व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT (INITIAL)

संख्या/No: Machine-672/1746 माह/Month: October, 2024

THIS TEST REPORT IS VALID UP TO 30.09.2031



GEORGE MAIJO, M700ECO 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

ट्रैक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.)

Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Weima Agricultural Machinery

Co. Ltd. Add: Zone B, Luohuang Industrial Park, Jiangjin District,

Chongqing, China.

Applicant

: M/s. George Maijo Industries Pvt. Ltd, 2B, Apex Plaza, 5, Nungambakkam High Road, Chennai – 600034. Tamil

Nadu, India.

GEORGE MAIJO, M700ECO POWER WEEDER

Report no.: Machine-672/1746 Month: October Year: 2024



Government of India
Ministry of Agriculture and Farmers Welfare
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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR (A.P.)

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Type of test

: COMMERCIAL (ICT)

Period of test

01.10.2024 to 24.10.2024

Test Report No.

Machine-672/1746

Month / Year of release

October, 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 selected randomly through virtual mode by testing authority.
- iii) The results presented in this report do not, in anyway, 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 "GEORGE MAIJO, M700ECO POWER WEEDER". This report is valid up to 30.09.2031, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

vi) SELECTEDCONVERSIONS

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	$100 \text{ kPa} = 10 \text{ N/cm}^2$
	1 mm of Hg	1.3332 m-bar

Machine-672/1746

GEORGE MAIJO, M700ECO POWER WEEDER

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COMMERCIAL (ICT)

18. COMMENTS & RECOMMENDATIONS

18.1 Engine performance:

- 18.1.1 The maximum power was observed as 3.71 kW under natural ambient condition against the declared value of 4.0 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 413 g/kWh respectively against the declared value of 420 g/kWh.
- 18.1.3 Max. Torque was observed as 10.97 Nm against the declared value of 12 Nm.
- 18.1.4 Back up torque of engine was observed as 11.9 % against declared value of 10%.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 322 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Hardness & chemical:

The hardness of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into for corrective action.

18.4 Air cleaner oil pullover:

The percentage of air cleaner oil pull over was recorded as 0.23 to 0.69 % against the declaration of 0.20%. The percentage of air cleaner oil pull over was considered very high and this should be looked into for corrective action.

18.5 Marking /labeling:

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. Address of applicant
- iii. Make
- iv. Country of origin
- v. Year of manufacturer
- vi. Engine number
- vii. Rated RPM
- viii. Specific fuel consumption (g/kWh)

18.6 Technical literature:

User's manual is not provided during the test. However, the same must be brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the guidance of users.

The following literature should be provided.

- i) Service manual
- ii) Parts catalogue

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COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

Annimy

19.APPLICANT COMMENTS

Sl. No.	Para No.	Comments
1	18.1.1	Will check on this and improve.
2	18.1.2	Will check on this and improve.
3	18.1.3	Will check on this and improve.
4	18.1.4	Will check on this and improve.
5	18.2	Will take corrective action and rectify.
6	18.3	Will take corrective action and rectify.
7	18.4	Will take corrective action and rectify.
8	18.5	Will do the needful as recommended.
9	18.6	Will do the needful as recommended.