

THIS TEST REPORT IS VALID UPTO 30.06.2031



AGRIMATE, AM-MPTC-5D-3G 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.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

Website: <http://srfmtti.dacnet.nic.in/>



Machine- 624/1681	AGRIMATE, AM-MPTC-5D-3G POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Chongqing Weima Agricultural Machinery Co. Ltd., Yuxang Road, Area B, Luohuang Industry Zone, Jiangjin District, Chongqing, **China** - 402 283.

Applicant : M/s. Ratnagiri Impex Pvt. Ltd., Annapurna House, # 1/1G, 7th Cross, New Guddadahalli, Mysore Road, Bangalore-560 026, Karnataka, India.

AGRIMATE, AM-MPTC-5D-3G POWER WEEDER

Report no.: **Machine-624/1681**

Month: **July**

Year: **2024**



सत्यमेव जयते

Government of India
Ministry of Agriculture and Farmers Welfare
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Southern Region Farm Machinery Training and Testing Institute
Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)
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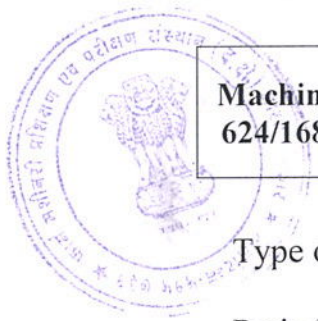
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**SOUTHERN REGION FARM MACHINERY TRAINING &
TESTING INSTITUTE, ANANTAPUR, (A.P.)**

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Machine-624/1681	AGRIMATE, AM-MPTC-5D-3G POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 30.06.2031	

Type of test : COMMERCIAL (ICT)
Period of test : June, 2024 to July, 2024
Test Report No. : Machine-624/1681
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 "AGRIMATE, AM-MPTC-5D-3G 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



Machine-
624/1681

AGRIMATE, AM-MPTC-5D-3G
POWER WEEDER

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COMMERCIAL
(ICT)

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 3.80 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 514 g/kWh against the declared value of 280 g/kWh.
- 18.1.3 Back up torque of engine was observed as 6.94 % against declared value of 10 %.
- 18.1.4 Max. torque was observed as 10.78 Nm against the declared value of 9.61 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 448 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Chemical composition of rotor blade:

Except carbon remaining all constituents of blade are conforming the IS 6690:1981(reaffirmed 2012).

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) Country of origin
- ii) Specific fuel consumption (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- 624/1681	AGRIMATE, AM-MPTC-5D-3G POWER WEEDER	COMMERCIAL (ICT)
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TESTING AUTHORITY

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

19. APPLICANT COMMENTS

Sl.no.	Para no.	COMMENTS
1	18.1 -18.5	We will discuss with our manufacturer to do the needful