

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

संख्या/No: Machine-614/1671

COMMERCIAL TEST REPORT (INITIAL)

माह/Month: July, 2024

THIS TEST REPORT IS VALID UPTO 30.06.2031



FARMCARE, FC-400D 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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Machine- 614/1671	FARMCARE, FC-400D POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Chongqing Jiamu Machinery Mfg Co. Ltd.,
No. 2, Aokang Ave., Bishan Country,
Chongqing, China.

Applicant : M/S. Farmcare Machinery Pvt. Ltd.,
D-45, 5-Star Industrial Area, Shendra,
Aurangabad, Maharashtra-431154.

FARMCARE, FC-400D POWER WEEDER

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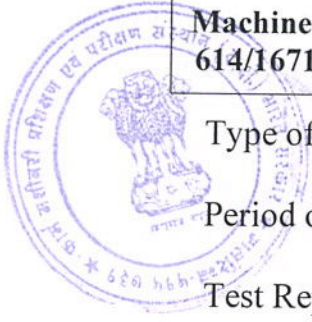
Telephone: 08551-286441

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**SOUTHERN REGION FARM MACHINERY TRAINING &
TESTING INSTITUTE, ANANTAPUR, (A.P.)**

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Machine- 614/1671	FARMCARE, FC-400D POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 30.06.2031	

Type of test : COMMERCIAL (ICT)
Period of test : April, 2024 to July, 2024
Test Report No. : **Machine-614/1671**
Month / Year of release : July, 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 "**FARMCARE, F-400D POWER WEEDER**". This report is valid up to **30.06.2031** 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 6.75 kW under natural ambient condition against the declared value of 6.0 kW.

18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 352 g/kWh against the declared value of 300 g/kWh.

18.1.3 Back up torque of engine was observed as 4.95 % against declared value of 10 %.

18.1.4 Max. torque was observed as 19.92 Nm against the declared value of 20.00 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 396 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

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

18.4 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:

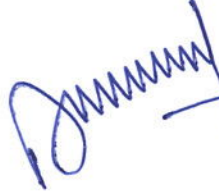


- i. Address of manufacturer
- ii. Country of origin
- iii. Year of manufacturer
- iv. Serial number
- v. Engine number
- vi. SFC, (g/kWh)

18.5 Technical literature:

User's manual cum parts catalogue provided but not in booklet form for reference during the test. It is recommended that same must be revised in booklet form 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.

Machine- 614/1671	FARMCARE, FC-400D POWER WEEDER	COMMERCIAL (ICT)
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TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 
Dr. B.M. NANDEDE DIRECTOR	

18. APPLICANT COMMENTS

Sl. No.	Para No.	Applicant comments
1	18.2	We will work on it to reduce the mechanical vibration of machine in future production.
2	18.3	We will improve the material as per IS Standards in future production.
3	18.4	Labelling will be done as per your recommendations
4	18.5	We will bring out the literature as per your recommendations