

**THIS TEST REPORT IS VALID UPTO 30.06.2031**



**E-AGRO CARE, G-105P (RT) 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 प्र शिक्षण 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.)

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

Machine- 615/1672	E-AGRO CARE, G-105P (RT) POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer : M/s. E-Argo Care Machineries and Equipments  
Pvt. Ltd, Unit No. 61, Sector 5, Auric, Shendra  
MIDC, Aurangabad-431154 Maharashtra.

Applicant : The manufacturer

### **E-AGRO CARE, G-105P (RT) POWER WEEDER**

Report No.: Machine-615/1672

Month: July

Year: 2024



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**Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)**  
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Machine- 615/1672	E-AGRO CARE, G-105P (RT) POWER WEEDER	COMMERCIAL (ICT)
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Type of test : COMMERCIAL (ICT)  
 Period of test : April, 2024 to July, 2024  
 Test Report No. : Machine-615/1672  
 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 "E-AGRO CARE, G-105P (RT) 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	<b>Force</b>	
	1 kgf	9.80665 N
		2.20462 lbf
2	<b>Power</b>	
	1 hp	1.01387 metric hp (Ps)
		745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	<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

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### 18. COMMENTS & RECOMMENDATIONS

#### 18.1 Engine performance:

- 18.1.1 The maximum power was observed as 3.95 kW under natural ambient condition against the declared value of 4.0 kW respectively.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 440 g/kWh respectively against the declared value of 450 g/kWh.
- 18.1.3 Max. Torque was observed as 11.43 Nm against the declared value of 12.0 Nm.
- 18.1.4 Back up torque of engine was observed as 8.36 % against declared value of 2.5%.

#### 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 340 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

- 18.3 The Material of rotor shaft does not conform to the requirement. This should be looked into for corrective action.

- 18.4 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.

#### 18.5 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 inter alia, the following must be provided:




- i) Address of manufacturer
- ii) Country of origin
- iii) Year of manufacturer
- iv) Machine serial number
- v) Engine HP
- vi) Specific fuel consumption, (g/kWh)

#### 18.6 Technical literature:

Instruction manual and parts catalogue of power weeder and engine were not 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	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