FROM LONGER OIL LIFE TO INCREASED EFFICIENCY

SHELL MORLINA MAKES IT POSSIBLE

SHELL LUBRICANTS
TOGETHER ANYTHING IS POSSIBLE



EVERY PART OF YOUR MACHINE OR PROCESS HAS BEEN METICULOUSLY ENGINEERED, SO YOU NEED TO CHOOSE THE RIGHT LUBRICANT TO ENSURE THAT YOUR EQUIPMENT IS WELL PROTECTED AND WORKS EFFICIENTLY.

The Shell Morlina range of bearing and circulating oils has been developed to enable equipment operators to select the oil that will deliver optimum value to their operations through enhanced wear protection, long oil life and high system efficiency.



WEAR PROTECTION

Lubrication systems for industrial equipment differ considerably across industries in size, loading, operating conditions, temperatures and exposure to contamination. But whatever your application, bearings, gears and oil pumps must be well protected from wear and corrosion for long machine life.

That is why Shell offers a range of bearing and circulating oils ranging from robust, reliable products to fully synthetic products fortified with extreme-pressure (EP) additives. There are also speciality products designed to cope with hot, wet or dusty environments, or high-precision operations.

OIL LIFE

The longer the oil life, the less fluid maintenance is required to help your equipment to operate for longer without interruption. The Shell Morlina range of bearing and circulating oils enables you to match the oil life of the fluid to your operational needs. This includes the fully synthetic Shell Morlina S4 B, which offers the longest oil life in the Shell range under severe conditions, and speciality products that continue to function even when very contaminated with water, dust or dirt.

SYSTEM EFFICIENCY

Efficient systems are characterised by their ability to operate at or beyond their original design parameters. Consistent and reliable lubrication, whatever the operating conditions, is key. As every application brings specific challenges, the Shell Morlina range is designed to provide a choice of oils that can help to optimise system efficiency.



OUR EXPERTISE, YOUR REASSURANCE

Shell Morlina oils have been designed and developed in close co-operation with customers and equipment makers, and have a proven track record in real-life applications. They are recommended or approved by leading equipment makers and users around the world so you can be assured that they will not let you down.

SHELL MORLINA OILS – KEY FEATURES

INCREASINGLY EFFICIENT PROTECTION

	SHELL MORLINA RUST AND OXIDATION (R&O) OILS	SHELL MORLINA R&O/ ANTI-WEAR OILS	SHELL MORLINA R&O/ AW OILS (SPECIAL APPLICATION)
TIER 4		**Shell Morlina S4 *B*** ■ Extra long life ■ Extra protection ■ Severe applications	
TIER 3	**Shell Morlina S3 *BA*** ■ Extra life ■ Extra life water shedding ■ Special applications: wet conditions		
TIER 2		**Shell Morlina S2 *B*** ■ Versatile protection ■ Industrial applications	**Shell Morlina S2 *BA*** ■ Extra protection ■ Water shedding ■ No-Twist® mill systems
		Shell Morlina S2 *BL* ■ Reliable protection ■ High-speed applications	
TIER 1	**Shell Morlina S1 *B*** ■ Reliable protection ■ Special applications		

PRODUCT-NAME SUFFIX KEY

- **A** = Water tolerant
- **B** = Bearings
- **L** = Low load

APPLICATION ICON KEY

- Roller bearing
- Enclosed gear
- High load
- Extreme high temperature
- Plain bearing
- Wet conditions
- Factory/machine applications

The Shell Morlina "B" range
Bearing and circulating oils with a range of protection and performance levels for a wide range of industrial applications

The Shell Morlina "BL" range
Extra-low viscosity grades for use in high-speed machine spindle applications

The Shell Morlina "BA" range
Speciality bearing and circulating oils with enhanced characteristics for use in demanding applications in the metal sector

RESPONDING TO YOUR NEEDS – SHELL MORLINA S4 B

EXTRA LONG LIFE
64% LESS VISCOSITY INCREASE[1]
[1]Compared with an international oil company oil in ASTM D2893 oxidation stability tests at 150°C (a higher temperature than is typically quoted for this test)

ENERGY EFFICIENCY
3% IMPROVEMENT IN AVERAGE ENERGY EFFICIENCY[2]
[2]Compared with the previous Shell Morlina S4 B formula in Radicon efficiency tests at 100°C in worm gears

GEAR PROTECTION
12+ FZG WEAR PROTECTION, LOAD STAGE

PRODUCT	BENEFITS	TECHNOLOGY	ISO VISCOSITY GRADES	SPECIFICATIONS AND APPROVALS (Full details of approvals for all products can be obtained from your Shell representative; approvals and claims will vary by viscosity grade.)
Shell Morlina S4 B	■ Extra long life ■ Extra protection ■ Severe applications	Synthetic, mild EP	68, 100, 150, 220, 320, 460, 680, 1000	Approved by or meets many equipment manufacturer requirements for worm gears, gearboxes with internal backstops, gear reducers, screw compressors and various other applications. Industry standards: DIN 51517-3 CLP; ISO 12925-1 type CKT; AGMA 9005 for anti-scuff/anti-wear (EP) oils and for inhibited (R&O) oils; Primetals Morgoil® Lubricant Spec. New Oil (Rev. 1.1)
Shell Morlina S3 BA	■ Extra life ■ Extra water shedding ■ Special applications: wet conditions	Conventional, enhanced water separation, non-EP	100, 150, 220, 320, 460, 680	Approved by or meets DIN 51517, Part 1 and 2 (C, CL); AGMA 9005 for inhibited (rust & oxidation) oils; ISO 12925-1 Type CKB; Primetals Morgoil® – Advanced Lubricant New Oil (Rev. 2.4); Danieli Super-Demulsifiable Oil 6.124249.F
Shell Morlina S2 BA	■ Extra protection ■ Water shedding ■ No-Twist® mill systems	Conventional, mild EP	100, 150, 220, 320, 460	Approved by or meets Primetals No-Twist® Mill Lubricant Spec. (MMC40003) ISO 100; Primetals Pre-Finishing Mill Lubricant Spec. (MMC40008) ISO 220, 320; Primetals Copper Mill Stand Lubricant Spec. (MMC40009) ISO 150, 460; Danieli Type 21-24 N 0.000.001 BVG No-Twist® Stand Block Lubricant (Rev. 14). Industry standards: DIN 51517, Parts 1, 2, and 3 (C, CL, CLP); ISO 12925-1 types CKB and CKC.
Shell Morlina S2 B	■ Versatile protection ■ Industrial applications	Conventional, anti-wear protection	32, 46, 68, 100, 150, 220, 320, 460, 680	Approved by or meets Primetals Morgoil® Lubricant Spec. New Oil (Rev. 1.1); Danieli Standard Oil 6.124249.F; Industry standards DIN 51517, Part 1 and 2 (C, CL); ISO 12925-1 types CKB and CKE; DIN 51524, Part 1 (ISO 32-150); AGMA 9005-E02 requirements for inhibited (R&O) oils.
Shell Morlina S2 BL	■ Reliable protection ■ High-speed applications	Low-viscosity base oils, anti-wear protection	5, 10, 22	Approved by or meets Fives Group Machine P-62 (ISO 5, 10); and Cincinnati Machine P-45 (ISO 22)
Shell Morlina S1 B	■ Reliable protection ■ Industrial applications	Conventional, non-EP	100, 150, 220, 320, 460, 680, 570	Approved by or meets Primetals Morgoil® Lubricant Spec. New Oil (Rev. 1.1); Industry standard DIN 51517, Part 1
SPECIALITY GRADES				
Shell Paper Machine Oil S3 M	■ Extra protection ■ Water shedding ■ Long life	Conventional, ashless additive	150, 220, 320	Approved by or meets Metso Oil recommendations for zone-controlled rolls, paper machine actuators, and paper machine lubrication systems; Voith recommendations for circulating lubrication oils used in bearings in the wet and dry ends of paper machines; requirements of SKF roller bearings and FAG (FE-8) tests for paper machine lubricants. Industry standard DIN 51517, Part 2 (CL)
Shell Paper Machine Oil S2 M	■ Extra protection ■ Water shedding ■ Long life	Conventional, zinc-based additive	150, 220, 320	Industry standards: DIN 51517-2 type 2 (CL)

FULL PRODUCT AND SERVICE PORTFOLIO

Shell Lubricants is constantly investing to develop better lubrication solutions, as demonstrated by

- Shell Omala S4 GXV synthetic gear oil – for long life in demanding environments
- Shell Corena S4 R air compressor oil – for up to 10,000 hours of protection.

In addition, Shell provides the world-leading Shell LubeAnalyst oil condition monitoring service, which is designed to help you improve your business performance.

Whatever your needs or application, Shell can provide a full range of oils and greases, including synthetic, high-performance products and additional services.



Find out more by visiting
www.shell.com/lubricants

"Shell Lubricants" refers to the various Shell companies engaged in the lubricant business.