

THIS TEST REPORT IS VALID UPTO 30.06.2031



AGRIMATE, AM-RT-212 POWER WEEDER



भारत सरकार

Government of India

कृषि एवं किसान कल्याणमंत्रालय

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

ट्रैक्टरनगर, 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- 619/1676	AGRIMATE, AM-RT-212 POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : Chongqing Haogeng industrail Trade Co. Ltd,
No.8, Jingsheng Road, Jingkou, Shapingba
District, Chongqing, China.

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

AGRIMATE, AM-RT-212 POWER WEEDER

Report No.: Machine-619/1676

Month: July

Year: 2024



सत्यमेव जयते

Government of India
Ministry of Agriculture and Farmers Welfare
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Machine-
619/1676

AGRIMATE, AM-RT-212 POWER WEEDER
THIS TEST REPORT IS VALID UP 30.06.2031

COMMERCIAL
(ICT)

Type of test : COMMERCIAL (ICT)
Period of test : June, 2024 to July, 2024
Test Report No. : Machine-619/1676
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 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 "AGRIMATE, AM-RT-212 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 Hp
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 4.13 kW under natural ambient condition against the declared value of 4.5 kW.

18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 455 g/kWh respectively against the declared value of 395 g/kWh.

18.1.3 Max. Torque was observed as 12.65 Nm against the declared value of 11.0 Nm.

18.1.4 Back up torque of engine was observed as 5.86 % against declared value of 13.5 %.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 525 microns, which is higher than the limit specified by the ILO. Therefore, necessary action to dampen the vibration should be taken in to account.

18.3 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) Size of the machine
- v) Engine number
- vi) SFC (g/kWh)

18.4 Technical literature:

Instruction manual and parts catalogue of power weeder and engine in a single booklet was supplied with the test sample for reference during the test. It is however, recommended that same may be revised and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel.

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TESTING AUTHORITY

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

19. APPLICANT COMMENTS

Sl. No.	Para No.	Applicant comments
1	18.2 to 18.4	We will discuss with the manufacturer to do the needful.