

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

COMMERCIAL TEST REPORT (INITIAL)

संख्या/No: Machine-636/1697

माह/Month: August, 2024

**THIS TEST REPORT IS VALID UPTO 31.07.2031**



**AGRIMATE, AM-MPTC-1100-9D-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/>

E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)

Machine- 636/1697	<b>AGRIMATE, AM-MPTC-1100-9D-3G POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UP TO 31.07.2031</b>	

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, 7<sup>th</sup> Cross, New Guddadahalli, Mysore Road, Bangalore-560 026, Karnataka, India.

**AGRIMATE, AM-MPTC-1100-9D-3G POWER WEEDER**

Report no.: **Machine-636/1697**

Month: **August**

Year: **2024**

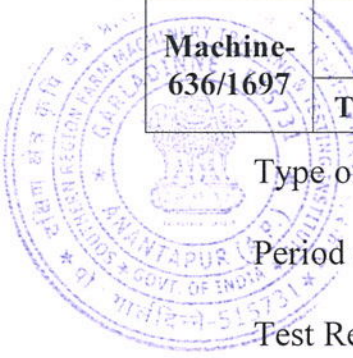


सत्यमेव जयते

**Government of India  
Ministry of Agriculture and Farmers Welfare  
Department of Agriculture and Farmers Welfare  
Southern Region Farm Machinery Training and Testing Institute  
Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)  
[An ISO 9001:2015 CERTIFIED INSTITUTE]**

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

E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)



Machine- 636/1697	<b>AGRIMATE, AM-MPTC-1100-9D-3G POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UP TO 31.07.2031</b>	

Type of test : COMMERCIAL (ICT)  
 Period of test : June, 2024 to August, 2024  
 Test Report No. : **Machine-636/1697**  
 Month / Year of release : August, 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-1100-9D-3G POWER WEEDER"**. This report is valid up to 31.07.2031, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

#### SELECTED CONVERSIONS

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

Machine- 636/1697	AGRIMATE, AM-MPTC-1100-9D-3G POWER WEEDER		COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.07.2031.		

1	2	3	4	5
21	Provision for easy start of engine	Must be provided	Provided	Conforms
22	Depth control mechanism	Must be provided	Provided	Conforms
23	Provision for transport wheels	Must be provided	Provided	Conforms
24	Provision for cover on exhaust	Must be provided	Provided	Conforms
25	Direction of exhaust emission away from operator	Must be provided	Provided	Conforms
26	Marking/labeling of machine	The labeling plate should be riveted on the body of the machine having name and address of manufacturer & applicant, country of origin, make, model, year of manufacturer, serial number, engine number, engine HP, rated rpm & SFC	<b>Address of manufacturer, Country of origin, rated rpm &amp; SFC are not provided</b>	<b>Does not conform</b>
27	Literature	Operator manual, service manual and parts catalogue should be provided	Provided	Conforms

## 18. COMMENTS & RECOMMENDATIONS

### 18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 6.54 kW under natural ambient condition against the declared value of 6.7 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 252 g/kWh against the declared value of 280 g/kWh.
- 18.1.3 Back up torque of engine was observed as 6.76 % against declared value of 10 %.
- 18.1.4 Max. torque was observed as 22.27 Nm against the declared value of 16.8 Nm.

### 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 534 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

Machine- 636/1697	AGRIMATE, AM-MPTC-1100-9D-3G POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.07.2031	

**18.3 Hardness:**

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 Marking/labeling:**

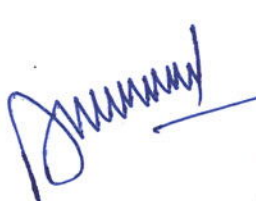

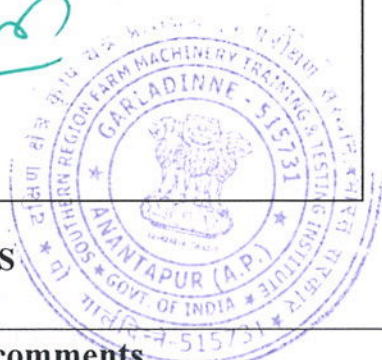
The labeling plate does not reveal all the required information. it is therefore recommended that a suitable labeling plate covering all essential components, inter alia, the following must be provided:

- i) Address of manufacturer
- ii) Country of origin
- iii) Make
- iv) Rated rpm
- v) 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.

**TESTING AUTHORITY**

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

**19. APPLICANT COMMENTS**

Sl. No.	Para No.	Applicant comments
1	18.1 to 18.5	We will discuss with the manufacturer to do the needful.