



New Holland T7.270 Auto Command

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.

10-268



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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	168 kW	192 kW
– Maximum power	183 kW	198 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	CVT
Ranges	4
Gears	
– forward	–
– reverse	–
Design speed*	50 km/h

Power Take Off				
Profile	21 splines (1 3/8")			
Transmission ratio*				
– Standard pto speed	540	540E	1000	1000E
– Engine speed	– min ⁻¹	– min ⁻¹	1893 min ⁻¹	1700 min ⁻¹

Chassis			
Front axle			
– Manufacturer	CNH		
– Type	rigid axle, suspended		
Tires	front	rear	
– Manufacturer/Model	Continental Contract AC 65	Continental Contract AC 65	
– Tire size	540/65 R30	650/65 R42	
Axle load	front	rear	total
– Permissible*	6000 kg	9500 kg	13000 kg
– Empty weight	3480 kg	4990 kg	8470 kg

Hydraulic	
Sytem*	Closed center, common supply of oil
Fluid type*	Ambra Multi G (NH 410 B), 10W-30
Capacity*	84 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

Test conditions

Axle load with ballast	front	rear
Axle load	3910 kg	6500 kg
Ballast		
– on frame	990 kg	950 kg
– on axle	– kg	– kg
Axle load distribution	38 %	62 %

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

* Manufacturer's data

Results of measurement at pto dynamometer – without boost

Full load	
Rated speed	
– Pto power	148,6 kW
– Absolute fuel consumption	35,3 kg/h
– Spec. fuel consumption	238 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

Maximum power	
– Engine speed	1800 min ⁻¹
– Pto power	166,6 kW
– Absolute fuel consumption	37,1 kg/h
– Spec. fuel consumption	223 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

1000 rpm at pto	
– Engine speed	1900 min ⁻¹
– Pto power	163,0 kW
– Absolute fuel consumption	36,9 kg/h
– Spec. fuel consumption	226 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

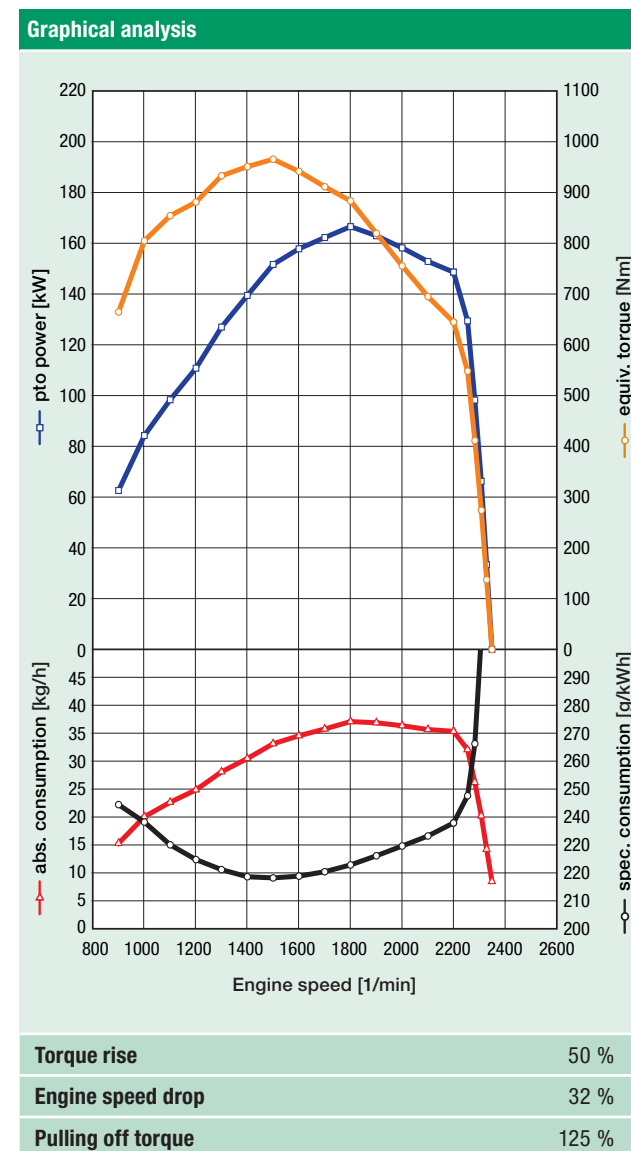
Part load	
Full throttle, 80 % of power at rated speed	
– Absolute fuel consumption	30,0 kg/h
– Spec. fuel consumption	252 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

90 % of rated speed, 80 % of power at rated speed	
– Absolute fuel consumption	28,1 kg/h
– Spec. fuel consumption	237 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

90 % of rated speed, 40 % of power at rated speed	
– Absolute fuel consumption	16,9 kg/h
– Spec. fuel consumption	284 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

60 % of rated speed, 40 % of power at rated speed	
– Absolute fuel consumption	14,4 kg/h
– Spec. fuel consumption	242 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

60 % of rated speed, 60 % of power at rated speed	
– Absolute fuel consumption	20,2 kg/h
– Spec. fuel consumption	226 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %



AdBlue consumption relative to fuel consumption during test at pto dynamometer: 6,0 %

* Measuring system under construction.

Results of measurement at pto dynamometer – with boost

Full load	
Rated speed	
– Pto power	167,9 kW
– Absolute fuel consumption	39,5 kg/h
– Spec. fuel consumption	235 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

Maximum power	
– Engine speed	1900 min ⁻¹
– Pto power	177,7 kW
– Absolute fuel consumption	40,0 kg/h
– Spec. fuel consumption	225 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

1000 rpm at pto	
– Engine speed	1900 min ⁻¹
– Pto power	177,7 kW
– Absolute fuel consumption	40,0 kg/h
– Spec. fuel consumption	225 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

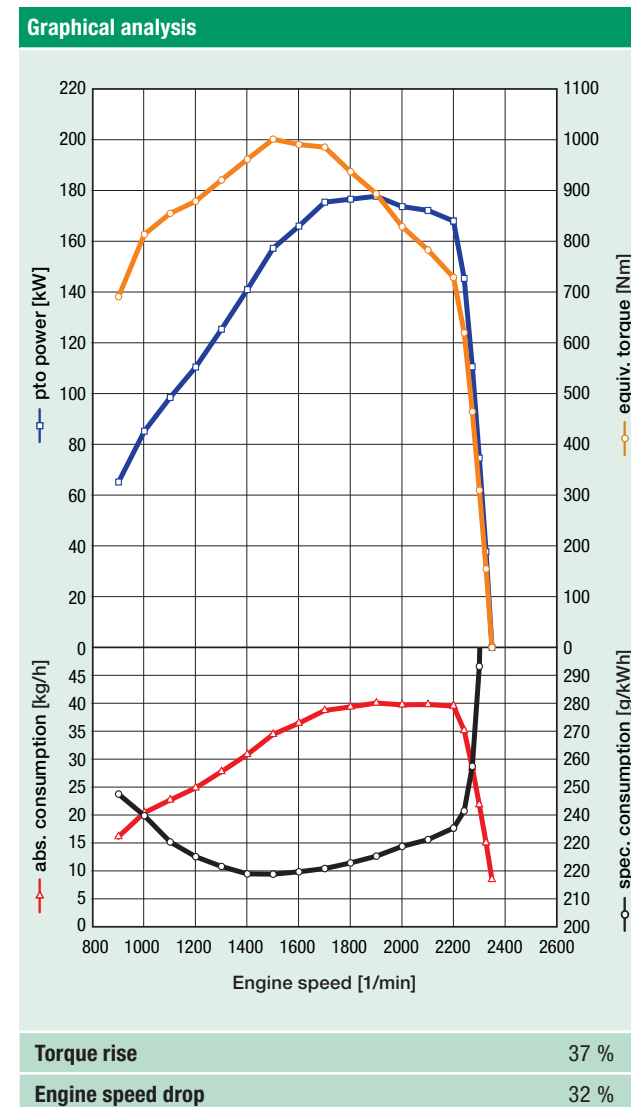
Part load	
Full throttle, 80 % of power at rated speed	
– Absolute fuel consumption	33,0 kg/h
– Spec. fuel consumption	246 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

90 % of rated speed, 80 % of power at rated speed	
– Absolute fuel consumption	31,3 kg/h
– Spec. fuel consumption	233 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

90 % of rated speed, 40 % of power at rated speed	
– Absolute fuel consumption	18,3 kg/h
– Spec. fuel consumption	273 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

60 % of rated speed, 40 % of power at rated speed	
– Absolute fuel consumption	16,0 kg/h
– Spec. fuel consumption	238 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %

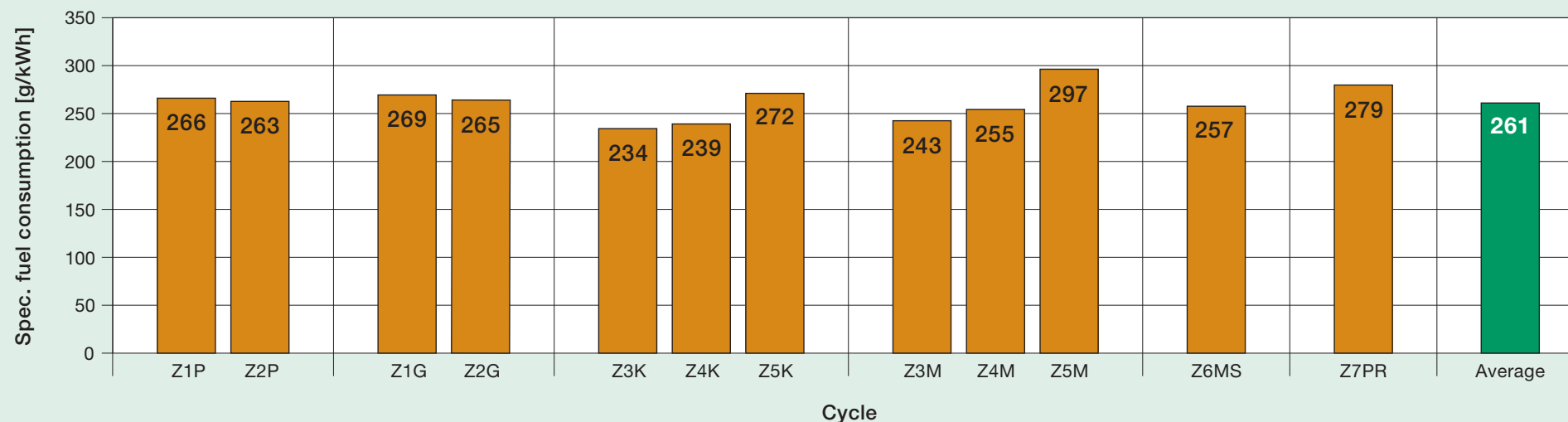
60 % of rated speed, 60 % of power at rated speed	
– Absolute fuel consumption	22,6 kg/h
– Spec. fuel consumption	224 g/kWh
– Spec. AdBlue consumption	–* g/kWh
– Percentage AdBlue to fuel	–* %



AdBlue consumption relative to fuel consumption during test at pto dynamometer: 6,1 %

* Measuring system under construction.

Results of DLG PowerMix



Main focus	Cycle		Average Value			
			Engine speed	Driving speed	Spec. fuel consumption	Spec. AdBlue consumption
Drawbar work	Plough 100 %	Z1P	1510 min ⁻¹	7,2 km/h	266 g/kWh	—* g/kWh
	Plough 60 %	Z2P	1307 min ⁻¹	8,6 km/h	263 g/kWh	—* g/kWh
	Cultivator 100 %	Z1G	1815 min ⁻¹	9,2 km/h	269 g/kWh	—* g/kWh
	Cultivator 60 %	Z2G	1400 min ⁻¹	11,5 km/h	265 g/kWh	—* g/kWh
Pto work	Rotary harrow 100 %	Z3K	1559 min ⁻¹	5,6 km/h	234 g/kWh	—* g/kWh
	Rotary harrow 70 %	Z4K	1423 min ⁻¹	5,8 km/h	239 g/kWh	—* g/kWh
	Rotary harrow 40 %	Z5K	1476 min ⁻¹	5,8 km/h	272 g/kWh	—* g/kWh
	Mower 100 %	Z3M	1567 min ⁻¹	14,1 km/h	243 g/kWh	—* g/kWh
	Mower 70 %	Z4M	1405 min ⁻¹	15,2 km/h	255 g/kWh	—* g/kWh
	Mower 40 %	Z5M	1463 min ⁻¹	15,4 km/h	297 g/kWh	—* g/kWh
Hydraulic work	Manure spreader	Z6MS	1587 min ⁻¹	6,7 km/h	257 g/kWh	—* g/kWh
	Baler	Z7PR	1608 min ⁻¹	9,8 km/h	279 g/kWh	—* g/kWh
Average Value for all cycles					261 g/kWh	—* g/kWh

AdBlue consumption relative to fuel consumption during DLG-PowerMix: 4,6 %

* Measuring system under construction.