



SHELL RIMULA
ENERGISED PROTECTION



SHELL RIMULA R3 X

• TRIPLE ACTION RESISTS • WEAR • DEPOSITS • HEAT

ABOUT ENERGISED PROTECTION

You need to know your oil will protect your engine under all conditions. No matter how hot, cold, steep, dusty, muddy or extended your operations, you demand protection.

The Energised Protection of Shell Rimula heavy duty diesel engine oils provides protection in three critical areas:

- 1. Acid control** — protects against corrosion from acids formed as fuel burns
- 2. Deposit control** — keeps engine clean for optimum performance and long life
- 3. Wear control** — keeps moving metal engine surfaces apart for long engine life

Shell Rimula R3 X Energised Protection oils provide triple action protection against wear, deposits and heat to continuously adapt to the needs of your engine for protection in on- and off-highway applications.

PROTECTIVE POWER

Using modern multi-component chemistry, Shell Rimula R3 X gives all-round protection for turbo- and non-turbocharged engines alike.

RELATIVE PROTECTION

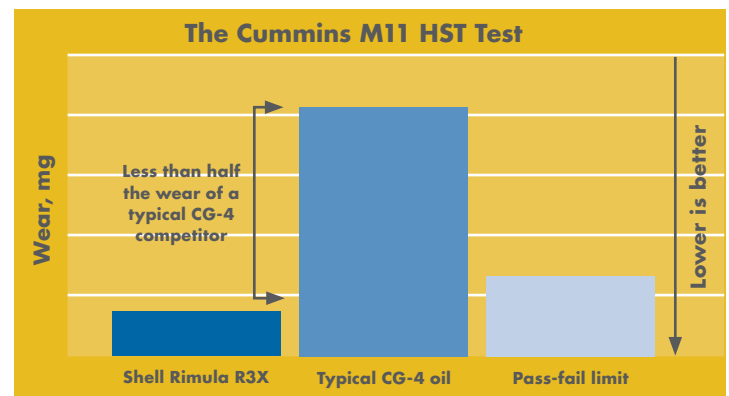
	Acid/ Corrosion	Dirt & Deposits	Wear
Shell Rimula R4 • Active Technology • Modern Engine – High Power Use	✓✓	✓✓✓	✓✓
Shell Rimula R3 X Triple Action Resists: • Wear • Deposits • Heat	✓✓	✓✓	✓✓
Shell Rimula R2 Extra • Turbocharger performance	✓✓ ^{1/2}	✓✓	✓

IMPROVED WEAR RESISTANCE

With over 18 million kilometers of documented on-road performance, Shell Rimula R3 X has demonstrated:

In the lab: Up to 50% lower cross-head wear in the industry standard Cummins M-11 HST test (see chart)

On the road: Up to 35% lower iron wear measured in used oil samples from heavy duty haulage operations in Caterpillar engines.



DESIGNED TO MEET CHALLENGES



EXCEPTIONAL DEPOSIT CONTROL

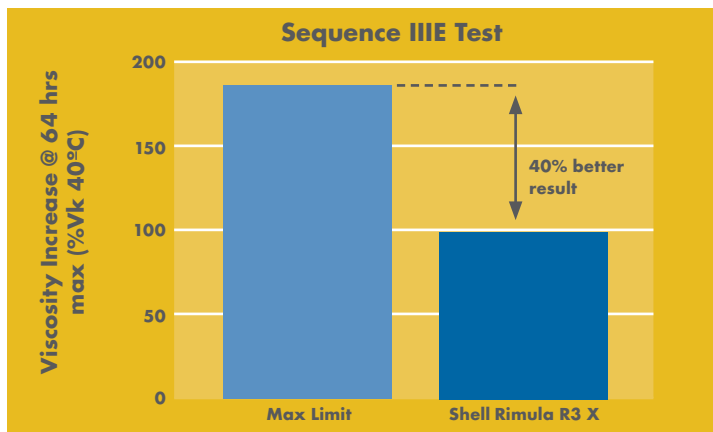
A clean engine inside is critical for efficient operation and long engine life. Shell Rimula R3 X has been shown to keep engines cleaner than previous generation oils. For instance:



INCREASED HEAT RESISTANCE

Hardworking engines generate heat – lots of it. Shell Rimula R3 X has been developed to resist breakdown by heat to ensure continued protection under heavy duty service. The oil exceeds the requirements of key industry high temperature oxidation tests* by up to 40% so providing a rugged safety margin for all but the most severe operations.

**including ASTM Sequence III and CEC PDSC test procedures*



SHELL RIMULA R3 X - APPLICATION GUIDE



With its wide range of on-highway truck maker approvals, Shell Rimula R3 X is particularly suitable for use in heavy duty bus, coach and truck applications, including modern turbocharged engines



Shell Rimula R3 X has been proven in rugged off-highway applications ranging from remote mining and quarrying operations to use in a wide range of agricultural machinery.



SPECIFICATIONS AND APPROVALS

	SAE Viscosity Grade		
	R3 Multi 10W-30	R3 X 15W-40	R3 X 20W-50
API: CH-4, CG-4, CF-4	✓	✓	✓
ACEA: E5, E3		✓	✓
Caterpillar: ECF-1-A		✓	
Cummins: CES 20071, 72, 75	✓	✓	✓
Cummins: CES 20076, 77	✓ <small>20076 only</small>	✓	
DDC: 93K215		✓	
MACK: EOM, EOM+	✓	✓	✓ <small>EOM only</small>
MAN: 3275		✓	✓
MB Approval: 228.3		✓	✓
MTU: Category 2		✓	
Renault Trucks: RD-2		✓	
Volvo: VDS-2		✓	
Meets req: Allison C-4		✓	



For more information contact your local Shell representative or visit www.Shell.com.