

IMPROVED PRODUCT QUALITY, LOWER OPERATING COSTS AND LONGER-LASTING EQUIPMENT

SHELL TONNA SLIDEWAY OILS

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SHELL TONNA






TO ENSURE PROCESS ACCURACY, TROUBLE-FREE OPERATION AND EXTENDED WORKING LIFE, YOUR MACHINE TOOL SLIDES, TABLES AND FEED MECHANISMS NEED RELIABLE AND EFFECTIVE LUBRICATION.

Shell Tonna slideway oils are specially formulated to enhance machine accuracy, efficiency and protection through their friction performance, coolant compatibility and oxidation, corrosion, wear and foaming resistance.

A RANGE OF SLIDEWAY OILS TO MEET YOUR NEEDS

To meet the challenges of a wide range of equipment, conditions and applications, Shell has designed a portfolio of oils that enables you to choose a product to match your needs.

INCREASINGLY EFFICIENT PROTECTION

SHELL TONNA "M" RANGE		
MAINLINE TIER 2	PREMIUM TIER 3	ADVANCED TIER 4
Shell Tonna S2 M	Shell Tonna S3 M	Shell Tonna S4 M
<ul style="list-style-type: none"> ■ Excellent separation from coolants ■ Standard applications 	<ul style="list-style-type: none"> ■ Extra machining accuracy ■ Standard applications 	<ul style="list-style-type: none"> ■ Precision machining ■ Outstanding frictional performance and coolant compatibility 

Better frictional performance and coolant compatibility



THE BEST COMBINATION OF FRICTIONAL AND SEPARABILITY PERFORMANCE

Have you experienced quality issues through slideway stick-slip or fluid waste through the formation of oil-coolant emulsions? The most effective slideway oils exhibit strong frictional performance for low stick-slip and excellent coolant separability.

In tests,¹ Shell Tonna S4 M demonstrates a better overall balance of frictional performance and coolant compatibility than five competitors' oils, including Mobil Vactra No. 2. This helps it to reduce stick-slip for enhanced machining accuracy and thus better manufacturing quality, while separating quickly from coolants to avoid fluid waste and reduce consumption costs.

GREATER PROTECTION FOR YOUR MACHINES

Shell Tonna oils are versatile and designed to extend the life of critical hydraulic pump and gearbox parts by protecting them from wear. For example, in Vickers vane pump tests (DIN 51524), Shell Tonna S3 M achieved up to 92% less wear than the maximum allowed. In four-ball wear tests (ASTM D4172), Shell Tonna S4 M had a scar diameter well below the allowable limit, thus demonstrating its excellent wear protection.

REAL-WORLD VALUE

A customer switched to Shell Tonna S4 M in four machines during a three-month trial. Top-up was reduced by 20% for the two Victor Vturn machines and by 30% for the two XYZ Machine Tools SMX 500 machines when compared with the previously used competitors' oils. The machines performed as expected, with no change in reliability or fluid waste rates, and no contamination issues. The customer continued to use Shell Tonna S4 M oil after the trial.

Customers switching to Shell Tonna S3 M have reported enhanced machining precision and reduced stick-slip. One customer reported \$46,000² of annual savings through reducing maintenance costs and production time losses. Another customer reported up to 6.5% less oil consumption owing to Shell Tonna S3 M oil's good adhesion to slideways.



IN TESTS,¹ SHELL TONNA S4 M DEMONSTRATED A BETTER OVERALL BALANCE OF FRICTIONAL PERFORMANCE AND COOLANT COMPATIBILITY THAN FIVE COMPETITORS' OILS, INCLUDING MOBIL VACTRA NO. 2.



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PRODUCT	BENEFITS	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 Tonna S4 M	<ul style="list-style-type: none"> Precision machining Outstanding frictional performance and coolant compatibility 	32, 68 and 220	<ul style="list-style-type: none"> Fives Group Cincinnati specifications for slideway lubricants: P-53 (ISO 32), P-47 (ISO 68), P-50 (ISO 220) DIN 51517, Part 3 ISO 12925-1 Type CKC ISO 19378 / ISO 6743-13 GA and GB (applied to ISO 68 and 220) China GB 11118.1-2011 L-HG (applied to ISO 32 and 68) ISO 11158 HM and DIN 51524, Part 2 HLP (applied to ISO 32 and 68) Meets the specifications of and approved by key Japanese equipment manufacturers
Shell Tonna S3 M	<ul style="list-style-type: none"> Extra machining accuracy Standard applications 	32, 68 and 220	<ul style="list-style-type: none"> Fives Group Cincinnati specifications for slideway lubricants: P-53 (ISO 32), P-47 (ISO 68), P-50 (ISO 220) China GB 11118.1-2011 L-HG (applied to ISO 32 and 68) Meets the specifications of and is approved by an extensive list of Japanese equipment manufacturers ISO 11158/ISO 6743-4 HM and HG (ISO 32 and 68) ISO 12925-1 CKC ISO 19378/ISO 6743-13 GA and GB (ISO 68 and 220)
Shell Tonna S2 MX	<ul style="list-style-type: none"> High adherence Excellent separation from coolants 	32, 68 and 220	<ul style="list-style-type: none"> Fives Group Cincinnati specifications for slideway lubricants: P-53 (ISO 32), P-47 (ISO 68), P-50 (ISO 220) ISO 6743-13 GA and GB (ISO 68 and 220)
Shell Tonna S2 M	<ul style="list-style-type: none"> Extra separation from coolants Standard applications 	32, 68 and 220	<ul style="list-style-type: none"> Fives Group Cincinnati specifications for slideway lubricants: P-53 (ISO 32), P-47 (ISO 68), P-50 (ISO 220) ISO 6743-13 GA and GB (ISO 68 and 220) China GB 11118.1-2011 L-HG (applied to ISO 32 and 68)

FULL PRODUCT AND SERVICE PORTFOLIO

Shell Lubricant Solutions is the market leader in lubricants and has an 80-year history of innovation. It constantly invests to develop better lubrication solutions, including advanced synthetic technologies such as

- Shell Omala S4 GX synthetic gear oil – for long life in demanding environments
- Shell Tellus S4 ME synthetic hydraulic oil – for long life and energy saving.

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

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

"Shell Lubricant Solutions" refers to the various Shell companies engaged in the lubricants business.

¹Based on the SKC coolant separability and Darmstadt rig tests, and Shell's technical experience with finished lubricants, additive, chemistry and base oils. Results may vary according to the operating conditions and equipment. No guarantees are provided. The tests were performed for sliding speeds from 0.01 to 3,000 mm/min; 10 mm/min was the peak friction-generating speed.

²Saving reported by one customer. Actual savings may vary, depending on the application, the current oil used, the maintenance procedures and the condition of the equipment.



For more information, please contact your
Shell Lubricant Solutions representative.

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