



Kixx Gear EP

The Perfect Fit for Your Machines

Kixx
All Ways with You

Kixx Gear EP

Kixx Gear EP is a high-performance industrial gear oil with a mineral oil base providing excellent wear resistance and oxidation stability. Ideal for all kinds of sealed gear drives, its performance exceeds major industry standards and has been verified and widely used by customers in fields including steel and cement, automobile manufacturing and electricity and electronics.

BENEFIT from Kixx Gear EP



Protecting the Machinery
and Extending Its Life



Reducing
Maintenance Costs



Supporting
Operational Stability

Kixx Gear EP's Performance Test



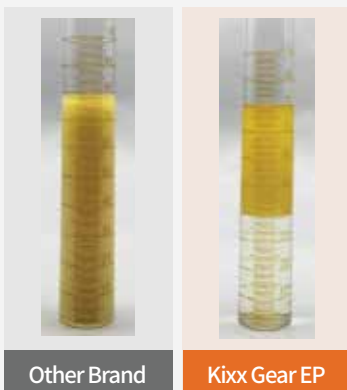
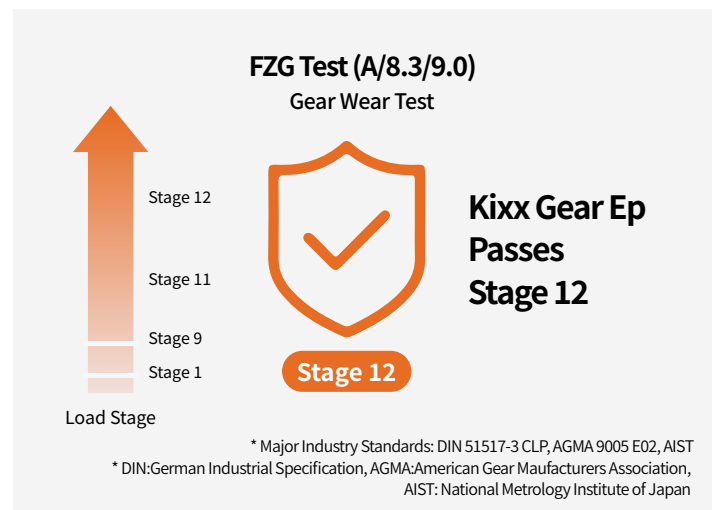
Protecting the Machinery and Extending Its Life

Kixx Gear EP provides excellent wear resistance to protect gear teeth and is designed to keep lubricant separate from the moisture and impurities that are introduced by different working environments. Thanks to these rigorously tested characteristics, Kixx Gear EP offers reliable performance, protects equipment like gear drives and extends the use cycles of a variety of machinery types.

Excellent Wear Resistance

Protecting machinery by minimizing wear

The FZG test determines the wear resistance performance of lubricants by measuring whether wear occurs on the surface of the gear across a spectrum of load conditions. Kixx Gear EP has been verified by the FZG test criteria required by major industry standards*, successfully passing Load Stage 12.



Superior Oil and Water Separation

Minimizing machine damage from moisture

In work environments, moisture may enter equipment due to various external factors. Since moisture inflow like this can damage equipment, lubricants must be able to separate well from water. Kixx Gear EP provides stable lubrication performance with excellent oil and water separation characteristics, keeping moisture damage to a minimum.

* Test environment: ISO 320

Reducing Maintenance Costs

Industrial gear oil is oxidized when exposed to air, and this can be exacerbated through temperature changes, moisture and impurities in the external environment. Oxidation changes the physical properties of lubricants and gives them shorter use cycles, but products with strong oxidation stability resist oxidation and can be used for longer periods. Kixx Gear EP's excellent oxidation stability reduces lubricant replacement costs, cuts machinery downtime and keeps operation consistent.

Excellent Oxidation Stability

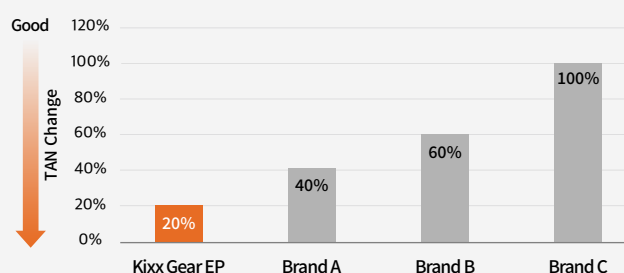
Reducing maintenance costs with long use cycles

The ASTM D5763 test is a method of evaluating oxidation stability by measuring the TAN change of lubricants under high-temperature oxidation conditions. With its dependable oxidation stability, Kixx Gear EP's TAN change is very small compared to other mineral-based lubricants, even under high-temperature oxidation conditions.

The ASTM D2893 test is another way of testing oxidation stability, doing so by measuring the degree of viscosity change in lubricants under high-temperature oxidation conditions. Submitted to this test, Kixx Gear EP maintains a stable viscosity under high-temperature oxidation conditions, with viscosity shifts approximately 33% lower than the standard required by major industry specifications.

Oxidation Stability Test (ASTM D5763)

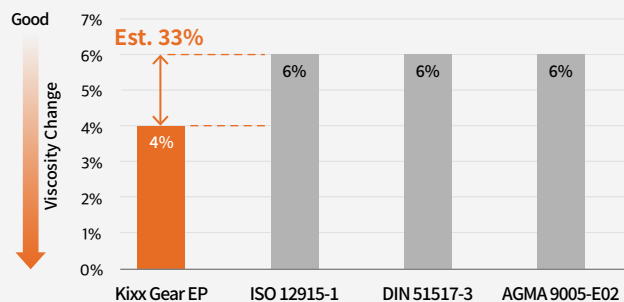
TAN change test in high-temperature oxidation conditions



*ASTM: American Society for Testing and Materials
*Test environment: ISO 320, 121C, 312hrs

Viscosity Change Test (ASTM D2893)

Viscosity change test in high-temperature oxidation conditions



*Test environment: ISO 320, 121C, 312hrs



Oxidation Test (ASTM D2893)

Testing impurity production and color change in high-temperature oxidation conditions

Lubricants exposed to high-temperature oxidation environments in the long term are often subjected to impurities and contamination, resulting in poor performance. Kixx Gear EP showed only a low level of impurity production and color change: a testament to its excellent oxidation stability standard.

*Tested product: ISO 320

Kixx Gear EP was selected as a 'Certified Oil' after a year-long field trial conducted by Sumitomo Heavy Industries, confirming its excellent oxidation stability.



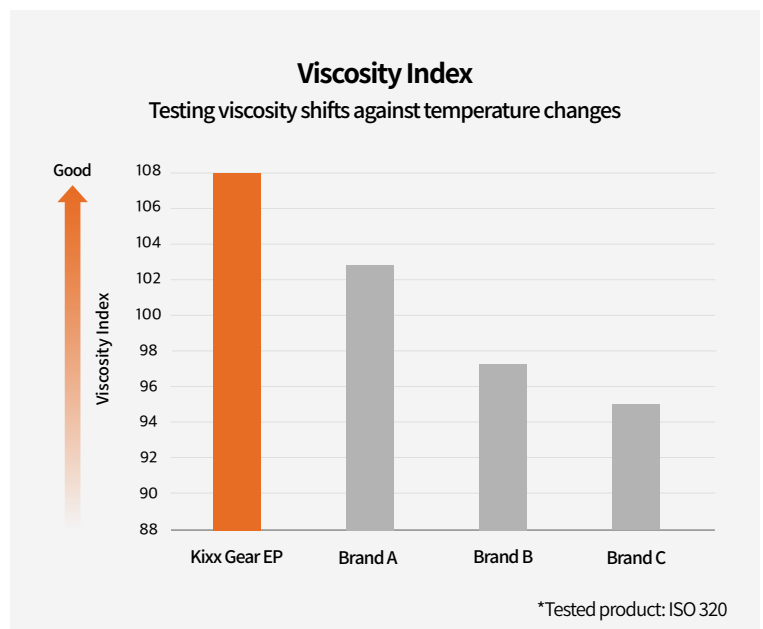
Supporting Operational Stability

Industrial gear oil is exposed to all kinds of temperature variations by different working sites and gear drive operational environments. Kixx Gear EP boasts a high viscosity index and low pour point to ensure the stable operation of equipment in a wide range of temperatures from low to high.

High Viscosity Index

Supporting operation by maintaining performance

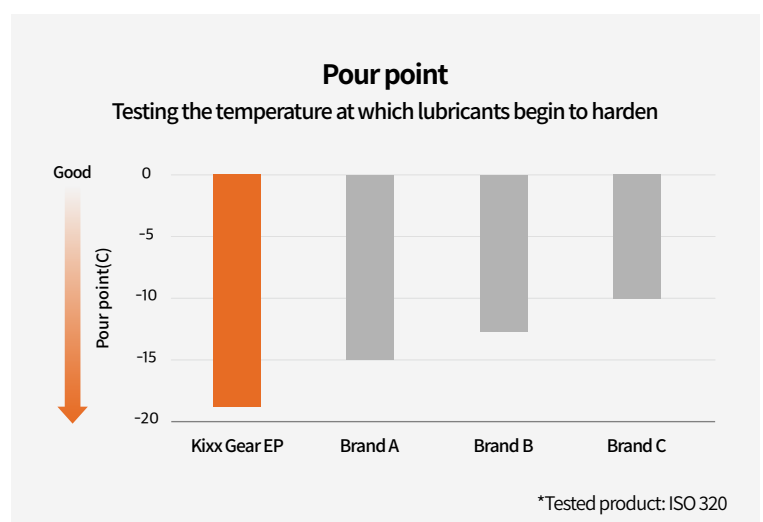
The viscosity index is a measure of a fluid's shift in viscosity relative to temperature change. The higher the viscosity index, the more consistently the initial viscosity of a product is maintained as temperatures change, boosting protection to machines and supporting efficient operation. Thanks to a high viscosity index, Kixx Gear EP suppresses the increases in viscosity often experienced at low temperatures and the decreases in viscosity seen at high temperatures, helping machines operate reliably across a range of environments.



Low Pour Point

Supporting operation in extreme cold conditions

The pour point is the temperature below which a liquid loses its flow characteristics. Gear oils with lower pour points help protect machinery at low temperatures and improve operational efficiency. Kixx Gear EP has a very low pour point, so it supports ideal machine operation even in cold areas.





Kixx: The Most Trusted Lubricants Brand in Korea

Recognized by First Brand Awards as Korea's No.1 lubricants brand, Kixx's lubricant products are trusted by consumers and partners all over the world. Leading the Korean lubricants market and backed by 50 years of extensive research and innovation, Kixx is recognized for its superior products made with premium base oils produced through GS Caltex's cutting-edge development methods.



Application

- Recommended for all types of industrial and mobile equipment requiring mild EP gear lubricants. Particularly recommended for enclosed gear drives and speed reducers, ranging from small gearboxes to large, high-power units such as metal rolling mills, cement mills, sugar mills and mine hoists.
- Also suitable for chain cases, sprockets, slide guides, flexible couplings, and plain and rolling element bearings.

Performance Standard

- DIN 51517 Part 3 CLP (ISO VG 68~680)
- AGMA 250.04, AGMA251.02, U.S.Steel 224, David Brown Table E
- ANSI/AGMA 9005-E02 (EP)
- U.S. Steel 224(ISO VG 68~320)
- David Brown Table E approved (ISO VG 68~680)

Key Properties

ISO VG	68	100	150	220	320	460	680	1000
AGMA	2EP	3EP	4EP	5EP	6EP	7EP	8EP	8AEP
David Brown	2E	3E	4E	5E	6E	7E	8E	-
Kinematic Viscosity(mm ² /s) @40°C	67.8	98.2	148.0	214.8	309.8	437.8	664.8	967.0
Kinematic Viscosity(mm ² /s) @100°C	9.1	11.8	15.4	19.4	24.9	30.3	40.7	51.3
Viscosity Index	110	110	106	102	103	102	101	100
Pour Point(°C)	-29	-25	-21	-15	-13	-12	-17	-15
Timken Ok Load(kg)	27	27	27	27	27	27	27	27
FZG, Load Stage	12	12	12	12	12	12	12	12
Flash Point(°C)	235	254	248	280	285	290	268	240