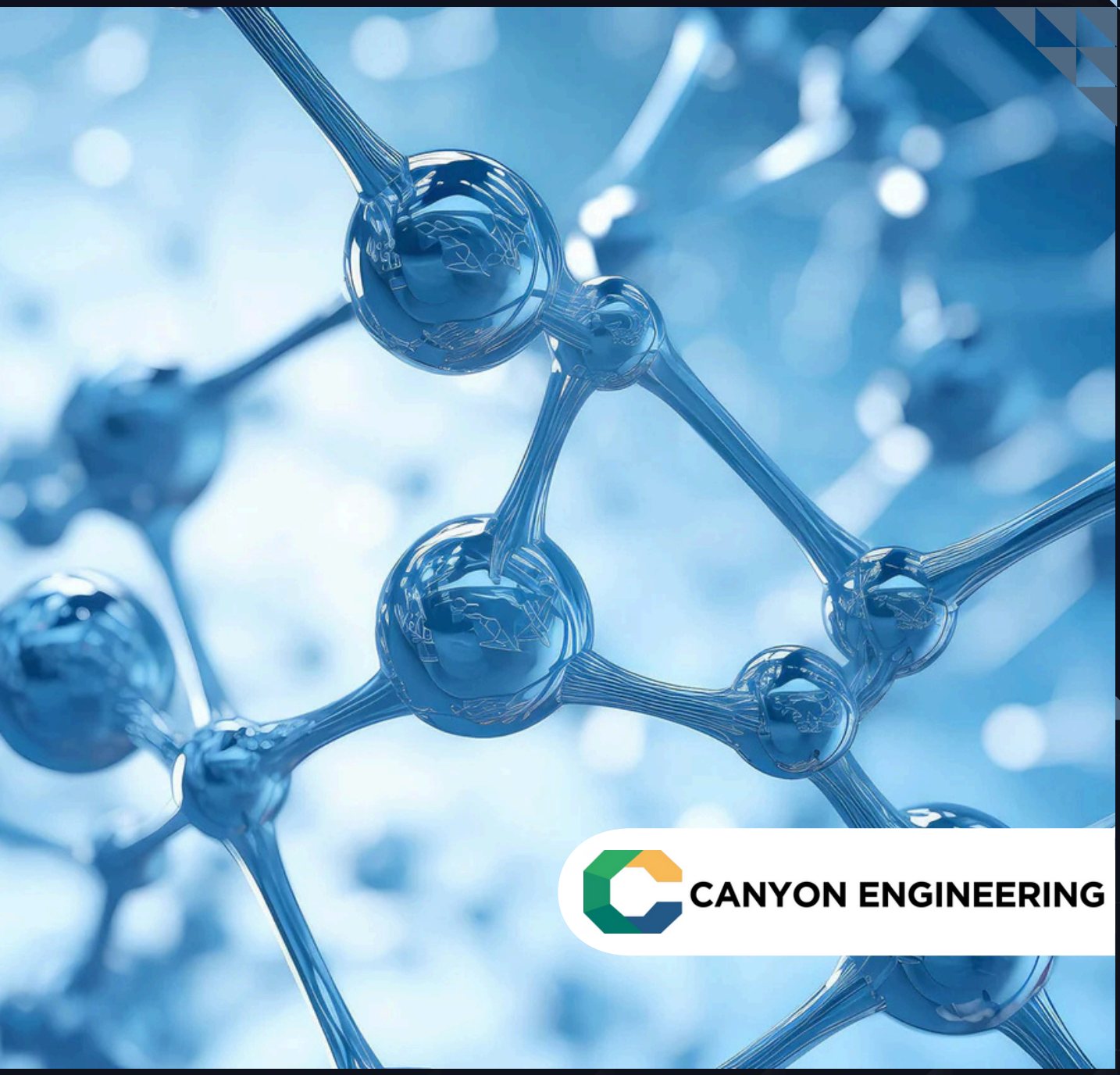


CANYON ENGINEERING

NANOTECHNOLOGY SOLUTIONS

Discover the Power of Nanoscale Innovation — Engineered for the Future

TABLE OF CONTENTS

Canyon Engineering NanoTech 01

Revolutionizing Materials Science 02

Unmatched Versatility for Industries 03

The Power of Nanotechnology 04

Applications and Advancements 05

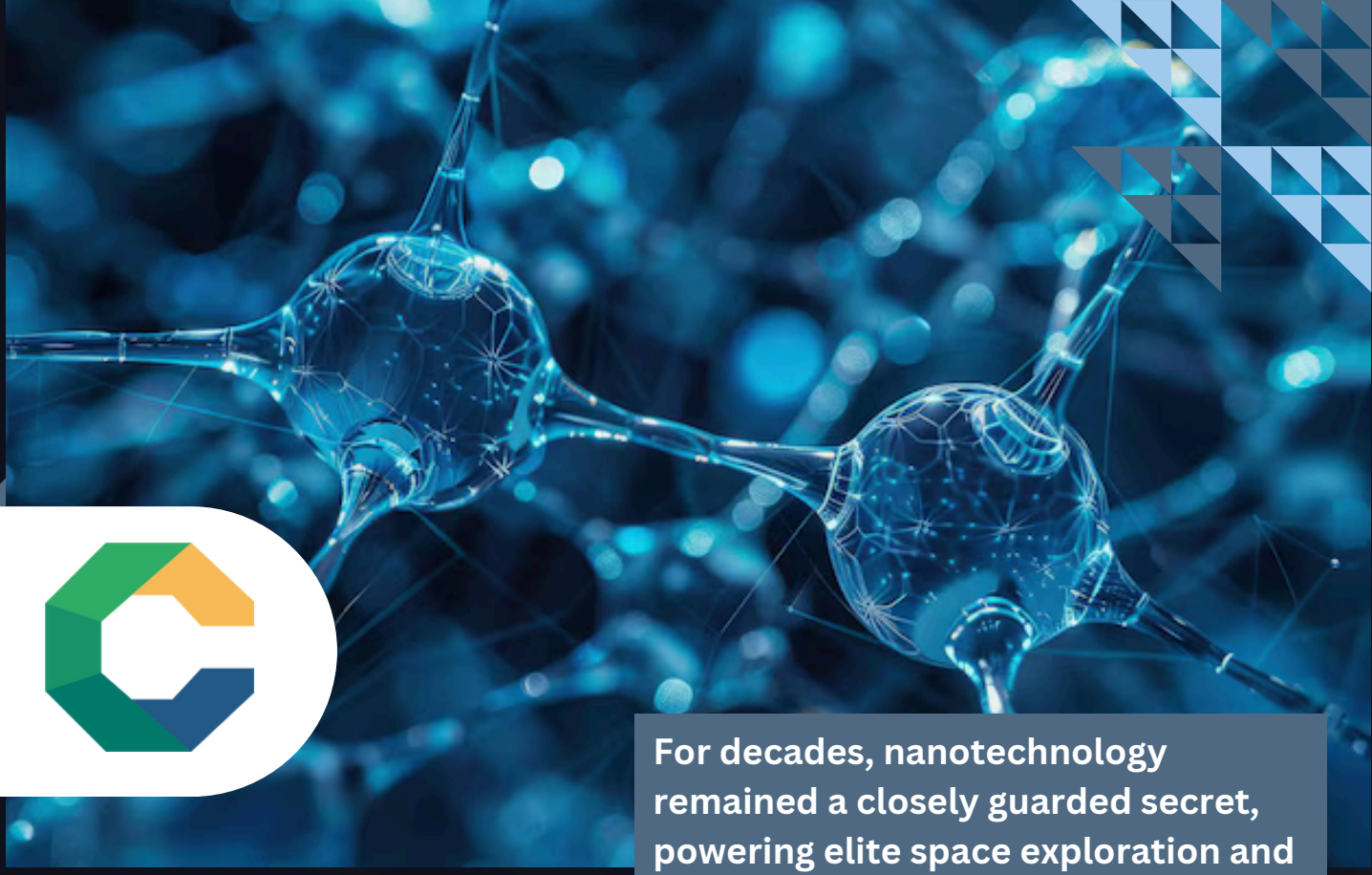
A Future Fueled by Research 06

Our Nanotechnology Products 07

Industrial Applications 08

User Case Studies 09

Contact Us 10



For decades, nanotechnology remained a closely guarded secret, powering elite space exploration and military programs in the world's most developed nations.

Today, Canyon Engineering is at the forefront of bringing this transformative science to industries and applications across the globe. efficiency and sustainability.

CANYON ENGINEERING
NANOTECHNOLOGY

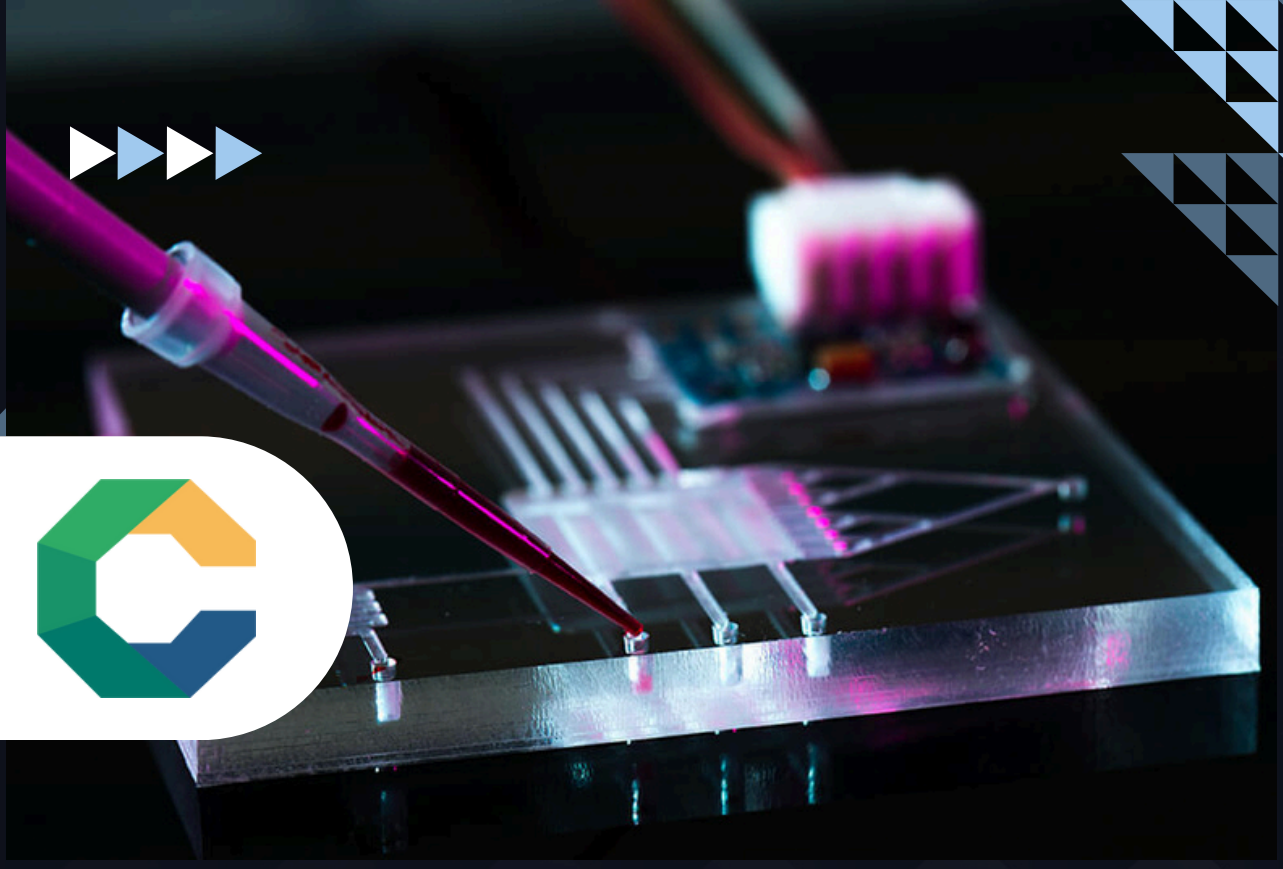
At Canyon Engineering, we specialize in the development and application of different types of nanomaterials. Central to our innovation is the use of special nanomaterials, which have opened new frontiers in extreme-performance lubricants, coatings, and polymer composites.

Our cutting-edge nanomaterials are designed to enhance industrial performance across multiple sectors. Our expertise lies in harnessing the unique properties of nanotechnology to engineer next-generation solutions that significantly improve efficiency, durability, and sustainability. We have revolutionized the fields of extreme-performance lubricants, coatings, and polymer composites. These materials, owing to their nanoscale structures, exhibit extraordinary mechanical strength, thermal stability, and friction-reducing capabilities, making them indispensable for high-stress industrial applications.

Revolutionizing Materials Science

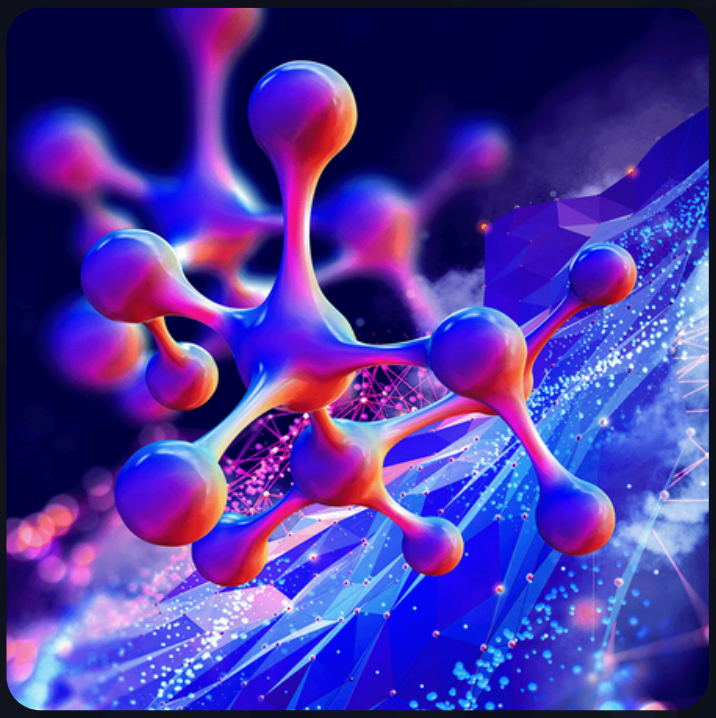
In the ever-evolving landscape of material science, nanotechnology stands as a groundbreaking innovation, redefining the limits of performance, durability, and efficiency. By engineering materials at the molecular and atomic levels, nanotechnology has enabled the creation of substances with extraordinary mechanical, thermal, and chemical properties. This technological advancement has opened new frontiers across various industries, from aerospace and automotive to energy and defense, where materials must withstand extreme conditions while maintaining superior strength and longevity.

Nanotechnology enables the manipulation of material structures at the molecular level, unlocking entirely new properties that were previously unattainable. Materials enhanced with nanotechnology can be made stronger, lighter, and more durable, allowing them to outperform traditional alternatives in demanding applications.



UNMATCHED VERSATILITY FOR INDUSTRIES

The potential of Canyon Engineering's nanotechnology spans diverse industrial sectors. Our advanced solutions are already driving innovation in industries such as defense, mining, and metalworking. For example, in defense applications, our nanomaterials enhance the reliability and operational life of critical machinery exposed to extreme stress.



The Power of Nanotechnology

The benefits of nanotechnology extend beyond traditional materials science. Canyon Engineering's nanomaterials exemplify this versatility by addressing specific industry needs, from creating energy-efficient lubricants to engineering corrosion-resistant coatings.

APPLICATIONS AND ADVANCEMENTS

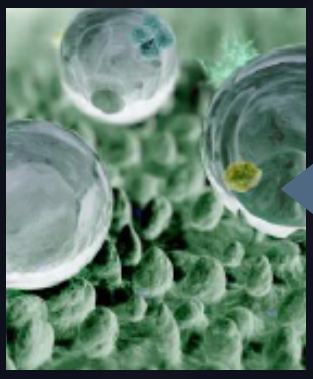
Canyon Engineering's nanotechnology forms the foundation for innovative solutions

- **Anti-wear and anti-friction oil additives for extreme pressure (EP) applications**
- **Fully formulated EP oils and greases to enhance operational efficiency**
- **Dry nano coatings provide long-lasting protection against friction and wear**

The versatile applications of nanotechnology extend beyond traditional industries. From military machinery to precision-engineered components, our nano-enhanced solutions are at the forefront of durability and reliability in high-stress environments.

OUR NANOTECHNOLOGY PRODUCTS

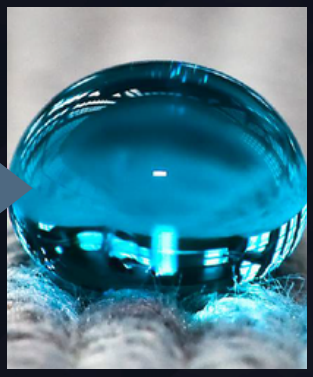
At Canyon Engineering, our mission is to harness the potential of nanotechnology to revolutionize industrial and automotive performance. Our dedicated team of scientists continues to explore new applications for special nanoparticles, from military equipment to advanced manufacturing processes.



Home Line Nanotechnology

Nano System PSL

Nano System TNW



Nano System GC

Nano System MS

Nano Additives

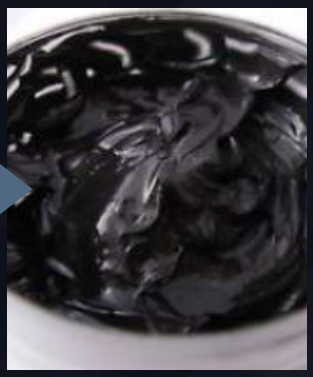
PIONEERS IN NANO INNOVATION

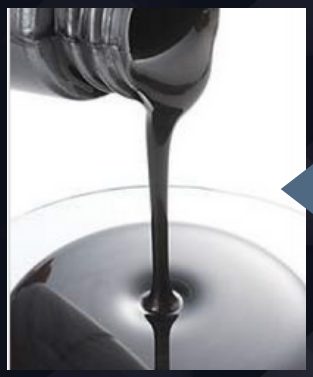
At Canyon Engineering, we are the trailblazers in inorganic nanotechnology, pioneering groundbreaking advancements that have redefined industry benchmarks. We have successfully commercialized multi-layered, spherical, and tubular nanostructures derived from inorganic compounds.

Nano System HC 3.5

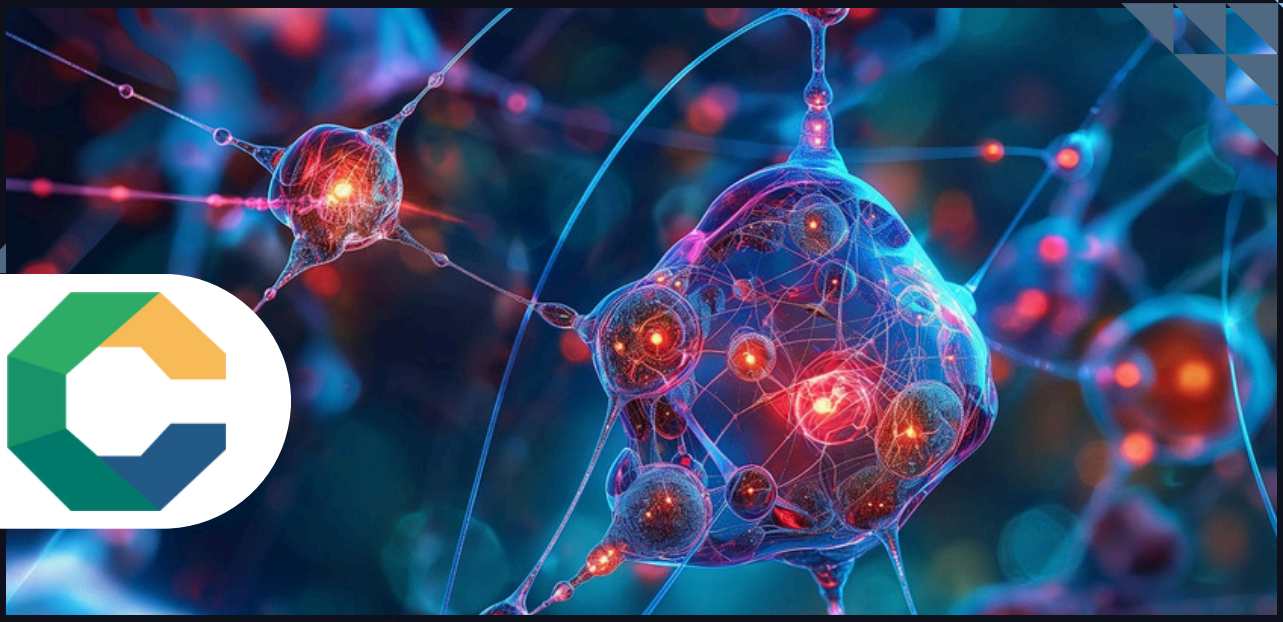
Nano System Black Knight 3.5

Nano System Grease





Nano System 6.0



OUR NANOTECH

1. Home Line and Professional Nanotechnology

At Canyon Engineering, we bring the transformative power of nanotechnology into everyday homes. One of the most remarkable advancements we deliver is the integration of ultrahydrophobic surfaces. These surfaces, also referred to as superhydrophobic, exhibit extreme water resistance, making them virtually impossible to wet.

2. Nano System PSL

Canyon Engineering proudly presents Nano System PSL, an innovative surface protection solution designed specifically for stainless steel, painted metals, plastics, plexiglass, and lacquered surfaces.

Nano System PSL forms an ultra-thin, invisible layer with extraordinary oleophobic and hydrophobic properties, effectively repelling oil, water, and dirt. This advanced coating prevents surface adhesion, making cleaning easier and preserving the material's pristine condition.

3. Nano System TNW

Canyon Engineering's Nano System TNW is a cutting-edge nanotechnology solution designed to deliver unparalleled

protection to materials such as textiles, suede, paper, paperboard, and natural wood.

This advanced nano-coating combines superior hydrophobic and oleophobic properties to safeguard materials against stains, spills, and environmental wear, without altering their natural texture, color, or functionality.

By creating an ultra-thin, invisible protective layer, Nano System TNW enhances the longevity and cleanliness of treated materials, offering a durable solution for various applications

4. Nano System GC

Advanced Protection for Glass and Glazed Ceramics - Unveiling Next-Level Surface Protection

Canyon Engineering's Nano System GC offers revolutionary protection for glass and glazed ceramic surfaces, transforming their durability, cleanliness, and functionality. Designed with advanced nanotechnology, Nano System GC creates an invisible, UV-resistant shield that safeguards against dirt, water, and environmental contaminants.

This cutting-edge coating enhances surface performance by reducing cleaning efforts while maintaining a pristine appearance.

5. Nano System MS

Advanced Nano Protection for Porous Mineral Surfaces - Revolutionizing Surface Protection

Canyon Engineering's Nano System MS delivers cutting-edge nanotechnology for the protection of porous mineral surfaces such as concrete, natural stone, terracotta, and facades.

Designed for surfaces with high absorption characteristics, Nano System MS creates an ultra-thin, invisible layer that shields against water, oil, and impurities, offering a self-cleaning effect.

6. Nano Additives

Nano Additives - Revolutionizing Lubricants, Coatings, and Composites

At Canyon Engineering, we are at the forefront of inorganic nanotechnology, driving innovation that redefines industry standards.

We have revolutionized performance, durability, and efficiency across heavy industries. Our cutting-edge nanomaterials are engineered to withstand extreme pressures, temperatures, and environmental conditions, significantly reducing friction, minimizing wear, and extending the lifespan of critical machinery components.

7. Nano System HC

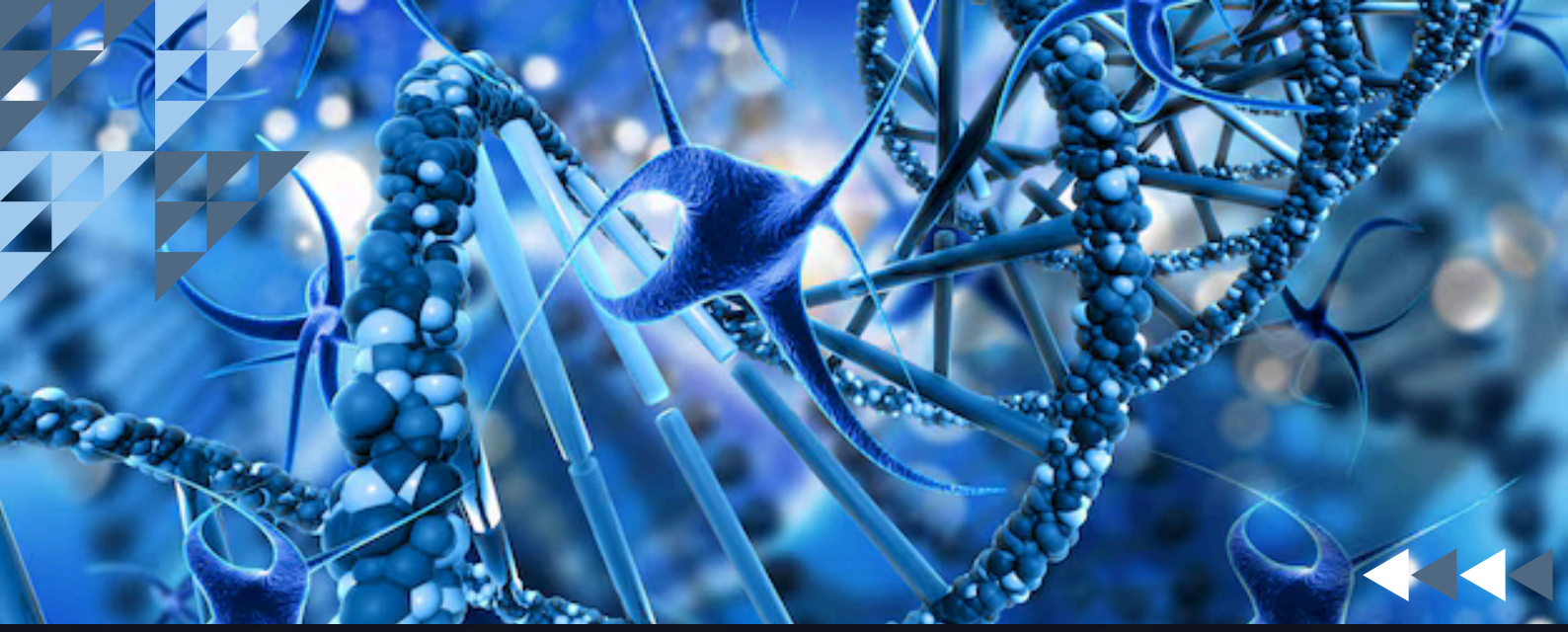
Canyon Engineering's Nano System HC 3.5 represents the latest generation of resources on the basis of hybrid nanomaterials for thin-layer protection of metal surfaces. It is characterized by exceptional anti-friction, anti-wear, anti-corrosion and heat-resistant properties.

8. Nano System 6.0

Canyon Engineering's Nano System 6.0 represents the latest generation of special nano product characterized by exceptional anti-friction, anti-wear and heat-resistant properties.

9. Nano System Grease

Canyon Engineering's Nano Grease is an affordable, super strong, multipurpose solution for a wide range of EP applications.



Under extreme pressure conditions, the solid particles bond to the surface of the metal, lowering friction and wear while providing outstanding load-bearing capabilities.

10. Nano System 3.5

Canyon Engineering's Nano System 3.5 is a new generation fully formulated oil, based on nano-sized inorganic nanomaterials engineered to provide outstanding load-bearing anti-wear and ultra-low friction.

Applications Across Industries

The unique properties of Nanotechnology make them invaluable across a variety of industries. From advanced lubricants that improve the performance of engines, bearings, and gear systems to coatings that protect industrial surfaces, the potential applications are vast.

INDUSTRY APPLICATIONS

Canyon Engineering's cutting-edge nanotechnology solutions deliver superior protection, lubrication, and efficiency, ensuring that industries operate at peak performance with minimal downtime and maximum cost savings

Bearings

Nano System 3.5 and Nano System 6.0 form an antiwear and friction-resistant nanocoating on bearing surfaces, significantly reducing wear and extending lifespan in high-load environments.

Gears & Gear Boxes

Nano System 3.5 nanoparticles act as self-repairing lubricants, reducing heat, friction, and energy loss in gear mechanisms, extending service life and improving efficiency.

Fleet Management

Nano Additives in lubricants enhance engine efficiency, reduce fuel consumption, and lower maintenance needs for truck and bus fleets, ensuring optimal performance in demanding conditions.

Heavy Machinery

Nano System HC 3.5 protect hydraulic systems, pistons, and metal components from corrosion, wear, and extreme pressure conditions, ensuring reliability in rugged industrial operations.

Conveyor Systems

Conveyor systems endure constant friction and heavy loads, leading to wear, inefficiencies, and frequent maintenance. Nano coatings provide a game-changing solution by forming an ultra-thin, durable protective layer that reduces surface roughness.

Metal Forming

Nano System HC 3.5 creates a protective nano-layer on dies and molds, reducing friction, improving material flow, and increasing tool lifespan in high-precision metal forming processes.

INDUSTRY APPLICATIONS

Mining

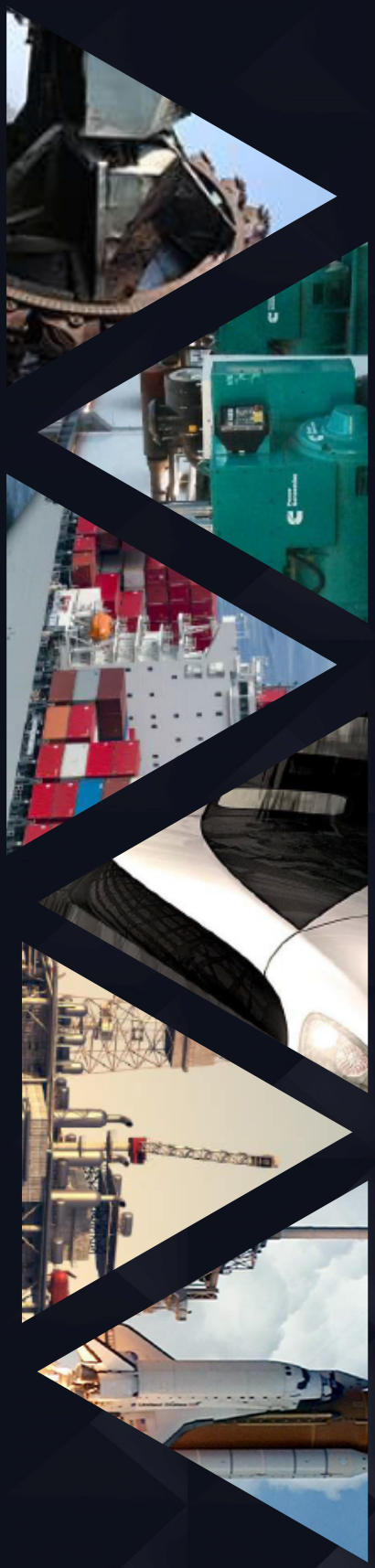
Nano System HC 3.5 provide extreme pressure resistance in drilling, excavation, and crushing machinery, reducing downtime and improving operational efficiency in harsh mining environments.

Moving Freight

Moving freight operates under extreme conditions, where friction, wear, and fuel efficiency are constant challenges. Nano additives can enhance these systems by reducing metal-on-metal contact, lowering friction, and protecting critical components from wear and corrosion.

Oil & Gas

Nano System 3.5 and Nano System 6.0 enhances drill bit lubrication, reduce friction under high pressures, and protect components against corrosion, maximizing efficiency in oil and gas operations.



Power Generation Plants

Nano Additives improve turbine lubrication and heat resistance, reducing wear and increasing energy efficiency in generators, steam turbines, and mechanical pumps.

Railroad

Nano System PSL, PSL 3.5 and HC 3.5 protects locomotive components and rail infrastructure against friction, rust, and debris accumulation, ensuring smooth operation and extended service life.

Space & Defense

Nano System HC 3.5 and 6.0 provide advanced lubrication and thermal stability for aerospace and military applications.

INDUSTRY APPLICATIONS

Steel Mills

Nano System HC 3.5 and Nano System 3.5 improve wear resistance in rolling mills, presses, and cutting tools, reducing maintenance needs and increasing productivity.

Trucks & Buses

Nano Additives enhance fuel efficiency, reduce engine friction, and improve longevity of moving parts, lowering operational costs for commercial transport fleets.

Wind Turbines

Nano System 3.5, HC 3.5 and Nano Additives reduce friction and wear in turbine bearings and gearboxes, enhancing energy efficiency and extending the lifespan of wind energy systems.

USER CASE STUDIES

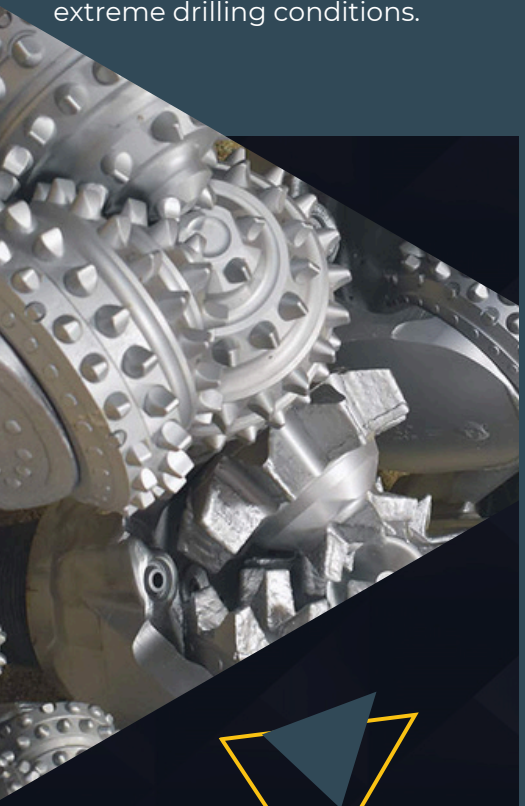
Case 1

Nanotechnology-Driven Solution

Enhanced Surface Treatment

Using nanotechnology, drill bits can undergo advanced surface treatment techniques, such as:

- **Nanocoatings**: The application of wear-resistant nanocoatings (e.g., tungsten carbide, titanium nitride, or graphene-enhanced coatings) significantly reduces friction and increases resistance to abrasion and corrosion.
- **Nanostructured Alloys**: Embedding nanoparticles in the bit surface enhances toughness, thermal stability, and overall performance under extreme drilling conditions.



Case 2

A Saudi Arabia-based oil and gas operator adopted nanotechnology to refurbish scrapped drilling bits. By applying nanocoatings, they:

- Increased the lifespan of drill bits from 300 hours to 540 hours (80% improvement).
- Refurbished and exported over 5,000 drill bits annually to African markets, generating $2 million in additional revenue.
- Reduced industrial waste by 40% through recycling and refurbishing scrapped bits.

This approach not only optimized drilling operations but also aligned with sustainability goals, creating value across the supply chain.

CONTACT INFORMATION

Let's Connect With Us!

0138142700

info@canyonengineering.com

www.canyon.com.sa

7643 Al Khalidiyah Ash Shamaliyah Dist.
Unit No:10 DAMMAM 32231 3548