

What is TriboTeX?

TriboTeX is a clean-tech startup commercializing proprietary synthetic nanoparticle based environment-friendly lubricating additive technology. Our goal is to provide clean and safe lubricating additives that vastly improve efficiency everywhere friction takes place; not only reducing friction and wear, but effectively reconditioning moving parts to a like-new condition during normal operation.

Two-Sided Nanoparticle:

Chemically Inert

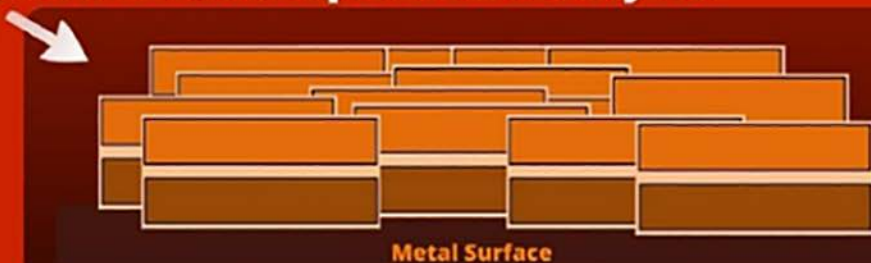
Will Always Be Slippery

Chemically Active

Attaches With Pressure

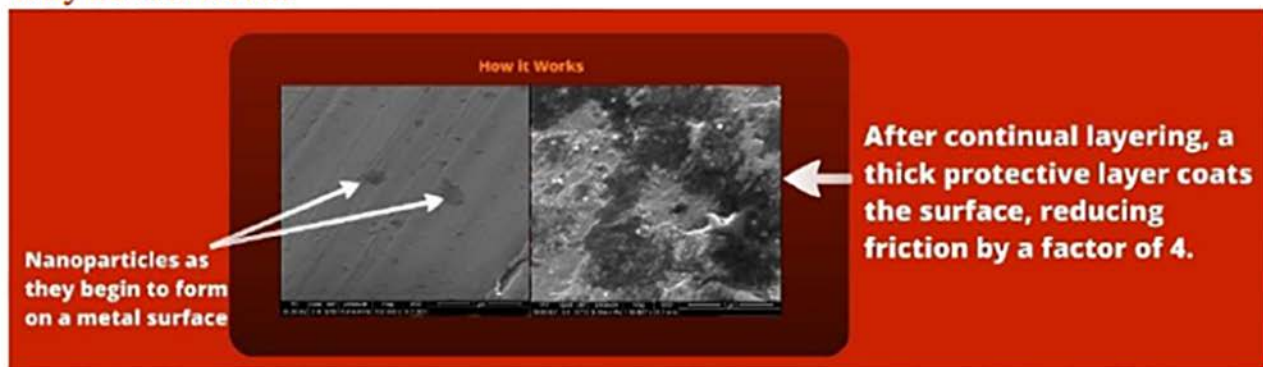
The company's synthetic, inorganic, natural rock derived nanoparticle-based friction modifiers improve the tribological properties of existing mechanisms through the formation of a protective coating on friction surfaces *in-situ*, effectively reversing the wear process.

Particles form a protective layer:



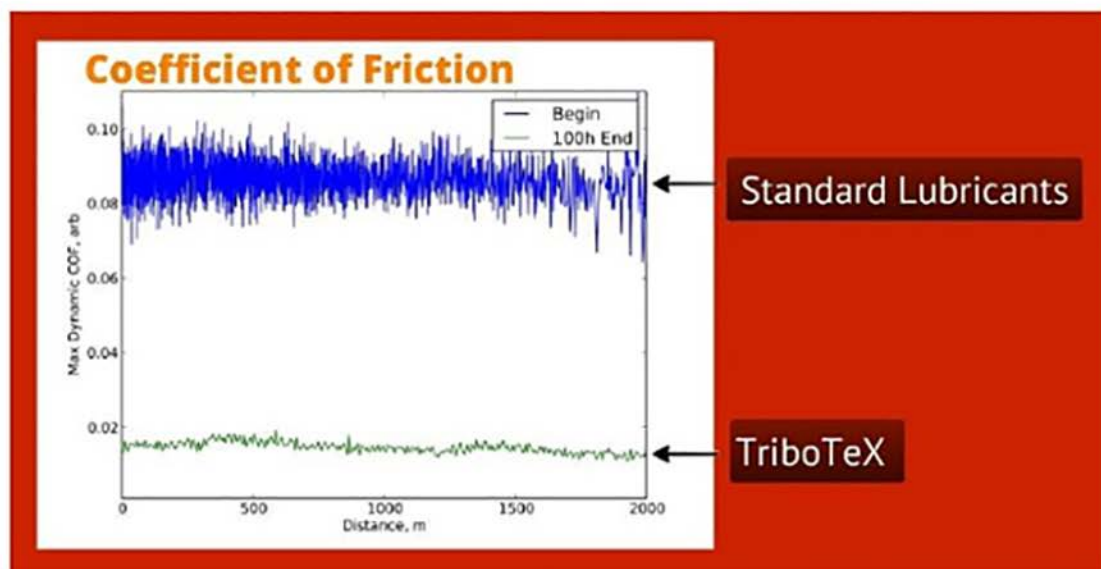
- Fills in the surface's grooves
- Reverses damage caused by friction
- Reduces further friction.

Why does it work?



Our solid inorganic nanopowder demonstrates:

- Reduction of friction in boundary lubrication: 0.02 and declining.
- Surface roughness declines due to formation of tribogenerated layers on the surface that extend mixed lubrication regime.
- The tribogenerated particle layers are several microns thick so wear is not slowed down but compensated by the generation of particle layers.
- Independent tests have shown positive effect at temperatures up to 400C which is above the flash points of most oils.
- Tests have also shown excellent corrosion and moisture resistance of both source material and formed film



Who are the clients?

While TriboTeX has performed beautifully in a lab setting, it has yet to be field tested. Our initial target industry, therefore, is wind energy; wind energy provides a unique opportunity for testing TriboTeX's performance in relation to power output increases and turbine life extensions. In this industry, TriboTeX can lower costs of maintenance/repair, reduce the amount of lost revenue caused by repair downtime, increase power output per turbine, and extend the life of a wind turbine gearbox: all with a simple drop-in application. Once proven in the field, our unsystematic risk will be reduced dramatically, enabling TriboTeX to be applied to a wide variety of applications and industries.

Where are its applications?

TriboTeX applications include, but are not limited to:

- **Engine Turbine Manufacturing**
 - Wind Turbine Manufacturing
 - Automobile Engine Manufacturing
 - Aircraft Engine Manufacturing
 - Train, Subway and Transit Car Manufacturing
 - Conveyor Belt Manufacturing
 - Maritime Transit Vehicle Manufacturing
 - Military Transit Vehicle Manufacturing
- **Engine Maintenance and Repair**
 - Wind Turbine Maintenance and Repair
 - Automobile Maintenance and Repair
 - Aircraft Maintenance and Repair
 - Transit Line Maintenance and Repair
 - Conveyor Belt Maintenance and Repair
 - Maritime Transit Vehicle Maintenance and Repair
 - Military Transit Vehicle Maintenance and Repair
 - Other Shipping and Transportation Maintenance and Repair
- **Lubricant Manufacturing**
- **Iron & Steel Manufacturing**
- **Weapons Maintenance and Repair**
- **Hydropower Maintenance and Repair**
- **Plastic and Resin Manufacturing**
- **Ball Bearing Manufacturing**
- **Industrial Equipment Maintenance and Repair**