

VORTEX™ COUPLING GREASE

Whitmore's Vortex™ Coupling Grease is a tacky, lithium-polymer thickened grease specifically formulated for long term lubrication of greased mechanical couplings including gear tooth, chain type, and steel grid designs. Vortex™ may be used in couplings of any size and at high speed.

Results of the high-speed centrifugal test (ASTM D-4425) have shown that the dual thickener used in Vortex™ permits only miniscule oil separation even at 15,000 rpm. Oil separation is the major cause of lubricant failure in couplings.

Robust anti-wear and extreme pressure additives in combination with a high viscosity fluid assure protection from abrasive wear that is generated by low amplitude, high frequency rubbing motion common to industrial couplings.

In addition to couplings, Vortex™ can be used to lubricate slow moving, heavily loaded bushings, especially where water contamination exists. Supplemental heat may be required in order to facilitate pumping. Do not use in rolling element bearings (ball bearings, roller bearings etc).

BENEFITS:

- **REDUCED DOWNTIME** - no unscheduled downtime due to lubrication failures.
- **HOUSEKEEPING** - no oil leakage, even where seals are imperfect.
- **LONG LIFE** - extended grease life gives an extra measure of security and reduces maintenance labor.
- **ALL COUPLINGS** - one product can be used for all sizes and speeds, including areas of water contamination.
- **TEMPERATURE RANGE** – Usable from 14° F to 220°F (-10° C to 104° C)

APPLICATIONS:

Use Vortex™ in all sizes of gear, chain and grid type couplings, where grease is the recommended lubricant. Typical manufacturers include Fast's, Koppers, Lovejoy, Falk, TB Wood's, and Browning. Vortex™ can be used at all speeds found in industrial applications and also in the presence of water and steam.

Vortex™ meets the requirements of AGMA CG-1, CG-2, and CG-3 for coupling grease.

ASTM #	Typical Characteristics
D-217	Grade 1
D-2265	Cone Penetration, Worked 315-345
D-445	Dropping Point, °F (°C) 480 (249)
Gardner Method	Kinematic Viscosity (Base oil without polymer)
D-2509	cSt @ 40°C 390.0
D-2596	cSt @ 100°C 27.5
D-2266	Density, lb/gal @ 60°F (15.5°C) 7.48
D-4049	Specific Gravity, g/cc @ 60°F (15.5°C) 0.89
D-1743	Timken OK Load, lb >40
D-4048 (Modified)	Four Ball EP
OEM Standard	Weld Point, kg 315
D-4425	Load Wear Index, kg 46
D-942	Four Ball Wear, Scar Width, mm 0.50
	Water Spray-Off, % Loss (Standard at 40 psi, 5 min., 100°F) 2.9
	Rust Test Pass
	Copper Strip Corrosion 1B
	212°F (100°C) @ 3 hrs
	Low Temperature Pumpability
	Lincoln Ventmeter, °F (°C) 28 (-2)
	Oil Separation, Kopper Method, K36 @ 24 hrs, % Loss <1
	Oxidation stability, psi drop <5
	Thickener Type Lithium and Polymer

The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.

PACKAGING

Drums	Kegs	Pails	Cartridges 50 Per Case
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