

DLG-Data Sheet Tractors 2003

John Deere 6820 AutoQuad

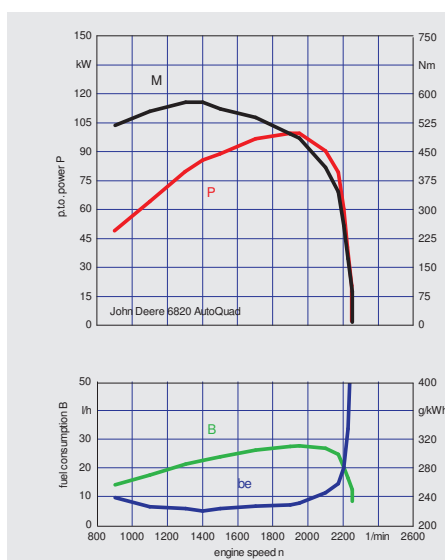
DLG-top agrar-Test Issue No. 12/2002

Engine

John Deere 6068HLA71, rated engine power 99 kW at 2100 min⁻¹, turbocharger, intercooler, 6 cylinder, capacity 6788 cm³, bore 106,5 mm, stroke 127 mm, water cooled, viscous fan, average pressure 8,3 daN/cm², fuel tank capacity 207 l

Measurement at main power take off

	Rated engine speed 2100 min ⁻¹	Engine speed at max power 1950 min ⁻¹
Power	90,3 kW	99,7 kW
Fuel consumption	26,7 l/h	27,8 l/h
Specific fuel cons.	247 g/kWh	233 g/kWh



Average fuel consumption of

the 6 measurement points from the governor curve 18,1 l/h, 309 g/kWh

Equivalent flywheel torque

Max. torque 583 Nm at 1400 min⁻¹, torque increase 42 % at a speed drop of 33 %

Torque at engine speed 1000 min⁻¹

132 % rated to the torque at rated engine speed

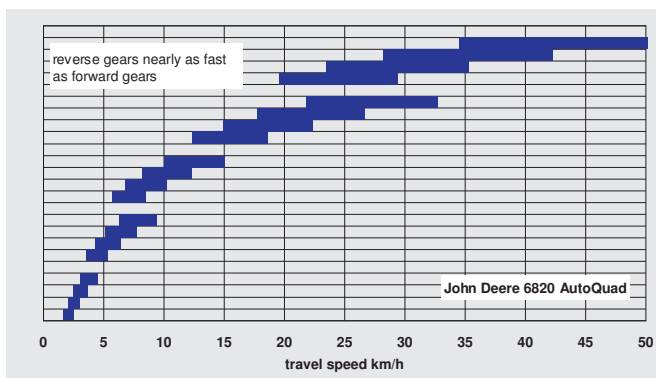
Power take off

Wet multi-disc clutch, electro-hydraulically operated by rotary switch, 1 rear p.t.o., form 1, triple shifting

Standard speed	540	540 E	1000	1000E
Engine speed	1987 min ⁻¹	1753 min ⁻¹	2000 min ⁻¹	-

Gearbox

Wet multi-disc clutch, 20 forward, 20 reverse; selectable gearbox with 4 gears, power shifted, partly automated; range gearbox with 5 ranges, synchronised; shuttle gearbox, power shifted; 2 shift levers, 2 buttons, 1 rocker switch



Speed scheme arranged by groups, for every gear in the speed range from the engine speed at max. torque to the rated engine speed.

Drawbar power

Max. power 88,1 kW at 6,9 km/h and engine speed 1950 min⁻¹, at 266 g/kWh; at rated engine speed 78,9 kW at 8,4 km/h, at 285 g/kWh



Chassis

All wheel drive, central driving shaft with universal joints, wet multi-disc clutch, electro-hydraulically operated; front self-engaging multi-plate differential lock, rear multi-plate differential lock, electro-hydraulically operated; hydro-pneumatically suspended front axle.

Front Tyre 540/65 R 28

Rear Tyre 650/65 R 38

Turning circle: 13,9 m left; 14,2 m right

Brakes

Hydraulically operated, oil-immersed disc brake at the rear axle; automatic engagement of 4WD.

Cab

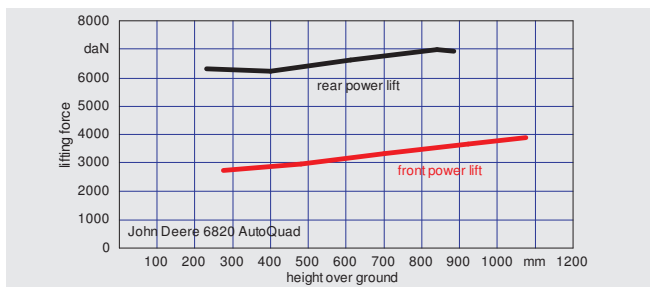
John Deere SG 068, OECD-No. 4/0 694, 2 doors, rear and side windows tiltable, cooling water heat exchanger, air conditioner

Sound levels at drivers ear

	Unloaded	Under load
At 7.5km/h, nominal gear selected, all openings closed	-	71,0 dB(A)
Open	-	-
In loudest gear, all openings closed	74,0 dB(A)	-

Hydraulic system

Closed centre type; pressure and flow compensated system, power lift category 2, 2 external cylinders with 85 mm diameter, electronic lower link sensing, front power lift



Oil tapping port

Max flow rate 114,2 l/min; max. hydraulic power 33,3 kW at 185 bar and 108,2 l/min; max. pressure 205 bar; oil together with gear box with 65 l capacity, available to external cylinders 25 l (stationary), 15 l (in transport)

Masses/Axle load

Mass	Test tractor	Permissible total mass
Front	2635 kg	4800 kg
Rear	3695 kg	7800 kg
Total	6330 kg	10500 kg

Tractor mass to engine power ratio 64 kg/kW

Dimensions

Width 2430 mm, length 5380 mm, height at top of exhaust silencer pipe 2890 mm, at cab 2910 mm, wheel base 2600 mm, distance from p.t.o. shaft end to trailer hitch 180 mm, distance from p.t.o. shaft end to lower link couplers 530 mm



Test centre

DLG-Prüfstelle für Landmaschinen