

Shell & Whitmore Reliability Solutions



MINING LUBRICATION SOLUTIONS



PERFORMANCE LUBRICANTS & RELIABILITY PRODUCTS

YOUR VALUABLE EQUIPMENT IS EXPECTED TO PERFORM EFFICIENTLY AND SURVIVE IN ADVERSE CONDITIONS AND DEMANDING ENVIRONMENTS. THAT'S WHY SHELL AND WHITMORE HAVE COMBINED FORCES IN THE MINING SECTOR TO OFFER A COMPLETE LINE OF GREASES, OILS, OPEN GEAR LUBRICANTS AND RELIABILITY PRODUCTS DESIGNED TO PROTECT YOUR INVESTMENT, MAXIMIZE UPTIME AND LOWER OPERATING COSTS.



INCREASINGLY EFFICIENT PROTECTION

TOPTIER

MAINTIER

ENTRY LEVEL

DIESEL ENGINES	HYDRAULIC SYSTEMS	DIFFERENTIAL AND FINAL DRIVES	GREASE POINTS: Pins, bushes and journal bearings
Shell Rotella® T6 SYNTHETIC 	Shell Tellus® S4 ME SYNTHETIC 	Shell Spirax® S6 AXRME SYNTHETIC 	Shell Gadus® S3 V460XD
	Shell Spirax® S6 CXME SYNTHETIC 	Shell Omala® S4 Wheel 	Shell Gadus® (Caliber 5-M)
		Shell Spirax® S6 CFD ME SYNTHETIC 	
Shell Rotella® T5 	Shell Tellus® S3 M 	Shell Spirax® S4 CX 	Shell Gadus® S3 V460D
Shell Rotella® T4 Triple Protection 	Shell Spirax® S4 CX 	Shell Spirax® S5 CFD M 	Shell Gadus® (Matrix EP)
	Shell Tellus® S2 VX 		Shell Gadus® (Matrix M)
Shell Rotella® T3 Fleet 	Shell Tellus® S2 MX 		Shell Gadus® S2 V220AD

GREASES

Shell Gadus (Matrix EP)

Shell Gadus (Matrix EP) greases are calcium sulfonate complex greases highly recommended for difficult applications such as extreme pressure, water, heat or chemical attack. The thickener system in Shell Gadus (Matrix EP) have a protective effect similar to that of molybdenum disulfide, protecting equipment from wear under difficult conditions of extreme load and slow speed. This grease helps neutralize acids and also resists reacting with caustic materials. Shell Gadus (Matrix EP) greases have prevented corrosion despite years of exposure to phosphoric acid fumes.

Shell Gadus (Matrix EP 2) may be used at DN speeds up to 250,000 and meets the Bucyrus International specification for multipurpose grease (SD 4711). It also meets the following standards per DIN 51502: KP2R -20. Andritz Separation, Inc. of Arlington, Texas has issued an approval for use in the automatic lubrication systems of their tilting pan filters.

NLGI Grades - EP 1 & 2

POWER SHIFT TRANSMISSIONS	OPEN GEARS:
Shell Spirax® S6 CXME	Shell Gadus® (Envirolube XE Extreme)
SYNTHETIC	
	Shell Gadus® (GearMate 1000 ICT)
Shell Spirax® S4 CX	

Shell Gadus (Matrix M)

Shell Gadus (Matrix M) greases are calcium sulfonate complex greases with MoS2 (molybdenum disulfide) that is highly recommended for difficult applications such as extreme pressure, water, heat or chemical attack. The thickener system itself has a protective effect, but the addition of molybdenum disulfide creates a powerful layer of protection under conditions of extreme load and slow speed. Shell Gadus (Matrix M) helps neutralize acids and also resists reacting with caustic materials.

Shell Gadus (Matrix M) meets the Bucyrus International specification for multipurpose grease (SD 4711). Grades 1 and 2 meet standards KPOR -20, KP1R-20 and KP2R-10 per DIN 51502.

NLGI Grades - EP 1 & 2

Shell Gadus S3 V460XD

Shell Gadus S3 V460XD greases are premium heavy-duty greases designed for use in a wide range of industrial and mining applications. They are based on a high viscosity index mineral oil and lithium complex soap thickener. Shell Gadus S3 V460XD contains selected additives to offer excellent high temperature oxidation performance and enhanced extreme pressure, antiwear and anti-corrosion properties. They contain extra molybdenum disulfide to provide additional resistance to shock loading.

NLGI Grades - 1 & 2

Shell Gadus S3 V460D

Shell Gadus S3 V460D greases are high performance, high temperature greases for slow moving heavily loaded large bearings subject to shock loads. They are based on high viscosity index mineral oil and a lithium complex soap thickener. Apart from containing the latest additives to ensure excellent high temperature, anti-corrosion and anti-oxidation performance, they also contain solids to ensure the grease can handle shock loads.

NLGI Grades - 1 & 2

Shell Gadus S2 V220

Shell Gadus S2 V220 greases are high quality multipurpose, extreme-pressure greases based on a blend of high viscosity index mineral oils and a lithium hydroxystearate soap thickener. They contain extreme-pressure and other proven additives to enhance their performance in a wide range of applications. Shell Gadus S2 V220 greases are designed for multipurpose grease lubrication of rolling element and plain bearings as well as hinges and sliding surfaces.

NLGI Grades - 0, 00, 1 & 2

PRODUCT NAME SUFFIX KEY

- A = Axle (Shell Spirax)
- A = Wet (aqueous) conditions
- C = Construction (Shell Spirax)
- D = Contains solids
- E = Energy saving, fuel efficiency
- FD = Final drive
- L = Low emissions
- M = Maintenance saving
- V = Versatile applications
- X = Extreme/extreme performance

APPLICATION ICON KEY

- | | | | |
|--|------------------|--|-------------------------|
| | Bulldozer | | Extreme load |
| | Continuous miner | | Shock load |
| | Drill | | Wet conditions |
| | Excavator | | High temperature |
| | Scraper | | Long life |
| | Grader | | Plain bearing |
| | Haul truck | | Rolling element bearing |
| | Wheel loader | | |

Shell Gadus (Caliber 5-M)

Shell Gadus (Caliber 5-M) greases are extreme pressure, water resistant, lithium complex greases that contain 5% MoS₂ (molybdenum disulfide). Shell Gadus (Caliber 5-M) greases are designed primarily for use in draglines, shovels, drills, earthmoving equipment and other heavy-duty rolling stock applications. These greases have the extreme pressure capability to prevent wear in very heavily loaded bushings and bearings.

- Also available with 3% MoS₂ - Shell Gadus (Caliber 3-M).

Grades - EP 0, 1 & 2

OPEN GEAR LUBRICANTS

Shell Gadus (GearMate 1000 ICT)

Shell Gadus (GearMate 1000 ICT) are tclp-safe, multipurpose, lithium based open gear lubricants specially formulated for use on open gears and other severe open applications on draglines and mining shovels. This series is also highly recommended for the open gears of kilns and ball mills, including the most severely loaded. Shell Gadus (GearMate 1000 ICT) deposits a dense black coating on the surface, reassuring operators that the lubricant is in place. The blend of solid and oil-soluble antiwear additives provides superior load carrying ability and high-performance wear resistance in a safe package. Shell Gadus (GearMate 1000 ICT) has a thickener structure that inherently resists emulsification with water and has excellent mechanical and thermal stability. A specially selected polymer allows the lubricant film to maintain its adhesive characteristics under varying temperature conditions.

Grades - Light, Heavy & Super Heavy

Shell Gadus (EnviroLube XE Extreme)

Shell Gadus (EnviroLube XE Extreme) is a tclp-safe, non-asphaltic, open gear lubricant. Created by adding proprietary anti-wear technology proven in enclosed-gear applications, Shell Gadus (EnviroLube XE Extreme) increases open-gear wear protection. Shell Gadus (EnviroLube XE Extreme) is capable of extending the life of even the most severely loaded open gears. This lubricant smooths existing wear damage, restoring a smooth operating surface and ensuring cost savings through reduced friction and wear.

Grade - Heavy

OILS

Shell Rotella T6

Shell Rotella T6 full synthetic, API CK-4 approved heavy-duty diesel engine oils have been enhanced with fully synthetic base oil plus advanced additive technology to provide protection against wear, deposits and oil breakdown plus better low temperature flow. Shell Rotella T6 is designed to provide protection under the most severe engine conditions found in modern low emission engines, resisting breakdown by heat to provide continuous protection throughout the service interval.

Grade - 5W-40

Shell Rotella T5

Shell Rotella T5 premium synthetic blend API CK-4 approved heavy-duty diesel engine oils have been enhanced with synthetic base oils and advanced additive technology to protect against wear, deposits and oil breakdown. The advanced formulation delivers good engine cleanliness and protection against piston deposits ensuring engine and component reliability at extended oil drain intervals.

Grade - 15W-40

Shell Rotella T4 Triple Protection

Shell Rotella T4 Triple Protection oil uses advanced additive technology plus synthetic base oil to protect under the most severe engine conditions found in modern, low-emission engines. Recommended by a wide range of OEMs, suitable for both the latest low-emissions and older model equipment.

Grade - 15W-40

Shell Rotella T3 Fleet

Shell Rotella T3 Fleet is a fully Group II mineral heavy-duty diesel engine oil that has been formulated to provide reliable protection and performance to fleet and off-highway equipment, offering the convenience of a single oil suitable for a wide range of OEMs.

Grade - 15W-40

Shell Omala S4 Wheel

Shell Omala S4 Wheel is an advanced synthetic heavy-duty industrial gear oil offering outstanding lubrication performance under severe operating conditions, including improved energy efficiency and long service life. It is recommended specifically for use in General Electric Off-Highway Motorized Wheels fitted to haul trucks used in mining applications.

Grade - 680

Shell Tellus S4 ME

Shell Tellus S4 ME hydraulic fluids are fully synthetic hydraulic fluids designed to help users improve the energy efficiency of their hydraulic systems without compromising the protection of the system or maintenance procedures of their equipment and operations. Shell Tellus S4 ME has been demonstrated to improve energy efficiency in a wide range of applications including mining conveyors. In addition, Shell Tellus S4 ME is designed to help extend equipment service life and lower maintenance costs through providing outstanding wear protection and long oil life capability.

Grades - 32 & 46

Shell Tellus S2 MX

Shell Tellus S2 MX fluids are high performance hydraulic fluids based on Group II base oils that provide outstanding protection and performance in many mobile equipment operations. They resist breakdown under heat or mechanical stress and help prevent damaging deposit formation that can decrease the efficiency of your hydraulic power system. Shell Tellus S2 MX fluids help extend equipment maintenance intervals by resisting thermal and chemical breakdown, minimizing harmful sludge formation and providing improved reliability and system cleanliness.

Grades - 32, 46 & 68

Shell Tellus S2 VX

Shell Tellus S2 VX fluids are high performance hydraulic fluids based on Group II base oils that provide outstanding protection and performance across a wide range of temperatures. They resist breakdown under heat or mechanical stress and are ideally suited to most mobile equipment and other applications subjected to a wider range of ambient or operating temperatures. Shell Tellus S2 VX also has good stability in the presence of moisture, ensuring long fluid life and reducing the risk of corrosion and rusting. Highly shear stable viscosity modifiers help minimize variations in the fluid properties throughout the service life of the fluid.

Grade - 32

Shell Tellus S3 M

Shell Tellus S3 M hydraulic fluids are high performance, Group II lubricants that use exclusive zinc-free technology to provide outstanding protection and performance in many mobile equipment operations. They resist breakdown under heat or mechanical stress, helping to prevent damaging deposits that can decrease the efficiency of your hydraulic systems.

Grade - 46

Shell Spirax S4 CX

Shell Spirax S4 CX fluids are high performance off-highway transmission and hydraulic oils for many applications, including approval for applications requiring CAT TO-4. Shell Spirax S4 CX is designed to provide operators with trouble free operation and maximum reliability for the lifetime of the equipment. Shell Spirax S4 CX meets the demanding requirements of modern transmissions, final drive, oil immersed brake and hydraulic systems fitted to heavy-duty off-highway machinery.

Grades - 10W, 30 & 50

Shell Spirax S5 CFD M

Shell Spirax S5 CFD M is a dedicated final drive and axle oil which offers significantly improved protection for gears and bearings in bevel gears, differentials, final drives and axles. It meets the Caterpillar FD-1 final drive axle oil (FDAO) specification. Spirax S5 CFD M has been developed for continuous use in extreme ambient temperatures in off-road vehicles.

Grades - 50/60

Shell Spirax S6 CXME

Shell Spirax S6 CXME oils are premium synthetic technology multifunction oils for off-highway vehicles. Shell Spirax S6 CXME is designed to provide operators with maximum reliability for the lifetime of their equipment, meeting the demanding requirements of modern off-highway vehicles in all climates. The synthetic blend product is formulated to meet low temperature viscosity and fluidity requirements, providing excellent responsiveness of hydraulic components during start-up and low operating temperature conditions as well as the required protection at high operating temperatures.

Grades - 10W-40 & 5W-30

OUR SALES FORCE AND TECHNICAL EXPERTS CAN WORK WITH YOU TO DELIVER PRODUCTS AND SERVICES THAT WILL MEET YOUR SPECIFIC NEEDS. WE AIM TO HELP YOU TO:

- CHOOSE THE RIGHT PRODUCTS
- ACHIEVE CONTINUOUS IMPROVEMENT
- MONITOR AND ASSESS EQUIPMENT PERFORMANCE
- INCREASE YOUR PRODUCTIVITY AND REDUCE YOUR COSTS

Shell Spirax S6 AXRME

Shell Spirax S6 AXRME is a superior performance, extended drain synthetic GL-5 axle oil designed to provide the ultimate protection to the latest heavy-duty axles. Specially formulated with synthetic base oils and additive technology that provide improved lubrication for the drive train, lowering the operating temperature and helping promote longer life for the equipment. Shell Spirax S6 AXRME is capable of extended oil drains and is approved by several OEMs for their extended drain specifications. Standard industry and commercial fleet testing have demonstrated a fuel efficiency improvement of over 1% when compared to several products in the same application.

Grade - 75W-90

Shell Spirax S6 CFD ME

Shell Spirax S6 CFD ME is a fully synthetic dedicated final drive and axle oil, offering significantly improved protection and long oil life for gears and bearings in bevel gears, differentials, final drives and axles. It meets the Caterpillar FD-1 final drive axle oil (FDAO) specification, and provides excellent performance in all temperatures as a Multi-Season product. Shell Spirax S6 CFD ME is capable of extending oil life and drain intervals, and in off-highway trucks oil drain intervals can be extended up to 6000 hours, significantly longer than standard final drive and axle oils.

Grade - 60



LEARN MORE:

shellwhitmorereliability.com
orders@shellwhitmorereliability.com
800-381-6585
972-771-1000

10/2022

