OECD ABSTRACT OF AGRICULTURAL AND FORESTRY TRACTOR PERFORMANCE TEST

OECD Approval Number 2/3 013

OECD Approval Date 20/12/2016

Make John Deere

Model 8370R

Type 4WD with dual rear wheels

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 cm³ Cooling Liquid

TRANSMISSION

 $\begin{array}{ccc} \textit{Gear box} & & & & \text{e23} \\ \textit{Number of forward and reverse speeds} & & 23 & & 12 \\ \textit{Speed at rated engine speed} & & & \text{from 2,40} & & \text{to 42,00 km/h} \\ \end{array}$

POWER TAKE-OFF SPECIFICATIONS

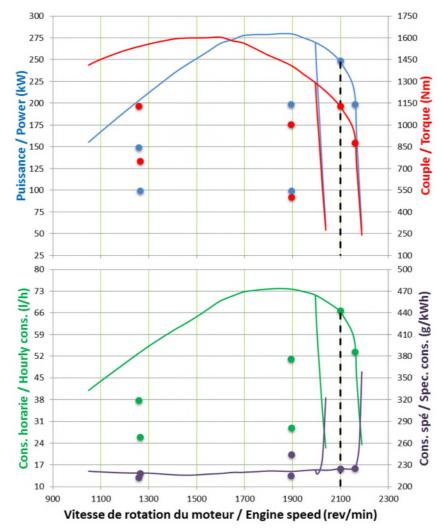
Standard Power take-off speed $540 \,\mathrm{min^{-1}}$ $1000 \,\mathrm{min^{-1}}$ Power take-off speed at rated engine speed $1052 \,\mathrm{min^{-1}}$ Diameter of the shaftNot $45 \,\mathrm{mm}$ Number of splinesapplicable $20 \,\mathrm{min^{-1}}$





PTO TEST RESULTS

| One hour test at maximum power | | | |
|---|-----------|------------------|------------------------|
| Power, Engine and Power take-off speed | 279,88 kW | $1849 min^{-1}$ | 927 min ⁻¹ |
| Hourly and specific consumption | | 73,86 l/h | 221 g/kWh |
| Hourly and specific urea consumption | | 1,17 l/h | 4,5 g/kWh |
| Test at maximum power at rated engine speed | | | |
| Power, Engine and Power take-off speed | 248,73 kW | $2099 min^{-1}$ | 1052 min ⁻¹ |
| Hourly and specific consumption | | 66,68 l/h | 225 g/kWh |
| Hourly and specific urea consumption | | 1,29 l/h | 5,6 g/kWh |
| Test at standard Power take-off speed | | | |
| Power, Engine and Power take-off speed | 269,82 kW | $1995 min^{-1}$ | 1000 min ⁻¹ |
| Hourly and specific consumption | | 71,75 l/h | 223 g/kWh |
| Hourly and specific urea consumption | | 1,16 l/h | 4,7 g/kWh |
| Torque rice | | | 41,8 % |
| <u>Torque rise</u> | | | • |
| Maximum torque, Engine speed corresponding | | 1605 Nm | 1600 min ⁻¹ |







PARTICULATE FILTER ACTIVE REGENERATION FUEL USE

| | l | mm:ss |
|---|-----|-------|
| Rated Engine Speed | 3.6 | 37:28 |
| 40% of maximum power at rated engine speed with throttle set to $90%$ of rated engine speed | 3.8 | 39:38 |
| 60% of maximum power at rated engine speed with throttle set to 60% of rated engine speed | 3.0 | 39:11 |

HYDRAULIC PERFORMANCE AND POWER LIFT TEST

Hydraulic system
Relief valve pressure setting (tolerance):

closed centre 20.4 ± 0.3 MPa

HYDRAULIC PERFORMANCES

At maximum hydraulic power

Flow rate, Pressure, Power (couplers: 1 pair) 135,1 l/min 16,48 MPa 37,1 kW Flow rate, Pressure, Power (couplers: 2 pairs or +) 230,3 l/min 17,57 MPa 67,5 kW

POWER LIFT

Maximum lifting force

at the hitch points 90,0 kN at the frame 81,1 kN







DRAWBAR TEST

Front tyres, Rear tyres 420/85R34 480/80R50
Inflation pressure 179 kPa 83 kPa

UNBALLASTED

Total Mass

Maximum drawbar pull

at speed of

Maximum power

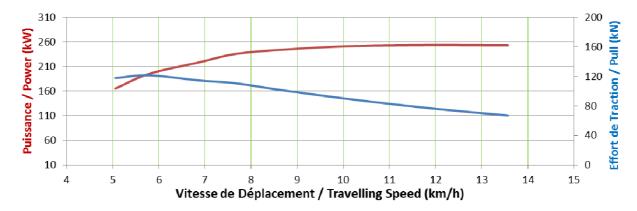
at speed of

5,79 km/h

253,44 kW

at speed of

11,76 km/h



BALLASTED

Total Mass
Maximum drawbar pull
179,45 kN
at speed of
3,75 km/h
Maximum power
253,29 kW
at speed of
10,18 km/h

