# OECD ABSTRACT OF AGRICULTURAL AND FORESTRY TRACTOR PERFORMANCE TEST

OECD Approval Number 2/3 010

OECD Approval Date 05/12/2016

Make John Deere

Model 8320RT

**Type** Rubber Tracklaying Tractor

Transmission e23

Speed 40 km/h

Manufacturer John Deere Tractor Works

Testing Station NTTL – USA







# **SPECIFICATIONS**

#### **ENGINE**

Make John Deere Model 6090RW441 Direct injection *Type* Supercharging Yes Cylinders 6 Disposition in line Capacity 8984 cm<sup>3</sup> Cooling Liquid

### **TRANSMISSION**

Gear boxe23Number of forward and reverse speeds2312Speed at rated engine speedfrom 2,24to 42,00 km/h

#### POWER TAKE-OFF SPECIFICATIONS

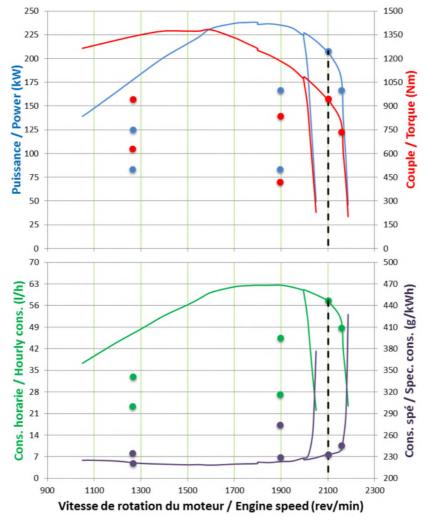
 $\begin{array}{ccc} \text{Standard Power take-off speed} & \underline{540 \text{ min}^{-1}} & \underline{1000 \text{ min}^{-1}} \\ Power take-off speed at rated engine speed} & \underline{1052 \text{ min}^{-1}} \\ Diameter of the shaft & Not & 45 \text{ mm} \\ Number of splines & applicable & 20 \\ \end{array}$ 





# PTO TEST RESULTS

One hour test at maximum power			
Power, Engine and Power take-off speed	236,00 kW	$1800\ min^{-1}$	902 min <sup>-1</sup>
Hourly and specific consumption		62,55 l/h	222 g/kWh
Hourly and specific urea consumption		1,47 l/h	6,8 g/kWh
Test at maximum power at rated engine speed			
Power, Engine and Power take-off speed	207,88 kW	2101 min <sup>-1</sup>	1053 min <sup>-1</sup>
Hourly and specific consumption		57,65 l/h	233 g/kWh
Hourly and specific urea consumption		1,27 l/h	6,6 g/kWh
Test at standard Power take-off speed			
Power, Engine and Power take-off speed	224,46 kW	$1995  min^{-1}$	1000 min <sup>-1</sup>
Hourly and specific consumption		61,00 l/h	228 g/kWh
Hourly and specific urea consumption		1,35 l/h	6,6 g/kWh
<u>Torque rise</u>			46,2 %
Maximum torque, Engine speed corresponding		1381 Nm	1601 min <sup>-1</sup>







# PARTICULATE FILTER ACTIVE REGENERATION FUEL USE

	l	mm:ss
Rated Engine Speed	3.0	38:13
40% of maximum power at rated engine speed with throttle set to $90%$ of rated engine speed	3.9	40:37
60% of maximum power at rated engine speed with throttle set to 60% of rated engine speed	2.9	39:32

### HYDRAULIC PERFORMANCE AND POWER LIFT TEST

Hydraulic system
Relief valve pressure setting (tolerance):

closed centre  $20.4 \pm 0.3$  MPa

#### **HYDRAULIC PERFORMANCES**

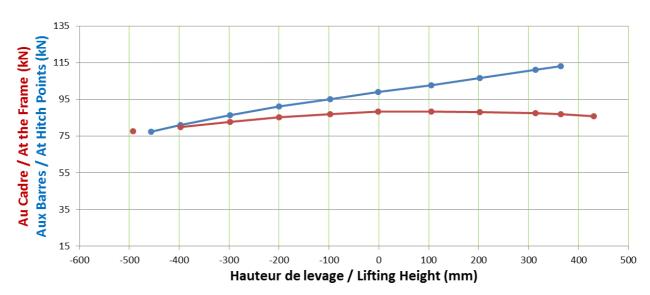
## At maximum hydraulic power

Flow rate, Pressure, Power (couplers: 1 pair) 129,7 l/min 16,44 MPa 35,5 kW Flow rate, Pressure, Power (couplers: 2 pairs or +) 233,8 l/min 17,64 MPa 68,7 kW

#### **POWER LIFT**

#### Maximum lifting force

at the hitch points 77,3 kN at the frame 77,6 kN







# DRAWBAR TEST

Front tyres, Rear tyres Inflation pressure Rubber with steel reinforcement

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### **UNBALLASTED**

Total Mass

Maximum drawbar pull

at speed of

Maximum power

at speed of

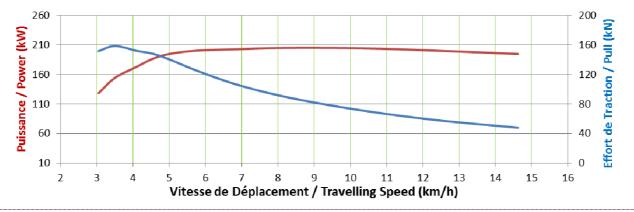
3,50 km/h

Maximum power

204,79 kW

at speed of

9,35 km/h



**BALLASTED** 

Not applicable



