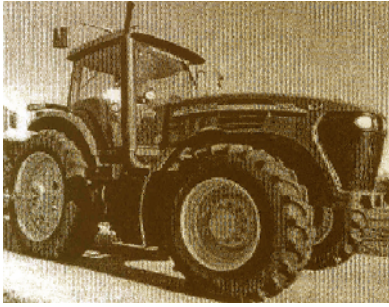




OECD approval number

2/2 170

Restricted Code

OECD approval date

20/09/2004

Make

John Deere

Model

7820

Type

4 WD

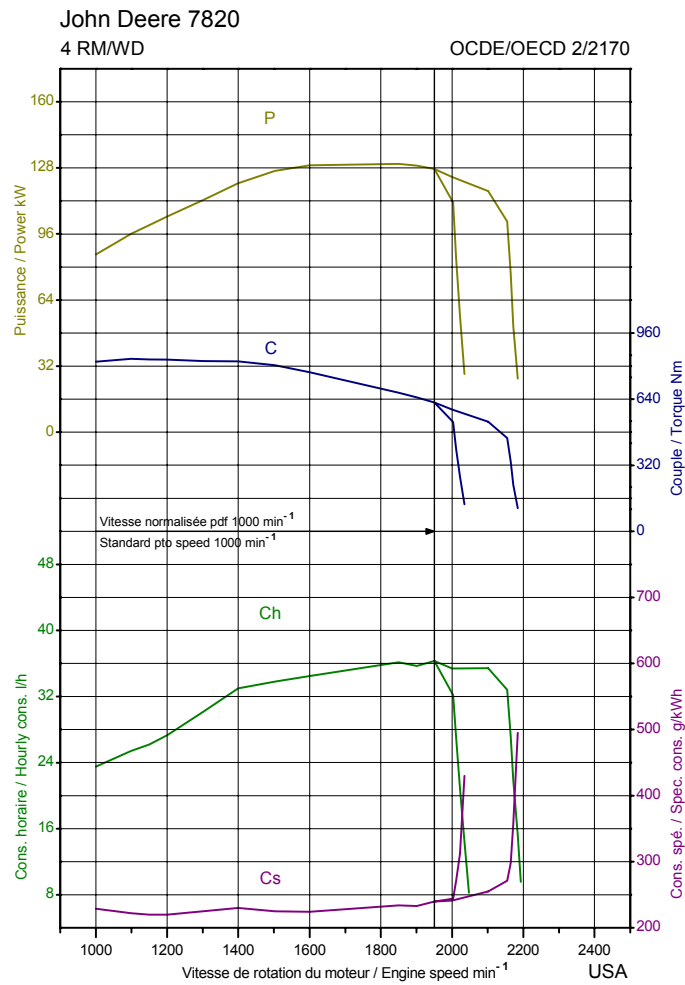
AutoQuad Plus - 20 speeds - MFWD - 40 km/h

Manufacturer

John Deere Tractor Works

Testing station:

Nebraska Tractor Test Laboratory, Lincoln, USA



Engine, Transmission, Power take-off Specifications

<i>Make, Model</i>	John Deere	6081HRW41
<i>Type, Supercharging</i>	Direct injection	Yes
<i>Cylinders, Disposition</i>	6	vertical in line
<i>Capacity, Cooling</i>	8134 cm ³	Liquid
<i>Gear box</i>		Mechanical
<i>Number of forward and reverse speeds</i>	20	20
<i>Speed at rated engine speed</i>	from 2.51	to 41.01 km/h
<u>Standard Power take-off speed</u>	<u>540 min⁻¹</u>	<u>1000 min⁻¹</u>
<i>Power take-off speed at rated engine speed</i>	582 min ⁻¹	1077 min ⁻¹
<i>Diameter of the shaft</i>	35 mm	45 mm
<i>Number of splines</i>	6	20

Power take-off TestTwo hours test at maximum power

<i>Power, Engine and Power take-off speed</i>	130.0 kW	1850 min ⁻¹	949 min ⁻¹
<i>Hourly and specific consumption</i>		36.15 l/h	234 g/kWh

Test at maximum power at rated engine speed

<i>Power, Engine and Power take-off speed</i>	116.7 kW	2101 min ⁻¹	1077 min ⁻¹
<i>Hourly and specific consumption</i>		35.44 l/h	255 g/kWh

Test at standard Power take-off speed

<i>Power, Engine and Power take-off speed</i>	127.5 kW	1950 min ⁻¹	1000 min ⁻¹
<i>Hourly and specific consumption</i>		36.32 l/h	240 g/kWh

Torque rise

57.3 %

Maximum torque, Engine speed corresponding835.0 Nm 1099 min⁻¹**Drawbar Test**

<i>Front tyres, Rear tyres</i>	420/90 R 30	480/80 R 46
<u>Test with tractor</u>	<u>unballasted</u>	<u>ballasted</u>
<i>Total Mass</i>	7820 kg	9686 kg
<i>Maximum drawbar pull</i>	75.9 kN	96.2 kN
<i>at speed of</i>	4.16 km/h	3.43 km/h
<i>Maximum power</i>	118.8 kW	119.3 kW
<i>at speed of</i>	7.25 km/h	6.66 km/h

Hydraulic Performance and Power Lift Test*Hydraulic system*

Closed centre

At maximum hydraulic power

<i>Flow rate, Pressure, Power (couplers: 1 pair)</i>	121.4 l/min	14.4 MPa	29.2 kW
<i>Flow rate, Pressure, Power (couplers: 2 pairs or +)</i>	118.8 l/min	17.8 MPa	35.2 kW

Maximum lifting force

<i>at the hitch points, at frame (Cat. 3, Euro, 2xØ 90 mm cylinders)</i>	55.2 kN	60.6 kN
<i>at the hitch points, at frame (Cat. 3, Euro, 2xØ 100 mm cylinders)</i>	69.6 kN	75.1 kN
<i>at the hitch points, at frame (Cat. 3, 2xØ 90 mm cylinders)</i>	53.1 kN	48.9 kN
<i>at the hitch points, at frame (Cat. 3, 2xØ 100 mm cylinders)</i>	75.2 kN	69.3 kN