

THIS TEST REPORT IS VALID UP TO 31.03.2031



WEIMA, WM1000NA POWER WEEDER



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि एवं किसान कल्याण विभाग

Department of Agriculture and Farmers Welfare

दक्षिणी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

Southern Region Farm Machinery Training and Testing Institute

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Tele.: 08551-286441

Machine- 553/1602	WEIMA, WM1000NA POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/S. Weima Agricultural Machinery Co. Ltd
Area B, Luohuang Industrial Park , Jiangjin
District, Chongqing, **China**

Applicant : M/S. VJ Materials Mart,113, Sathy Road, Near
Rukmani Ammal Hotel, Erode-638003, **India**

WEIMA, WM1000NA POWER WEEDER

Report no.: **Machine-553/1602**

Month: **April**

Year: **2024**



सत्यमेव जयते

Government of India
Ministry of Agriculture and Farmers Welfare
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Type of test : COMMERCIAL (ICT)
 Period of test : 24.11.2023 to 26.03.2024
 Test Report No. : Machine-553/1602
 Month / Year of release : April, 2024

- i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.
- ii) The data given in this report pertain to the particular machine randomly selected by testing authority.
- iii) The results presented in this report do not, in any way, attribute to the durability of the machine.
- iv) This Test Report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training & Testing Institute, Garladinne, Anantapur (A.P.).
- v) This is a report on Commercial Test of Power Weeder named **“WEIMA, WM1000NA POWER WEEDER”**. This report is valid up to 31.03.2031, Vide Ministry’s O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

SELECTED CONVERSIONS

S. No.	Units	Conversion Factor
1	Force	
	1 kgf	9.80665 N 2.20462 lbf
2	Power	
	1 hp	1.01387 metric hp (Ps) 745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	Pressure	
	1 psi	6.895 kPa
	1 kgf/cm ²	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm ²
	1 mm of Hg	1.3332 m-bar

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18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 3.83 kW under natural ambient condition against the declared value of 3.60 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 313g/kWh against the declared value of 280 g/kWh.
- 18.1.3 Back up torque of engine was observed as 10.85 % against declared value of 5 %.
- 18.1.4 Max. torque was observed as 11.95 Nm against the declared value of 12.0 Nm.

18.2 Mechanical vibration :

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 321 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Hardness of rotor blade :

The hardness of rotor blades does not confirm against the requirement of $56 \pm 3\text{HRC}$. This maybe looked into for corrective action.

18.4 The material of rotor shaft does not confirm against the requirement of SAE 1045 (CRS)/EN8/EN9. This should be taken care for corrective action.

18.5 Provision for emergency stop of engine and provision for shield to prevent flying of mud & stone from rotor are not provided in the machine. This should be taken care for corrective action.

18.6 The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, inter alia, the following must be provided:

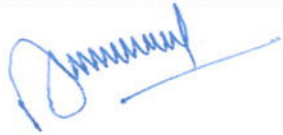



- i) Address of manufacturer
- ii) Country of origin
- iii) Make
- iv) Specific fuel consumption (g/kWh)

18.7 Technical literature:

Owner's manual, service manual and parts catalogue provided in booklet form in English for reference during the test. It is recommended that same must be revised in and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel in booklet form.

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TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. P.KAMALABAI SENIOR AGRICULTURAL ENGINEER
 Dr. B.M. NANDEDE DIRECTOR	

11. APPLICANT'S COMMENT

We will take proper action against all the comments and recommendation specified in the draft report for further products of our company.