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

संख्या/No: ICE/SRFMTTI,

ANANTAPUR/2025-26/22/22/1897

माह/Month: July, 2025

THIS TEST REPORT IS VALID UP TO 30.06.2032



RAJA, 1050G 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.)
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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Chongqing Shineray agricultural

machinery Co. Ltd.,

No. 8, Shineray Road, Hangu Town, Juilangpo District, Chongqing, China-

401329.

Applicant

: M/S. Al-Burhan International,

No. 16, B. R. B. Basu Road, Kolkata, West

Bengal -700001.

RAJA, 1050G POWER WEEDER

Report no.: ICE/SRFMTTI, ANANTAPUR/2025-26/22/22/1897

Month: July Year: 2025



Government of India

Ministry of Agriculture and Farmers Welfare
Department of Agriculture and Farmers Welfare
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COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: May, 2025 to June, 2025

Test Report No.

ICE/SRFMTTI, ANANTAPUR/2025-26/22/22/1897

Month / Year of release

July, 2025

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 through virtual mode.
- 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 "RAJA, 1050G POWER WEEDER". This report is valid up to 30.06.2032, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

SELECTED CONVERSIONS

Sl. 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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18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 5.55 kW under natural ambient condition against the declared value of 5.6 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 352 g/kWh against the declared value of 395 g/kWh.
- 18.1.3 Back up torque of engine was observed as 6.40 % against declared value of 6.0 %.
- 18.1.4 Max. torque was observed as 15.17 Nm against the declared value of 15 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder (fuel tank cap) was observed to the extent of 412 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Chemical Analysis:

The chemical composition of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022) does not conforms. This should be looked into for corrective action.

18.4 Marking /labeling:

The labeling plate does not reveal all the required information.

- 1. Name And Address of Manufacturer
- 2. Name And Address of Applicant
- 3. Country Of Origin
- 4. Year of Manufacturer
- 5. Size of The Machine
- 6. Specific Fuel Consumption, (g/kWh)

18.5 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.

The following literature should be provided.

- i) Service manual
- ii) Parts catalogue

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COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. P.P.RAO DIRECTOR

19 APPLICANT'S COMMENTS

We will match all the requirements and suggestions as stated in the chapter no. 18.