



OECD approval number

2/2 075

Restricted Code

OECD approval date

27/08/03

Make

Challenger

Model

MT835

Type

Rubber tracklaying tractor

Manufacturer

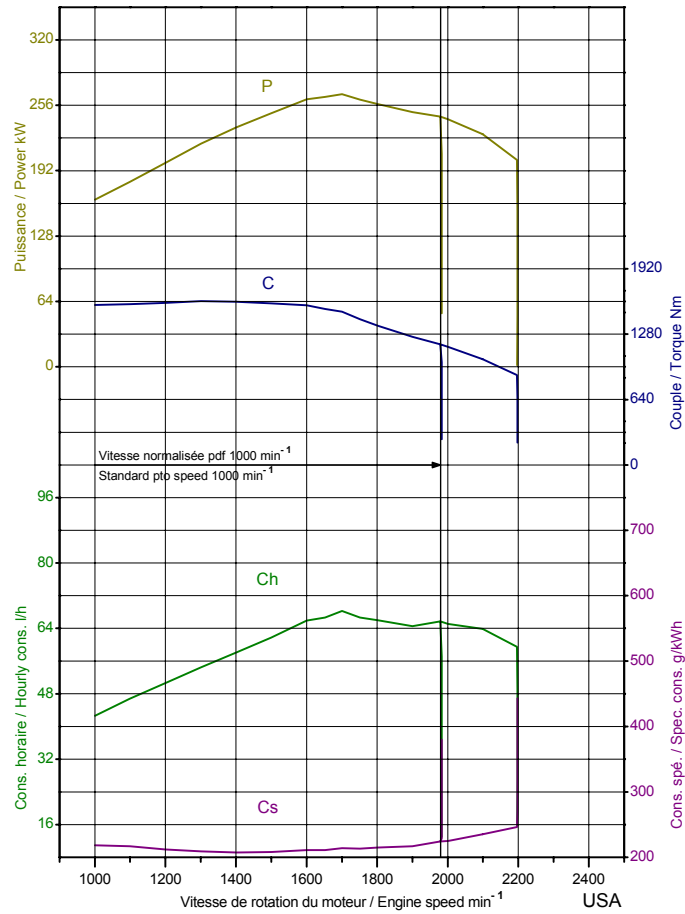
AGCO Corp

Testing station:

Nebraska Tractor Test Laboratory, Lincoln, USA

Challenger MT835

Tracteur à chenilles caoutchouc/Rubber tracklaying tractor OCDE/OECD 2/2075



Engine, Transmission, Power take-off Specifications

<i>Make, Model</i>	Caterpillar		C-12
<i>Type, Supercharging</i>	Direct injection		Yes
<i>Cylinders, Disposition</i>	6		in line
<i>Capacity, Cooling</i>	11946 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 2.69	to 40.00 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 Test

<u>Two hours test at maximum power</u>			
<i>Power, Engine and Power take-off speed</i>	266.9 kW	1700 min ⁻¹	859 min ⁻¹
<i>Hourly and specific consumption</i>		68.25 l/h	214 g/kWh
<u>Test at maximum power at rated engine speed</u>			
<i>Power, Engine and Power take-off speed</i>	227.6 kW	2099 min ⁻¹	1061 min ⁻¹
<i>Hourly and specific consumption</i>		63.92 l/h	235 g/kWh
<u>Test at standard Power take-off speed</u>			
<i>Power, Engine and Power take-off speed</i>	244.9 kW	1979 min ⁻¹	1000 min ⁻¹
<i>Hourly and specific consumption</i>		65.69 l/h	224 g/kWh
<u>Torque rise</u>			55.0 %
<u>Maximum torque. Engine speed corresponding</u>		1604.0 Nm	1301 min ⁻¹

Drawbar Test

<i>Track length and track width</i>		- mm	699 mm
<u>Test with tractor</u>		unballasted	ballasted
<i>Total Mass</i>		18695 kg	22366 kg
<i>Maximum drawbar pull</i>		171.9 kN	217.5 kN
<i>at speed of</i>		3.19 km/h	2.94 km/h
<i>Maximum power</i>		227.8 kW	232.3 kW
<i>at speed of</i>		7.41 km/h	5.79 km/h

Hydraulic Performance and Power Lift Test

<i>Hydraulic system</i>			Closed centre
<u>At maximum hydraulic power</u>			
<i>Flow rate, Pressure, Power</i>	164.7 l/min	18.0 MPa	49.3 kW
<u>Maximum lifting force</u>			
<i>at hitch points, at frame</i>		98.5 kN	93.1 kN