New Holland T7.260

Datasheet DLG PowerMix

Applicant

New Holland Agricultural
Equipment SpA
Via Plava 80
I-10135 Torino
www.newholland.com

Test performed by

DLG e.V.
Test Center Technology
and Farm Inputs
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Test No.

10-219

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Specifications

Engine		
Manufacturer	CNH/FPT	
Standard of emission*	III B	
Exhaust aftertreatment		
– NO_x-Emission	SCR	
– Particulate-Emission	–	
Exhaust gas recuperation	without EGR	
Number of cylinders*	6	
Bore*	104 mm	
Stroke*	132 mm	
Displacement*	6728 cm^3	
Rated speed*	2200 min^{-1}	
Power (ECE R120)*	**w/o Boost**	**with Boost**
– Rated power	158 kW	181 kW
– Maximum power	172 kW	191 kW
– Engine speed at maximum power	1800 min^{-1}	1800 min^{-1}
Main fan		
– Diameter	620 mm	
– Number of fan blades	9	

Transmission	
Manufacturer	CNH
Type of construction	Full power shift
Ranges	–
Gears	
– forward	19
– reverse	6
Design speed*	50 km/h

Power Take Off				
Profile	6 splines (1 3/8“)			
Transmission ratio*				
– Standard pto speed	540	540E	1000	1000E
– Engine speed	1950 min^{-1}	– min^{-1}	1893 min^{-1}	– min^{-1}

Chassis			
Front axle			
– Manufacturer	CNH		
– Type	rigid axle, suspended		
Tires	**front**	**rear**	
– Manufacturer/Model	Firestone Radial 9000	Firestone Radial 9000	
– Tire size	540/65 R30	650/65 R42	
Axle load	**front**	**rear**	**total**
– Permissible*	6000 kg	9500 kg	13000 kg
– Empty weight	3230 kg	4775 kg	8005 kg

Hydraulic	
Sytem*	Closed center; common supply of oil
Fluid type*	Ambra Multi G (NH 410 B), 10W-30
Capacity*	82 l
Extractable*	33 l
Auxiliary valves	
– Number	4
– Max. flowrate*	150 l/min
Max. pressure	210 bar

Fitted options	
Free return flow	yes
Air condition	yes
Air compressor	yes
Front hydraulic power lift	no
Front pto	no

* Manufacturer's data

Test conditions

Axle load with ballast	front	rear
Axle load	4005 kg	5850 kg
Ballast		
– on frame	900 kg	950 kg
– on axle	– kg	– kg
Axle load distribution	41 %	59 %

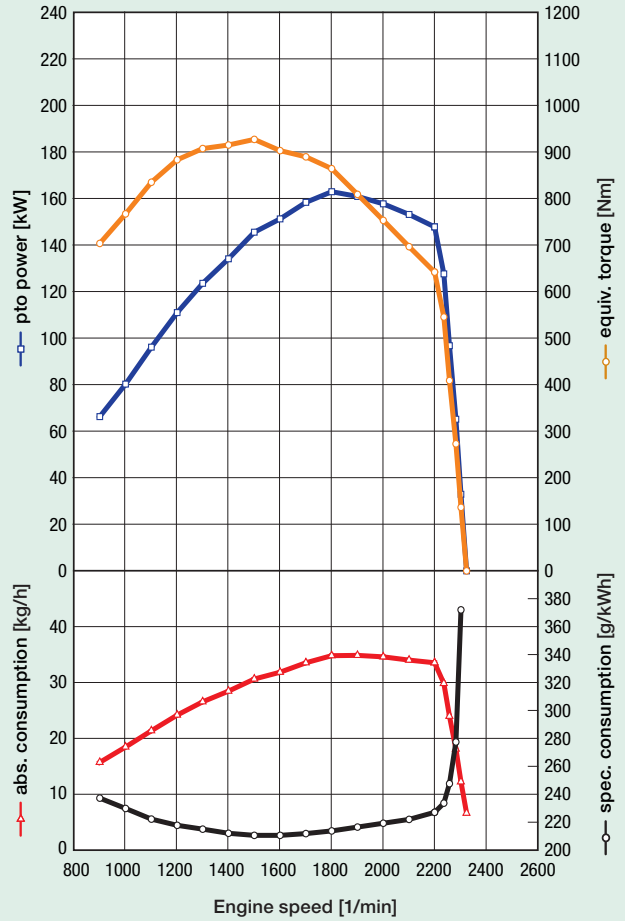
Tire pressure	front	rear
	1,2 bar	1,2 bar

Results of measurement at pto dynamometer – without boost

Full load	
Rated speed	
– Pto power	147,8 kW
– Absolute fuel consumption	33,6 kg/h
– Spec. fuel consumption	227 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
Maximum power	
– Engine speed	1800 min^{-1}
– Pto power	162,9 kW
– Absolute fuel consumption	34,8 kg/h
– Spec. fuel consumption	214 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
1000 rpm at pto	
– Engine speed	1900 min^{-1}
– Pto power	160,9 kW
– Absolute fuel consumption	34,9 kg/h
– Spec. fuel consumption	217 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

Part load	
Full throttle, 80 % of power at rated speed	
– Absolute fuel consumption	28,0 kg/h
– Spec. fuel consumption	236 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
90 % of rated speed, 80 % of power at rated speed	
– Absolute fuel consumption	26,6 kg/h
– Spec. fuel consumption	225 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
90 % of rated speed, 40 % of power at rated speed	
– Absolute fuel consumption	15,5 kg/h
– Spec. fuel consumption	261 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
60 % of rated speed, 40 % of power at rated speed	
– Absolute fuel consumption	13,7 kg/h
– Spec. fuel consumption	230 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
60 % of rated speed, 60 % of power at rated speed	
– Absolute fuel consumption	19,4 kg/h
– Spec. fuel consumption	218 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

Graphical analysis



Torque rise	44 %
Engine speed drop	32 %
Pulling off torque	119 %

AdBlue consumption relative to fuel consumption during test at pto dynamometer: 6,5 %

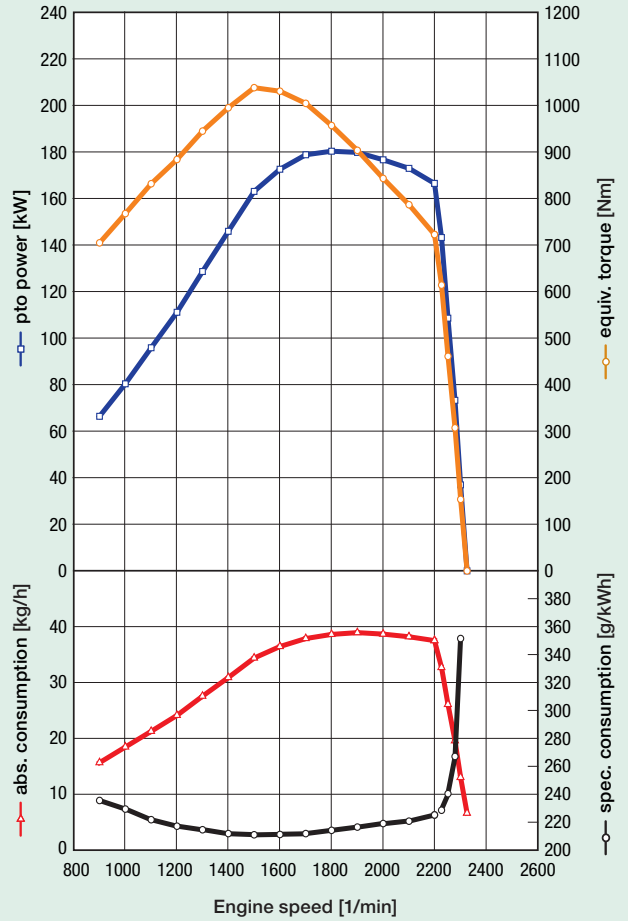
* Measuring system under construction.

Results of measurement at pto dynamometer – with boost

Full load	
Rated speed	
– Pto power	166,5 kW
– Absolute fuel consumption	37,5 kg/h
– Spec. fuel consumption	225 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
Maximum power	
– Engine speed	1800 min^{-1}
– Pto power	180,3 kW
– Absolute fuel consumption	38,6 kg/h
– Spec. fuel consumption	214 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
1000 rpm at pto	
– Engine speed	1900 min^{-1}
– Pto power	179,8 kW
– Absolute fuel consumption	38,9 kg/h
– Spec. fuel consumption	216 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

Part load	
Full throttle, 80 % of power at rated speed	
– Absolute fuel consumption	30,8 kg/h
– Spec. fuel consumption	230 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
90 % of rated speed, 80 % of power at rated speed	
– Absolute fuel consumption	29,5 kg/h
– Spec. fuel consumption	221 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
90 % of rated speed, 40 % of power at rated speed	
– Absolute fuel consumption	16,8 kg/h
– Spec. fuel consumption	252 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
60 % of rated speed, 40 % of power at rated speed	
– Absolute fuel consumption	15,1 kg/h
– Spec. fuel consumption	226 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %
60 % of rated speed, 60 % of power at rated speed	
– Absolute fuel consumption	21,5 kg/h
– Spec. fuel consumption	216 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

Graphical analysis

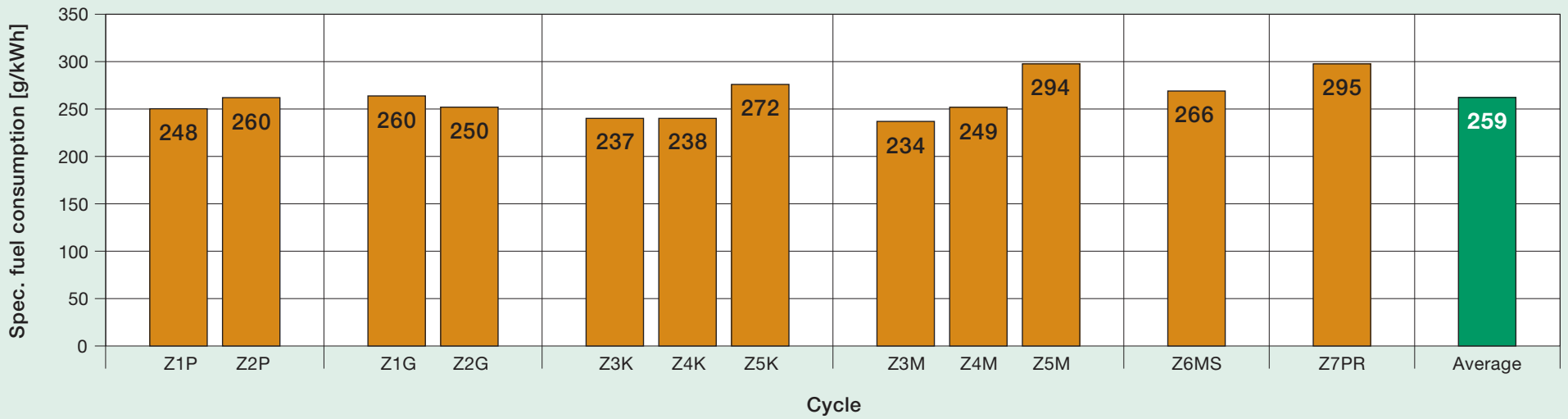


Torque rise	44 %
Engine speed drop	32 %

AdBlue consumption relative to fuel consumption during test at pto dynamometer: 6,6 %

* Measuring system under construction.

Results of DLG PowerMix



Main focus	Cycle		Average Value				
			Engine speed	Driving speed	Spec. fuel consumption	Spec. AdBlue consumption	Ratio AdBlue to fuel
Drawbar work	Plough 100 %	Z1P	1560 min^{-1}	6,7 km/h	248 g/kWh	–* g/kWh	–* %
	Plough 60 %	Z2P	1299 min^{-1}	8,2 km/h	260 g/kWh	–* g/kWh	–* %
	Cultivator 100 %	Z1G	1935 min^{-1}	9,3 km/h	260 g/kWh	–* g/kWh	–* %
	Cultivator 60 %	Z2G	1484 min^{-1}	11,0 km/h	250 g/kWh	–* g/kWh	–* %
Pto work	Rotary harrow 100 %	Z3K	1685 min^{-1}	4,8 km/h	237 g/kWh	–* g/kWh	–* %
	Rotary harrow 70 %	Z4K	1615 min^{-1}	6,1 km/h	238 g/kWh	–* g/kWh	–* %
	Rotary harrow 40 %	Z5K	1662 min^{-1}	6,3 km/h	272 g/kWh	–* g/kWh	–* %
	Mower 100 %	Z3M	1577 min^{-1}	12,2 km/h	234 g/kWh	–* g/kWh	–* %
	Mower 70 %	Z4M	1617 min^{-1}	14,5 km/h	249 g/kWh	–* g/kWh	–* %
	Mower 40 %	Z5M	1665 min^{-1}	14,9 km/h	294 g/kWh	–* g/kWh	–* %
Hydraulic work	Manure spreader	Z6MS	1804 min^{-1}	6,7 km/h	266 g/kWh	–* g/kWh	–* %
	Baler	Z7PR	1818 min^{-1}	9,7 km/h	295 g/kWh	–* g/kWh	–* %
Average Value for all cycles					**259 g/kWh**	**–* g/kWh**	**–* %**

AdBlue consumption relative to fuel consumption during DLG-PowerMix: 4,0 %

* Measuring system under construction.