

SMOOTHER WORLD BETTER LIFE

Technical Date Sheet

TKM-460D High Performance Grease

Product Introduction

This product is a high-performance, high-temperature and heavy-duty multipurpose grease. It is refined with high viscosity index mineral base oil and lithium complex soap as thickener. Formulated with premium anti-oxidant, anti-corrosion and extreme-pressure additives, as well as molybdenum disulfide (MoS₂) solid lubricant, it is specially designed for large bearings operating at low speed, heavy load and under shock load. It features excellent overall performances including high temperature resistance, vibration resistance, water resistance and shock load resistance.

Examples of Application

- Suitable for lubrication of large bearings under low speed, heavy load and impact load. Widely used in mining machinery, iron and steel metallurgy equipment, paper machinery, environmental protection equipment, plate rolling and continuous casting equipment and other heavy industrial working conditions.
- Operating Temperature Range: -20°C ~ 150°C.

Features and benefits

- High Load & Impact Resistance: Formulated with high-viscosity base oil and graphite, meeting mainstream OEM viscosity requirements. It withstands heavy and impact loads and prevents bearing seizure.
- Excellent Mechanical Stability: Resistant to vibration and shear, no easy leakage or thinning during operation, maintaining long-term grease stability.
- Superior Water, Rust & Corrosion Resistance: Resistant to water washout and effectively protects metal parts against rust and failure in humid and dusty conditions.
- High Temperature & Anti-Coking Performance: High dropping point formula resists softening and loss at high temperature, with good oxidation and coking resistance for continuous high-temperature equipment.
- Long Service Life & Low Maintenance: Outstanding comprehensive performance extends relubrication intervals and reduces equipment maintenance costs.

TESTING ITEMS	TYPICAL DATA			TESTING STANDARDS
NLGI Grade	1	2	3	ASTM D217
Appearance	Black	Black	Black	Visual
Soap Type	Lithium complex	Lithium complex	Lithium complex	--
Base Oil Type	Mineral	Mineral	Mineral	--
Worked Cone Penetration, 0.1mm	328	282	242	ASTM D217
Dropping Point, °C	269	275	282	ASTM D2265
Kinematic Viscosity @40°C, mm²/s	460	460	460	ASTM D445
Kinematic Viscosity @100°C, mm²/s	31	31	31	ASTM D445
Oil Separation (100°C, 24h), %	3.8	2.9	2.2	ASTM D6184
Evaporation Loss (99°C, 22h), %	1.8	1.8	1.8	ASTM D972
Water Washout Loss (38°C, 1h), %	7.2	5.8	4.5	ASTM D2266
Copper Corrosion (100°C, 24h)	1b Class	1b Class	1b Class	ASTM D130
Four-Ball Welding Load (PD/N)	3923	3923	3923	ASTM D2783

- * 1.Do not mix with other types of greases to prevent structural damage and performance failure of grease.
2.Clean the residual old grease before refilling. The bearing filling quantity is recommended to be 1/3~1/2 to avoid overheating caused by excessive filling.
3.All listed data are typical laboratory values for product selection reference only. Actual performance shall be subject to on-site operating conditions.



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