

Powermix 2.0 John Deere 6250R

Fuel consumption in field work

		-20%	-10%	0	+10%	+20%	0	g/kWh	50	
Draft work:	Average fuel consumption							AdBlue 12.1g/kWh		
								and 9.50l/ha		
1 Heavy (100% Load)	Plough									
	Cultivator									
2 Medium heavy (60% Load)	Plough									
	Cultivator									
Pto work:	Average fuel consumption							AdBlue 9.5g/kWh		
								and 0.11l/ha		
3 Heavy (100% Load)	Power harrow									
	Mower									
4 Medium heavy (70% Load)	Power harrow									
	Mower									
5 Light (40% Load)	Power harrow									
	Mower									
Mixed work:	Average fuel consumption							AdBlue 11.9g/kWh		
								and 0.13l/ha		
6 Muckspreader										
7 Baler										
Powermix 257g/kWh								10.8g/kWh		

The Powermix figure is displayed at the bottom to the left and is arrived at by averaging the seven individual tests. The table shows average results for the categories draft work, pto work and mixed work, measuring fuel consumption in grams per kilowatt hour and in litres per hectare. The right graph shows the AdBlue consumption curve (AdBlue is not a fuel but is diesel exhaust fluid and used by the SCR system). The bars are narrower here because AdBlue is less expensive than diesel. Blue text marks the average rates. The yellow line in the left graph marks the average result obtained from all previous Powermix tests. The length of the individual bars indicates tractor performance in this specific type of work was better than (green) or fell short of (red) the average result of all Powermix candidates tested to date. The average Powermix parameter, obtained from all tractors tested to present, is currently 288g/kWh. Fuel rates for the John Deere 6250R AutoPour are about average or slightly below in all types of work. The overall Powermix result for diesel consumption is 10.4% lower than the average result obtained from all previous Powermix tests. The AdBlue consumption, which also needs to be included, was an average of 3.6 litres per 100 litres of diesel.

Fuel consumption in transport work

		-20%	-10%	0	+10%	+20%	0	g/kWh	100
On the flat (40%)								AdBlue-Verbrauch	
At 40km/h									
At 50km/h									
At 60km/h									
Uphill (50%)									
Maximum climb at load									
Idling (10%)									
Idling, stationary machine									
Total transport mix consumption									
At 40km/h								348g/kWh	16.0g/kWh
At 50km/h								352g/kWh	16.0g/kWh
At 60km/h									

The transport work test was also carried out at the lab on the new rolling road. Uphill work accounts for 50% of the total result, travelling on the flat is 40% and idling 10%. The yellow lines in the graph mark the average result obtained from all tractors that have participated in the transport test so far. The length of the bars indicates the percentage by which the test candidate was better than (green) or fell short of (red) the average result. The current average (only a small number of tractors have been tested so far) for the Powermix transport test is 399g/kWh at 40km/hr and 404g/kWh at 50km/hr. The 6250R Powermix fuel rates were below the average results in all measurements. Total consumption at 40km/hr was 11.2% less than the average of all of the tractors tested up to now and 12.0% less at 50km/hr.



The 6250R gets the familiar 6.8-litre DPS motor but a bigger cooling pack. Test output and fuel use were excellent. Photos ST, HW.

pedal. In addition, at each end of the lever's shifting gate there is a click. At the front of the gate, this click activates the set maximum speed, acting more or less like a third cruise control. At the rear the click reduces the forward speed all the way down to active standstill by reducing the transmission ratio. The entire engine control system convinced us during our lengthy field tests, along with the separate inching gate and the automatic park lock, which activates the trailer brakes too. Indeed 'CommandPro' is a major coup for John Deere. Our only quibble is you can't select the pedal speed range from the dial.

Our test team operator discussion was dominated by the new stick which, as mentioned, is the alternative to Deere's traditional slider and speed wheel. On the new joystick there are five flick switches, four press buttons and a dial – so plenty of configuration options which, as usual, is good for some and not for others. Those who have complex ISObus implements will love 'CommandPro'. However, the driver not keen on bags of in-cab technology should perhaps go for the older style 'CommandArm'.

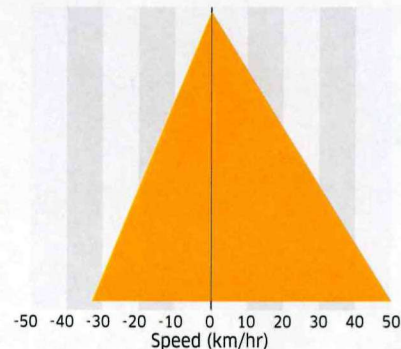
If you do plump for 'CommandPro', then you will find all kinds of help in the 'access manager', which ensures no unauthorised changes are made to the settings. A few of our test operators experienced a moment of horror after pressing the wrong button, something that's easy to do as there are lots of buttons, and many look the same. Assistance isn't far away, though: there is a decal on the cab's A-pillar that shows the factory-set functions. The complexity of the steering system, headland and data management is discussed in a separate article in the next issue.

Speed ratios

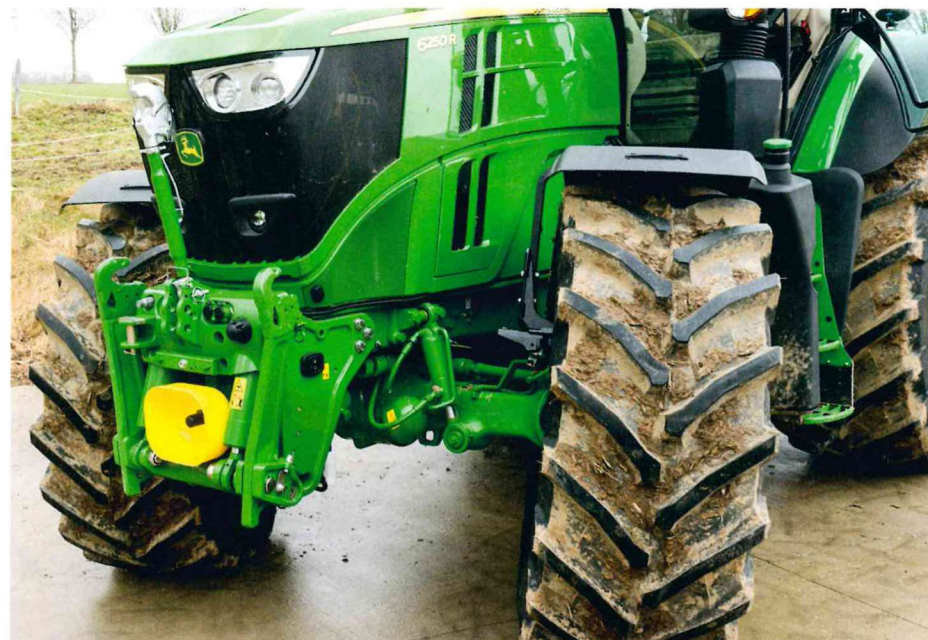
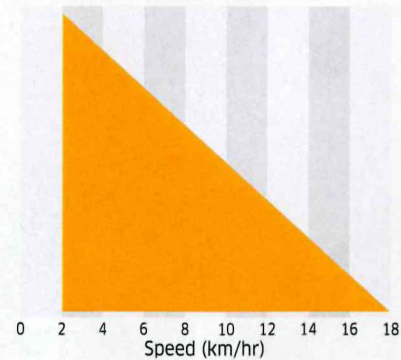
Forward/reverse speeds are stepless, with a powershuttle on the steering column and armrest. There is no 60km/hr option, but 50km/hr is achieved at 1,630rpm.



Infinite forward/reverse speeds



Infinitely variable in the 4-12km/hr band



The new front linkage made a good impression with our testers, although they thought the equally new suspension system, which utilises rams on the outside, could do with providing more cushioning.

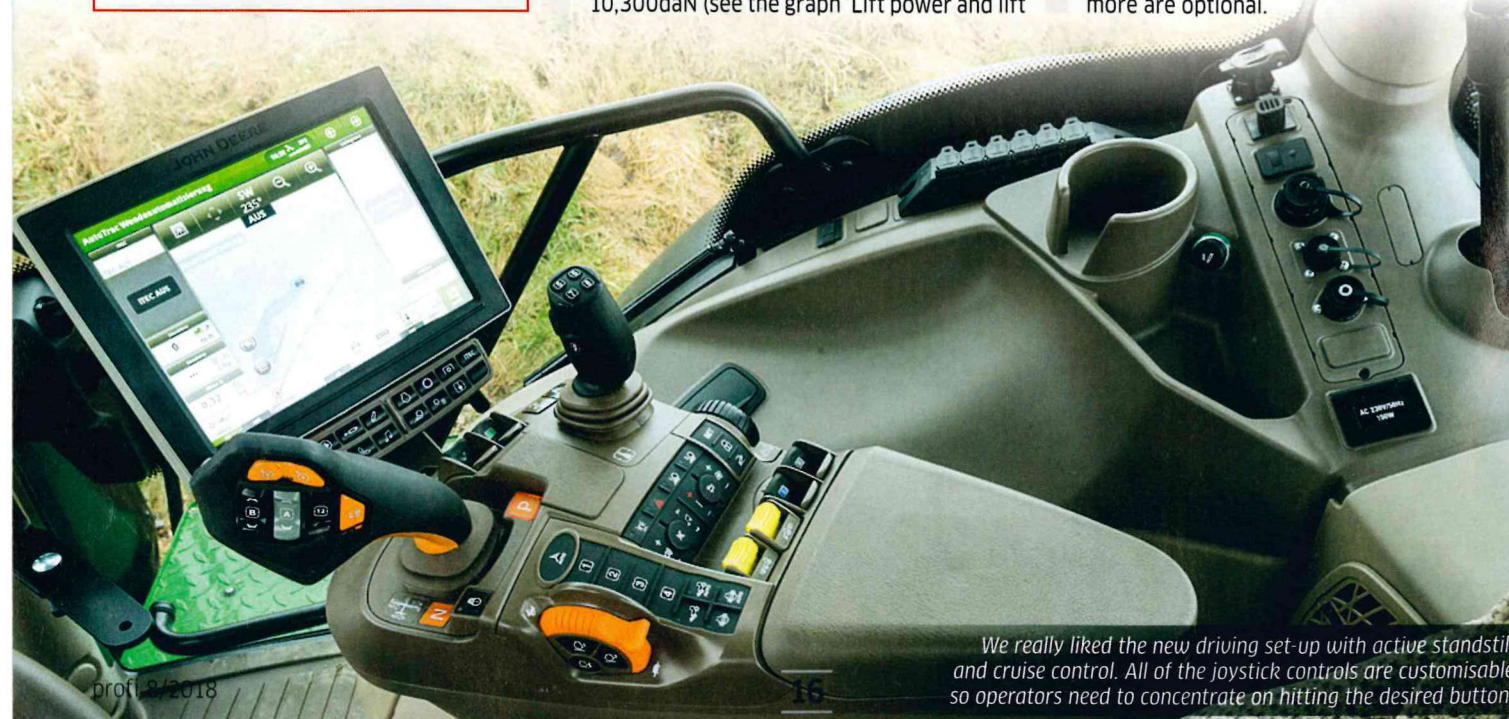
The cab itself is straightforward enough. It is 100mm taller than on the 'small' 6R models, and that's about the only difference. A noise level of 72.6dB(A) is in line with the top class build quality of the rest of the cab, though we're surprised that Deere has gone for a less grippy plastic steering wheel and small windscreen wiper. Back on the positive, the terminal is an example to competitors as to how display control hardware and software should be provided.

Moving to the rear of the tractor, the links haven't changed but have received beefier rams. The linkage developed a continuous lift power of 7,300daN at the DLG test centre. With that lift power increasing to more than 10,300daN (see the graph 'Lift power and lift

requirement') in the top range, this machine should always have enough power in reserve to tackle even the heaviest of mounted kit.

In the hydraulic department, the DLG measured an oil flow of 161l/min and a hydraulic output of 42.5kW. That's usually enough, but we would still like to see the 220l/min from the 7R offered as an option. The hydraulic oil is shared with the transmission, with a reasonable 90 litres on tap courtesy of the standard auxiliary tank.

There is no compromise with the spools – up to six couplers at the rear, or five and one power beyond coupler, all featuring a relief lever and clear identification. The front linkage also has a separate spool, and up to two more are optional.



We really liked the new driving set-up with active standstill and cruise control. All of the joystick controls are customisable so operators need to concentrate on hitting the desired button.