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

संख्या/No: Machine-613/1670

माह/Month: July, 2024

THIS TEST REPORT IS VALID UPTO 30.06.2031



FARMCARE, FC-205P POWER WEEDER



भारत सरकार

Government of India

कृषिएवं किसान कल्याण मंत्रालय Ministry of Agriculture and Farmers Welfare कृषिएवं 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.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

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FARMCARE, FC-205P POWER WEEDER

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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Chongqing Jiamu Machinery Mfg. Co. Ltd.

No.2, Aokang Ave., Bishan County, Chongqing

China.

Applicant

: M/s. Farmcare Machinery Pvt. Ltd D-4, 5-Star

Industrial Area, Shendra, Aurangabad - 431154,

Maharashtra.

FARMCARE, FC-205P POWER WEEDER

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Ministry of Agriculture and Farmers Welfare
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FARMCARE, FC-205P POWER WEEDER

THIS TEST REPORT IS VALID UP TO 30.06.2031

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (INITIAL)

Period of test

: April, 2024 to June, 2024

Test Report No.

Machine-613/1670

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 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 "FARMCARE, FC- 205P 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	$100 \text{ kPa} = 10 \text{ N/cm}^2$	
	1 mm of Hg	1.3332 m-bar	

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FARMCARE, FC-205P POWER WEEDER

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COMMERCIAL (ICT)



18. COMMENTS& RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 3.74 kW under natural ambient condition against the declared value of 3.8 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 436 g/kWh against the declared value of 350 g/kWh.
- 18.1.3 Back up torque of engine was observed as 3.99 % against declared value of 10 %.
- 18.1.4 Max. torque was observed as 11.20 Nm against the declared value of 14 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 394 micron, which is on higher side. This should be given top priority for corrective action.

- 18.3 The Material of blade is not as per requirement of the relevant code IS, therefore it should be looked into for the corrective action
- 18.4 The chemical composition of straight blade is not as per requirement of the relevant code IS 6025:1982 (Reaffirmed 1999) & therefore it should be looked into for the 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, interlaid, the following MUST be provided:

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

18.6 Technical literature:

User's manual is 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.

FARMCARE, FC-205P POWER WEEDER

THIS TEST REPORT IS VALID UP TO 30.06.2031

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR



19. 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 & 18.4	We will improve the material as per IS Standards in future production.	
3	18.5	Labelling will be done as per your recommendations	
4	18.6	We will bring out the literature as per your recommendations	