



TRIAX NANO XP GREASE

Ultimate Heavy-Duty Nano-Modified EP Grease

Rev: 2026-07-04

DESCRIPTION

TRIAX NANO XP is one of the most advanced multi-purpose greases ever produced — a nano-infused, super heavy-duty, industrial-grade grease suitable for an exceptionally wide range of applications under the most severe operating conditions.

It delivers an ultra-strong lubricating film under extreme load, vibration, and shock, with extraordinary anti-wear performance, excellent rust and corrosion protection, superb mechanical stability, and strong resistance to water washout. Nano XP is built on Tungsten Fullerene-like (IF-WS₂) nano friction-modifier technology, combined with an advanced EP/anti-wear additive package and a calcium sulfonate complex thickener — delivering exceptional performance across automotive, heavy-duty, and industrial service.

PERFORMANCE IN A CLASS OF ITS OWN

4-Ball Weld Point 800+ kgf (ASTM D2596) — up to ~70% higher than the 450–550 kgf typical of most greases.

Dropping Point 580 °F+ (304 °C+) (ASTM D566/D2265) — well above the 450–550 °F range of most lithium and lithium-complex greases.

Together, this exceptional load capacity and heat resistance help heavy-duty fleets **reduce grease consumption by up to 50%** versus conventional lithium-complex (LiX) greases.

Comparisons based on 4-ball weld and dropping point (ASTM D2596 / D566–D2265) versus typical market greases and field relubrication experience; actual results vary by application and equipment.

PERFORMANCE HIGHLIGHTS

- **Tungsten Fullerene Nano Technology** — a proprietary nano friction-modifier forms a tough, self-replenishing film that dramatically cuts friction and wear even under extreme load, shock, and vibration
- **Exceptional anti-wear protection** — delivers remarkably low wear to keep bearings, pins, and bushings running longer, reducing downtime, replacement costs, and unplanned maintenance
- **Wide operating temperature range** — performs reliably from deep cold through extreme heat without softening, thinning, or running off in hot, demanding service
- **Tenacious metal adhesion** — bonds aggressively to metal surfaces and stays in place under severe load and vibration, resisting sling-off, pound-out, and squeeze-out
- **Superior mechanical & shear stability** — resists softening, breakdown, and oil separation under continuous working and high shear, maintaining consistency over a long service life
- **Outstanding water & washout resistance** — clings and protects in wet, humid, and washdown environments without washing out or losing performance
- **Rust & corrosion protection** — shields critical components against rust and corrosion, even under moisture-heavy and contaminated operating conditions
- **Extended service life** — long-lasting protection means less frequent regreasing and lower overall grease consumption
- **Advanced alternative to moly greases** — high-performance tungsten-based EP chemistry engineered for the most demanding automotive, heavy-duty, and industrial service

APPLICATIONS

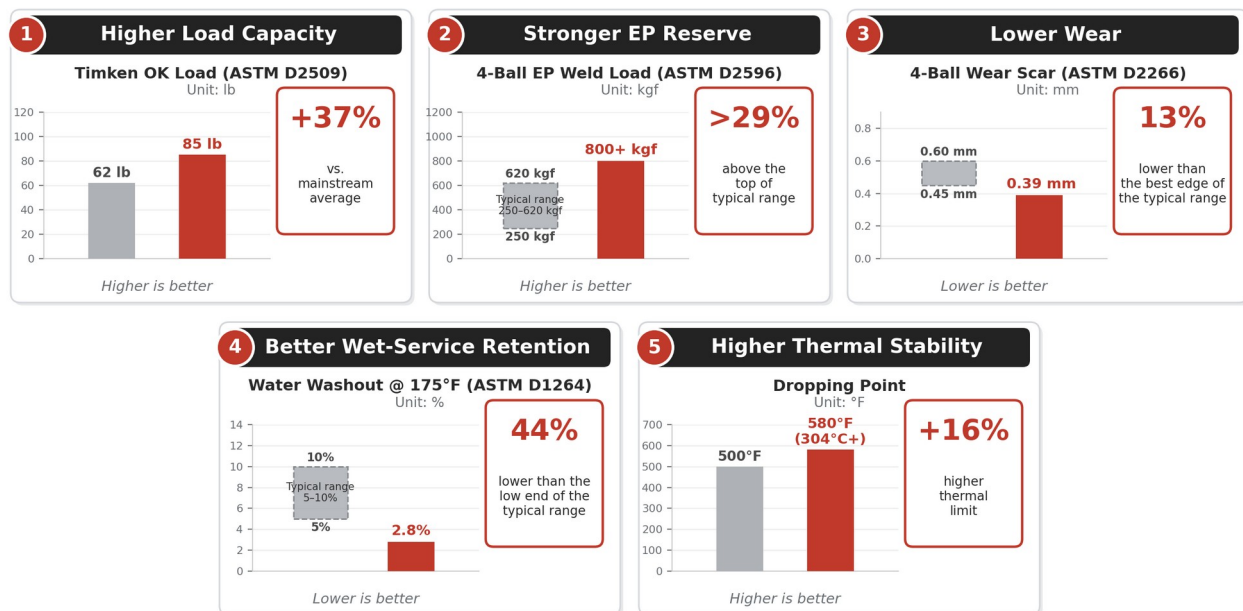
TRIAX NANO XP is an ideal choice for virtually all heavy-duty and industrial applications operating under severe load, shock, vibration, and contamination — spanning automotive, agriculture, construction, mining, and material-handling equipment.

- Shock-loaded and constantly loaded bearings
- High-impact and high-shock components
- Pinions, bushings, and bearings under extreme mechanical and thermal load
- Pivots and rotating components under high friction and load
- Suspension components, joints, and high-torque components
- Semi-truck & tractor 5th wheels, couplings, hitches, chassis, and drive shafts
- Extreme-pressure industrial components
- Water-contact and washdown heavy-duty applications
- Crushers, mills, conveyors, and material-handling equipment
- Surface & underground mining and tunnel-boring machines
- Tracks and undercarriage of off-highway equipment
- Agriculture, construction, and severe off-highway service

Fully compatible with calcium sulfonate complex and lithium complex greases.

PERFORMANCE COMPARISON

Others (Typical) TRIAX Nano XP



TYPICAL PROPERTIES

Property	TRIAX NANO XP	Test Method
NLGI Grade	2	—
Thickener Type	Calcium Sulfonate Complex (CSX)	—
Color	Dark Gray-Black	Visual
Texture	Smooth	Visual
ISO VG (Base Oil)	460	—
Penetration, Unworked (mm/10)	277	ASTM D217
Penetration, Worked 60 Strokes	288	ASTM D217
Penetration, Worked 10,000 Strokes	297	ASTM D217
Penetration, Worked 100,000 Strokes	290	ASTM D217
Dropping Point	580 °F (304 °C+)	ASTM D566/D2265
4-Ball Wear Scar (mm)	0.39	ASTM D2266
4-Ball EP Weld (kgf)	800+	ASTM D2596
Timken OK Load (lb)	85	ASTM D2509
Bearing Rust Protection	Pass	ASTM D1743
Copper Corrosion	1A	ASTM D4048
Water Washout @ 175 °F, %	2.8	ASTM D1264
Water Spray-Off, %	11	ASTM D4049
Flow Pressure @ 0 °C (32 °F), hPa	170	DIN 51805
Flow Pressure @ -20 °C (-4 °F), hPa	470	DIN 51805

Small deviations from these results are expected during the manufacturing process and do not affect product performance, and product formulations are subject to change without notice.