

# World Champion!

**FOCUS** technical correspondent, VIC OLIVER, puts to the test one of the first new Scania R 500 LA 6X4 MSZ two-pedal models to come off the assembly line

To accurately test and assess the ability of this new Scania model, the truck tractor was coupled to a set of interlink trailers loaded to their full legal capacity. In favourable weather conditions with very little head wind, the test run was conducted from Elandsfontein to Witbank – covering a distance of 238 km.

Throughout the test run, the Scania R 500 LA 6X4 MSZ was driven at the legal speed limit of 80 km/h and – thanks to its powerful engine and the quick, easy gear-changing ability of the automated gearbox – the vehicle was able to maintain this speed for most of the distance travelled. As many of us know, maintaining a good average speed not only facilitates quick trip times but also optimises vehicle productivity.

Within a few minutes behind the wheel of this world-class premium 56 t rig, I felt totally comfortable and

## SCANIA R500 & FLAT-DECK INTERLINKS

		Jhb - Cape Town			
		Laden 2 ways		Laden 1 way	
Purchase Price (Rands)		1759428		1759428	
Interest rate (%)		10		10	
Payload (tons)		37		37	
Distance (km)		2797.2		2797.2	
Time Taken (hrs:min)		38:53		37:57	
Ave Speed (km/h)		72		73.8	
Fuel Used (litres)		1438		1114.6	
Consumption (l/100 km)		51.4		39.8	
Fuel Price (R/l)		7.54		7.54	
Productivity Factor		52.1		27.8	
Ave Distance p.a. (km)		152630		169386	
Ave Carried p.a. (tons)		4035		2239	
Fixed Costs		Rands/annum		Rands/annum	
	Instalments	448592		448592	
	Crew	90480		90480	
	Insurance	147792		147792	
	Licence	16503		16503	
	Overheads	78152		78152	
Total fixed costs		781519		781519	
		R/km	R/Ton	R/km	R/Ton
Total fixed costs		5.12	193.69	4.61	349.05
Variable Costs					
	Fuel	3.91	147.95	3.03	229.36
	Tyres	0.78	29.66	0.79	60.02
	Maintenance	1.20	45.54	1.20	91.08
	Toll Fees	0.36	13.55	0.35	26.64
Total Costs		11.37	430.39	9.98	756.15

# R500 LA 6X4 MSZ Road test by Vic Oliver



in full control. The balance between the power produced by its 15.6-litre V8 engine and drive line components – including a 14-speed automated gearbox and braking retardation – gives the driver full control of the vehicle at all times and under any operating conditions.

The fuel consumption achieved during the test run was excellent, considering that the vehicle was fully loaded both ways. With an engine producing 368 kW (500 hp), I expected the Scania R 500 LA 6X4 MSZ to use 55 l/100 km. Instead, fuel consumption achieved on the trip was an amazing 43.79 l/100 km (2.28 km/l). Excellent fuel consumption was one of the factors contributing to the vehicle achieving 2010 International Truck of the Year Award status.

Fitted with a 14-speed synchromesh gearbox with a top gear ratio of 1:1 and a built-in retarder with an oil cooler and filter, the Scania R 500 LA 6X4 MSZ also boasts

an automatic clutch. Because drivers have the choice of running the truck in manual or automatic mode, I opted for automatic mode during most of the test run. With its two-pedal automated gearbox, automatic mode takes care of all the necessary changes – allowing the truck's driver to focus on the road ahead. If, on the other hand, the vehicle is driven in manual mode, gear changing is done by a slight flick of a button fitted to the steering column on a stalk.

The gearing is well matched to the engine. At 80 km/h in top gear, engine revolutions are at 1300 r/min exactly, with the engine producing its maximum torque of 2400 Nm. In automatic drive the electronic gear change mechanism allows the engine to lug down to 1100 r/min before changing gear, keeping engine revolutions low and maximizing the engine torque range.

When the Scania Opticruise system is selected, working together with other electronic systems offered by the Scania R

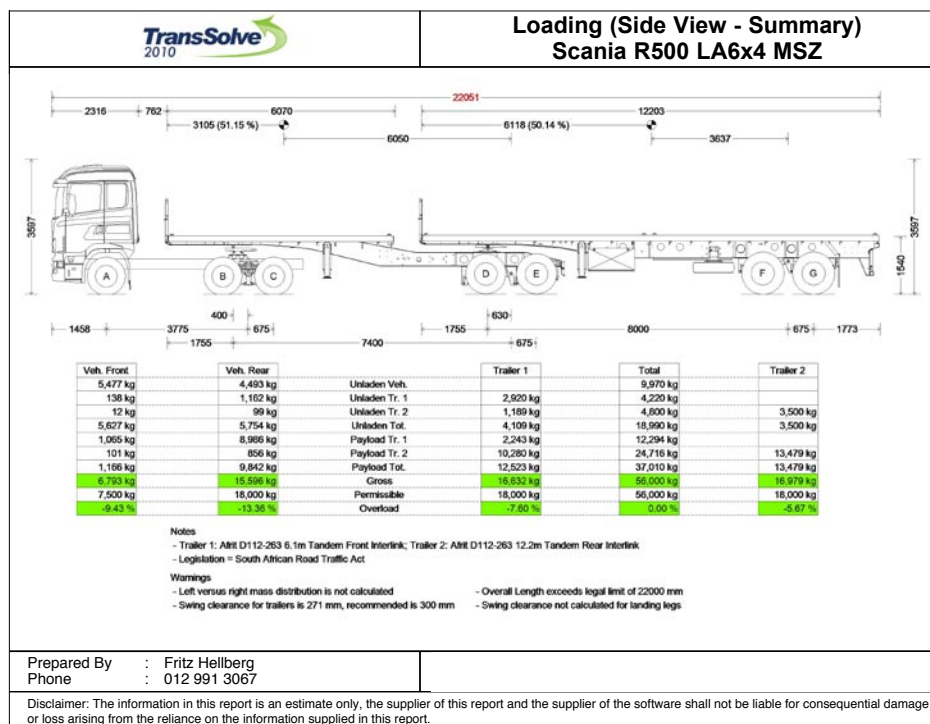
500 LA 6X4 MSZ – including retarder, engine and brake systems – operating costs are lowered, with safety and comfort improved. The five-stage hydraulic retarder and exhaust brakes are highly effective, producing 3000 Nm of torque at stage five.

During the test run I found that it was not necessary to use the foundation braking system/ foot brake at all, except during the last few metres when bringing the vehicle to a complete stop. If the Scania R 500 LA 6X4 MSZ is driven correctly, its brake linings will last a long time – saving on maintenance costs.

Another feature I found useful during the test run was the down-hill control switch which, when engaged, will automatically keep the vehicle at a set speed selected by the driver using retarders and even down-gearing the gearbox if necessary by way of the vehicle's electronic system. The Scania R 500 LA 6X4 MSZ is fitted with drum brakes well suited to South Africa's tough operating conditions. The anti-lock braking system (ABS) is also a standard fitting. Unfortunately, however, the vehicle's braking system does not include electronic braking, which would reduce brake application time.

In terms of ergonomics, the truck's spacious cab was extremely comfortable and all the controls were easy to use. Also, the interior noise level was very low; in fact, it's quieter inside the cab when the vehicle is running than it is in many passenger cars! With big double bunks and lots of storage space, the cab is well equipped to accommodate both driver and assistant driver on long trips.

In summary, after spending time in the Scania R 500 LA 6X4 MSZ, it's easy to understand why this vehicle won the 2010 International Truck of the Year award. It's a fabulous vehicle to drive; local truck drivers are going to love it. ■



\*These graphs illustrate the vehicle's operating costs but are not based on the road test.