, **95 busses required engine replacements**. However, in the MILITEC-1 fleet **only 25** busses required engine replacements. **The MILITEC-1 fleet required 70 fewer engine replacements than the control fleet.**

The cost of **one** replacement engine is about $18,000. The cost to treat the fleet with MILITEC-1 is about $20,000. The benefits of using MILITEC-1 are obvious.

At the conclusion of the tests, the Quality Assurance Specialist in charge recommended that MILITEC-1 be adopted for use in the entire fleet of the state of Maryland.

2. The **State of Pennsylvania Transit Authority (SEPTA)** conducted a test to determine the effect of MILITEC-1 on engine wear metals. Specifically, they wanted to determine if MILITEC-1 would affect the concentration of iron, lead and copper in busses whose engines showed high concentrations of these metals in their waste oil. **High levels of engine wear metals in the waste oil are an indication that the engines are old, tired, and will need to be rebuilt soon.** After obtaining an adequate baseline, MILITEC-1 was added at the ratio of 2 oz. per liter of engine oil and meticulous oil analysis records were kept at 3,000 mile (4,800 Km) intervals for the next 15,000 miles (24,000 Km). During that time, regular oil changes were performed, but no new MILITEC-1 was added. At the end of the test, the fleet averages were: **Iron reduced 60%; Lead reduced 58%; Copper reduced 44%**. In addition to the impressive reduction in engine wear metals, it was noted that the effect continued to intensify throughout the entire test, showing that **MILITEC-1's abilities remained intact even through successive oil changes.**

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密力鐵的應用範圍

車輛、船舶等交通工具

- 各式汽(機)車、船舶，在汽(機)車部分，可以加入引擎及齒輪箱變速油、動力方向機油、軸承及萬向接頭

- 在船舶部分，可以加入引擎傳動盒、排泥幫浦、發電機、水幫浦及壓縮機中，船舶引擎長時間處於嚴苛的海水環境中

密力鐵的應用範圍

工業用途

- 液壓系統、冷凍設備、空調系統、空壓機及氣動工具、綜合加工機、精密模組、線切割機、沖床、銑床、磨床、車床、鋸床、鑽床、雕刻機、鍛鑄機械、鉋床、深孔加工機、攻牙機、軸承、滾珠螺桿
- 任何金屬摩擦的地方

密力鐵的應用範圍

軍事／槍械

- 槍械(砲)潤滑、防銹、封存
- 運輸車輛
- 工事(兵)推挖吊機械、板車
- 發電、給水有關設備
- 戰鬥車輛
- 船艦引擎動力有關設備
- 製造加工機器刀具工具