



OECD approval number

2/2 074

Restricted Code

OECD approval date

27/08/03

Make

Challenger

Model

MT745

Type

Rubber tracklaying tractor

Manufacturer

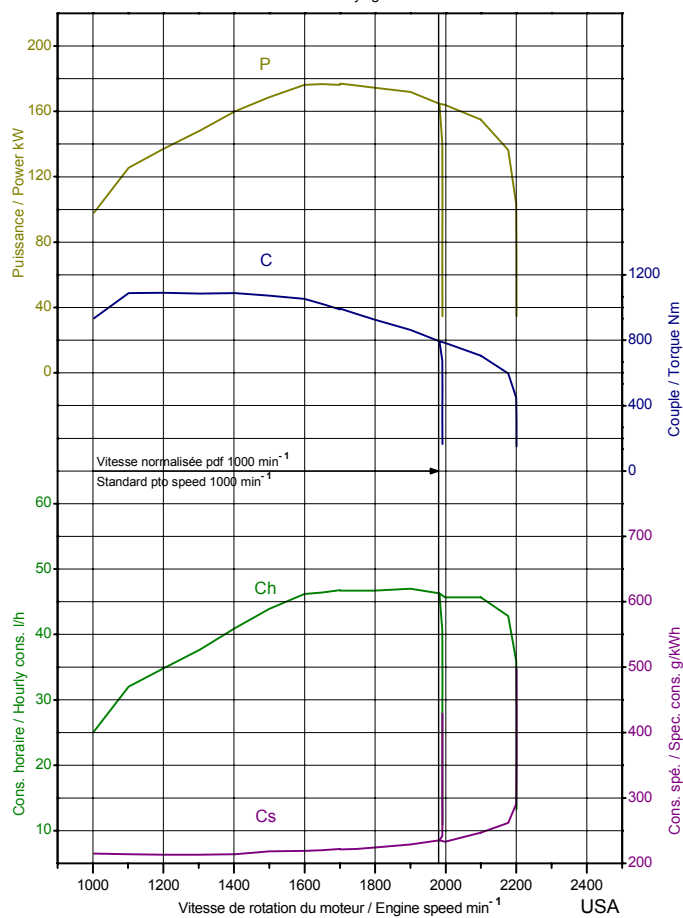
AGCO Corp

Testing station:

Nebraska Tractor Test Laboratory, Lincoln, USA

Challenger MT745

Tracteur à chenilles caoutchouc/Rubber tracklaying tractor OCDE/OECD 2/2074



Engine, Transmission, Power take-off Specifications

<i>Make, Model</i>	Caterpillar	C-9
<i>Type, Supercharging</i>	Direct injection	Yes
<i>Cylinders, Disposition</i>	6	vertical in line
<i>Capacity, Cooling</i>	8810 cm ³	Liquid
<i>Gear box</i>		Mechanical powershift
<i>Number of forward and reverse speeds</i>	16	4
<i>Speed at rated engine speed</i>	from 2.67	to 39.65 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>		1061 min ⁻¹
<i>Diameter of the shaft</i>		44.45 mm
<i>Number of splines</i>		20

Power take-off TestTwo hours test at maximum power

<i>Power, Engine and Power take-off speed</i>	176.1 kW	1700 min ⁻¹	858 min ⁻¹
<i>Hourly and specific consumption</i>		46.83 l/h	222 g/kWh

Test at maximum power at rated engine speed

<i>Power, Engine and Power take-off speed</i>	155.1 kW	2100 min ⁻¹	1060 min ⁻¹
<i>Hourly and specific consumption</i>		45.70 l/h	247 g/kWh

Test at standard Power take-off speed

<i>Power, Engine and Power take-off speed</i>	164.7 kW	1982 min ⁻¹	1000 min ⁻¹
<i>Hourly and specific consumption</i>		46.29 l/h	235 g/kWh

Torque rise

		54.6 %	
--	--	--------	--

Maximum torque, Engine speed corresponding

1090.0 Nm	1200 min ⁻¹
-----------	------------------------

Drawbar Test*Track length and track width*

- mm	457 mm
------	--------

Test with tractor

<u>unballasted</u>	<u>ballasted</u>
--------------------	------------------

Total Mass

12714 kg	13816 kg
----------	----------

Maximum drawbar pull

119.8 kN	127.0 kN
----------	----------

at speed of

2.99 km/h	3.00 km/h
-----------	-----------

Maximum power

151.5 kW	150.4 kW
----------	----------

at speed of

7.24 km/h	9.30 km/h
-----------	-----------

Hydraulic Performance and Power Lift Test*Hydraulic system*

Closed centre

At maximum hydraulic power

<i>Flow rate, Pressure, Power</i>	157.1 l/min	19.0 MPa	49.7 kW
-----------------------------------	-------------	----------	---------

Maximum lifting force

<i>at hitch points, at frame</i>	81.7 kN	76.8 kN
----------------------------------	---------	---------