



OECD approval number

2/2 182

Restricted Code

OECD approval date

22/10/2004

Make

Renault

Model

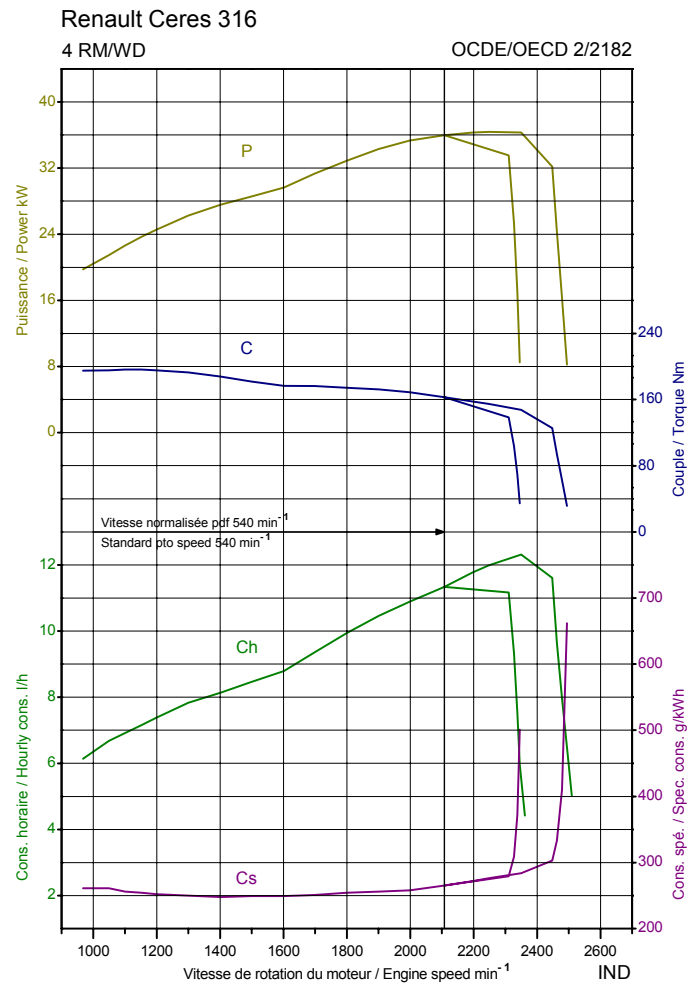
Ceres 316

Type

4 WD

M 1322 - 30 km/h

Manufacturer M/s International Tractors Ltd., India
Testing station: Central Farm Machinery Training and Testing Institute, Budni, India



Engine, Transmission, Power take-off Specifications

<i>Make, Model</i>	Sonalika	4100F Ceres
<i>Type, Supercharging</i>	Direct injection	None
<i>Cylinders, Disposition</i>	4	vertical in line
<i>Capacity, Cooling</i>	3456 cm ³	By water
<i>Gear box</i>		Mechanical synchronized
<i>Number of forward and reverse speeds</i>		28 28
<i>Speed at rated engine speed</i>		from 0.44 to 26.61 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>		602 min ⁻¹ 1108 min ⁻¹
<i>Diameter of the shaft</i>	34.84 mm	34.84 mm
<i>Number of splines</i>	6	21

Power take-off TestTwo hours test at maximum power

<i>Power, Engine and Power take-off speed</i>	36.4 kW	2249 min ⁻¹	576 min ⁻¹
<i>Hourly and specific consumption</i>		11.99 l/h	276 g/kWh

Test at maximum power at rated engine speed

<i>Power, Engine and Power take-off speed</i>	36.3 kW	2350 min ⁻¹	602 min ⁻¹
<i>Hourly and specific consumption</i>		12.31 l/h	284 g/kWh

Test at standard Power take-off speed

<i>Power, Engine and Power take-off speed</i>	36.0 kW	2108 min ⁻¹	540 min ⁻¹
<i>Hourly and specific consumption</i>		11.34 l/h	265 g/kWh

Torque rise

<i>Maximum torque. Engine speed corresponding</i>		196.5 Nm	1152 min ⁻¹
---	--	----------	------------------------

Drawbar Test

<i>Front tyres, Rear tyres</i>	12.4 R 20	16.9 - 28
<u>Test with tractor</u>	<u>unballasted</u>	<u>ballasted</u>
<i>Total Mass</i>	3350 kg	
<i>Maximum drawbar pull</i>	29.1 kN	Not
<i>at speed of</i>	2.19 km/h	required
<i>Maximum power</i>	27.6 kW	in
<i>at speed of</i>	6.95 km/h	Code 2

Hydraulic Performance and Power Lift Test

<i>Hydraulic system</i>			Opened centre
<u>At maximum hydraulic power</u>			
<i>Flow rate, Pressure, Power</i>	42.1 l/min	15.2 MPa	10.7 kW
<u>Maximum lifting force</u>			
<i>at hitch points, at frame</i>		17.9 kN	16.9 kN