

## MATRIX® HIGH PERFORMANCE GREASE

Matrix® is bearing grease that is highly recommended for difficult applications such as extreme pressure, water, heat, or chemical attack.

The thickener system in Matrix® has a protective effect similar to that of molybdenum disulfide, protecting equipment from wear under difficult conditions of extreme load.

Matrix® helps neutralize acids and also resists reacting with caustic materials. Matrix® grease has prevented corrosion despite years of exposure to phosphoric acid.

A continuous temperature of 400°F (200°C) is within its safe range. It can withstand 550°F (288°C) continuously, provided the bearing is replenished every 30 minutes with normal quantities of grease. Occasional temperature spikes to 600°F (315°C) can be sustained for 5 to 10 minute periods without melting or carbonizing.

Matrix® EP 2 is manufactured to NLGI grade 1.5 for use at a broad range of bearing speeds up to DN 200,000. Matrix® TK 2 (NLGI grade 2) is designed for slower moving bearings up to 150,000 DN.

Matrix® EP 2 is the preferred grade for electric motor bearings.

Matrix® 5M EP 2 is designed primarily for earthmoving equipment and other heavy-duty rolling stock applications. It contains 5% solid lubricants.

Matrix® meets the Bucyrus International specification for multi-purpose grease (SD 4711)

Ford Tox # 165359

### BENEFITS:

- LONG LIFE - reduced relubrication frequency.
- WATER RESISTANT - does not deteriorate when water (including treated water) enters the body of the grease.
- WIDE SPEED RANGE - recommended for use in electric motor bearings as well as slow moving bearings and bushings.

### APPLICATIONS:

Water / Chemicals: Phosphate processing, suction and wet end rolls on paper machines, outdoor cranes and ship lifts, boat trailer wheel bearings and other marine applications.

Highly Loaded Equipment: Draglines, electric shovels, slew bearings of hydraulic shovels, pellet mills, shaker screens, belt conveyor pulleys, slewing bearings, pin and bushing, centrifuges, hammer mills, sealed work roll bearings, fan bearings and many others.

High Temperature Applications: Oven conveyor bearings, plastic extruder bearings, rotary unions on roto-molders.

Automotive and Earthmoving Applications: Wheel bearings, U-joints, ball joints, pin-and-busing pivot points and slewing bearings.

ASTM #	Grade	TYPICAL CHARACTERISTICS				
		EP 0	EP 1	EP 2	TK 2	5M EP 2
D-217	Penetration Range	355-385	315-345	285-315	270-300	265-295
D-2265	Dropping Point, °F (°C)	>500 (260)	>500 (260)	>500 (260)	>500 (260)	>550 (288)
D-2509	Timken OK Load, lb	Not Tested	50	55	55	Not Tested
D-2596	Four Ball EP					
	Weld Point, kg	500	800+	800+	800+	800
	Load Wear Index	68	70	70	70	Not Tested
D-2266	Four Ball Wear, Scar Width, mm	0.50	0.48	0.45	0.45	0.42
FTM 321.2	Screen Bleed, % Loss	Not Tested	Not Tested	<1	Not Tested	Not Tested
D-1264	Water Washout, % Loss	1	--	1	1	1
D-3527	Wheel Bearing Life Test, hrs of life	NA	NA	260	NA	Not Tested
D-1743	Rust Test	Pass	Pass	Pass	Pass	Pass
OEM Standard	Low Temperature Pumpability Lincoln Ventmeter @ 400 psi, °F (°C)	-20 (-29)	12 (-11)	34 (1)	70 (21)	Not Tested

### PACKAGING

Drums	Kegs	Pails	Cartridges 50 Per Case
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