OECD ABSTRACT OF AGRICULTURAL AND FORESTRY TRACTOR PERFORMANCE TEST

OECD Approval Number 2/2 919

OECD Approval Date 14/01/2016

Make John Deere

Model 7310R

Type 4WD with rear dual wheels

Transmission e 23 Full PowerShift

Speed 40 km/h

Manufacturer John Deere Tractor Works

Testing Station NTTL – U.S.A.







SPECIFICATIONS

ENGINE

Make
Model
Type
Supercharging
Cylinders
Disposition
Capacity
Cooling

John Deere 6090RW431 Direct injection Yes 6 vertical in line

8984 cm³

Liquid

TRANSMISSION

Gear box Number of forward and reverse speeds Speed at rated engine speed $\begin{array}{ccc} & & & e23 \ PST \\ 23 & & 12 \\ from \ 2,42 & & to \ 42,00 \ km/h \end{array}$

POWER TAKE-OFF SPECIFICATIONS

Standard Power take-off speed Power take-off speed at rated engine speed Diameter of the shaft Number of splines 540 min⁻¹

Not

Applicable

 $1077 \; min^{\text{-}1} \\ 45 \; mm \\ 20$

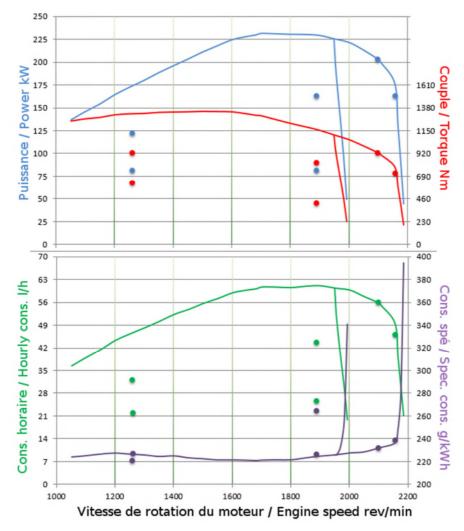
1000 min-1





PTO TEST RESULTS

One hour test at maximum power			
Power, Engine and Power take-off speed	231,04 kW	1751 min ⁻¹	898 min ⁻¹
Hourly and specific consumption		60,71 l/h	221 g/kWh
Hourly and specific urea consumption		1,29 l/h	6,1 g/kWh-
Test at maximum power at rated engine speed			
Power, Engine and Power take-off speed	203,13 kW	2100 min ⁻¹	1077 min ⁻¹
Hourly and specific consumption		55,90 l/h	232 g/kWh
Hourly and specific urea consumption		1,18 l/h	6,3 g/kWh-
Test at standard Power take-off speed			
Power, Engine and Power take-off speed	225,50 kW	1950 min ⁻¹	1000 min ⁻¹
Hourly and specific consumption		60,41 l/h	226 g/kWh
Hourly and specific urea consumption		1,23 l/h	5,9 g/kWh-
Torque rise			45,5 %
Maximum torque, Engine speed corresponding		1343,78 Nm	1500 min ⁻¹







PARTICULATE FILTER ACTIVE REGENERATION FUEL USE

	l	mm:ss
Rated Engine Speed	4,3	37:53
40% of maximum power at rated engine speed with throttle set to $90%$ of rated engine speed	4,3	39:39
60% of maximum power at rated engine speed with throttle set to 60% of rated engine speed	2,5	38:48

HYDRAULIC PERFORMANCE AND POWER LIFT TEST

Hydraulic system Closed centre Relief valve pressure setting (tolerance): 20.2 ± 0.5 MPa

HYDRAULIC PERFORMANCES

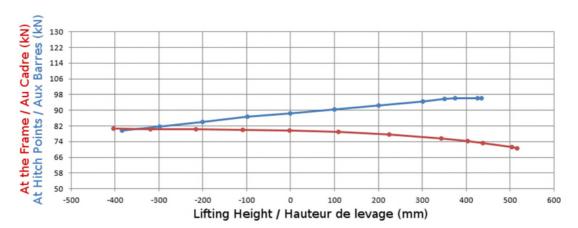
At maximum hydraulic power

Flow rate, Pressure, Power (couplers: 1 pair)	134,0 l/min	18,89 MPa	42,2 kW
Flow rate, Pressure, Power (couplers: 2 pairs or +)	165,9 l/min	19,24 MPa	53,2 kW

POWER LIFT

Maximum lifting force

at the hitch points 79,5 kN at the frame 70,7 kN







DRAWBAR TEST

Front tyres, Rear tyres	420/85 R34	480/80 R50
Inflation pressure	117 kPa	83 kPa

UNBALLASTED

Total Mass

Maximum drawbar pull

at speed of

Maximum power

at speed of

11231 kg

111,11 kN

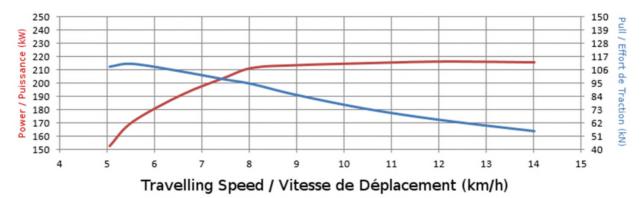
5,53 km/h

Maximum power

215,98 kW

at speed of

12,06 km/h



BALLASTED

Total Mass

Maximum drawbar pull

at speed of

Maximum power

213,62 kW

at speed of

12,15 km/h

