

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

संख्या/No: Machine-543/1587

COMMERCIAL TEST REPORT (INITIAL)

माह/Month: February, 2024

THIS REPORT IS VALID UPTO 31.01.2031



GAJA HITECH AGRO, G-104P 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

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Machine- 543/1587	GAJA HITECH AGRO, G-104P POWER WEEDER
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Manufacturer, (apa) : M/S. Chongqing Senci Wugu Agricultural Machinery Import & Export Co., Ltd No.8 Longfei Road, Dongcheng Street, Tongliang Town ,Chongqing,China

Applicant : M/S. VJ Materials Mart,113,Sathy Road, Near Rukmani Ammal Hotel, Erode-638003

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Machine- 543/1587	GAJA HITECH AGRO, G-104P POWER WEEDER	 COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.01.2031	

Type of test : COMMERCIAL (INITIAL)
 Period of test : 07.11.2023 to 16.01.2024
 Test Report No. : **Machine-543/1587**
 Month / Year of release : February, 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 “**GAJA HITECH AGRO, G-104P POWER WEEDER**”. This report is valid up to 31.01.2031, 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

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16.3 Transmission gears:

All the gears of the transmission system were found in normal working condition.

16.4 Rotary drive unit:

The rotary drive unit was dismantled and all the components were found in normal working condition.

17. COMMENTS & RECOMMENDATIONS

17.1 Engine Performance:

17.1.1 The maximum power was observed as 3.75 kW under natural ambient condition against the declared value of 3.75 kW.

17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 415 g/kWh against the declared value of 374 g/kWh.

17.1.3 Back up torque of engine was observed as 4.47% against declared value of 7 %.

17.1.4 Max. torque was observed as 10.97 Nm against the declared value of 20 Nm.

17.2 Mechanical vibration :

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 296 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

17.3 The hardness of rotary blades do not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into for corrective action.

17.4 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) Specific fuel consumption (g/kWh)
- ii) Serial no.
- iii) Address of manufacturer

17.5 Technical literature:

User's manual provided in booklet form in english for reference during the test. It is recommended that same must be revised in 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.

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TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. D.C.MOULI AGRICULTURAL ENGINEER
 Dr. B.M. NANDEDE DIRECTOR	



18. Applicant comments

With reference to the DTR, we take proper action against all Comment & Recommendation specified in the Draft report further products of our company. All the data & parameters mentioned in the DTR are correct & satisfied.