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

संख्या/No: Machine-699/1795

माह/Month: January, 2025

THIS TEST REPORT IS VALID UP TO 31.12.2031



BHARATH AGENCY, BA9PWPOWER 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.)

[An ISO 9001:2015CERTIFIEDINSTITUTE]

Website: http://srfmtti.dacnet.nic.in/ E-mail: fmti-sr@nic.in

BHARATH AGENCY, BA9PW POWER WEEDER

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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Joins Hanghou Joins Imp & Exp Co.,

LTD Room 809, No 1451, Binxing Road, Changhe street, Binxing District Hangzhou,

310052, Zhejiang Provinca China.

Applicant

: M/s. Bharath Agency

Shop No.2/75 Main Road, Dev MD 14, Mamatha Lower Primary School Gugal,

Gugal, Raichur, Karnataka, 584113.

BHARATH AGENCY, BA9PW POWER WEEDER

Report no.: Machine-699/1795 Month: January Year: 2025



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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR(A.P.)

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THIS TEST REPORT IS VALID UP TO 31.12.2031

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: November, 2024 to January, 2025

Test Report No.

: Machine-699/1795

Month / Year of release

: January, 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 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 "BHARATH AGENCY, BA9PW POWER WEEDER". This report is valid up to 31.12.2031, 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)
	hibat to in	745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	Pressure	COMMODER IN IN A PROPERTY IS
	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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BHARATH AGENCY, BA9PW POWER WEEDER

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COMMERCIAL (ICT)

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 6.72 kW under natural ambient condition against the declared value of 6.5 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 392 g/kWh against the declared value of 286 g/kWh.
- 18.1.3 Back up torque of engine was observed as 24.69% against declared value of 12 %.
- 18.1.4 Max. torque was observed as 22.17 Nm against the declared value of 18.0Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 586 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Chemical composition:

The Chemical analysis 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. Address of applicant
- iii. Country of origin
- iv. Rated RPM
- v. 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

BHARATH AGENCY, BA9PW POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.12.2031

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

19. APPLICANTS COMMENTS

Reference No.	Comments	
18.2	We will take corrective action to reduce the mechanical vibration.	
18.3	We will take corrective action to meet the requirement as per IS 6690:1981 (Reaffirmed 2022).	
18.4	We will take corrective action to meet the requirement in future production.	
18.5	We will provide correct labelling plate in future production.	
18.6	We will be brought out the literature as per IS 8132:1999.	