व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT (INITIAL) माह/Month: January, 2025

संख्या/No: Machine-698/1793

THIS TEST REPORT IS VALID UP TO 31.12.2031



NEW BHARATH, 9HPBR 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, गार्लिदिन्ने-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/

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NEW BHARATH, 9HPBR POWER WEEDER

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COMMERCIAL

Manufacturer, (apa)

: M/s. New Bharath Engineering Works,

Stage, 5th Cross, 788/859/1, 2nd

Annapoorneshwari

Nagar,

Kyathyrmgere, Mandya

571403,

Karnataka, India

Applicant

: The manufacturer

NEW BHARATH, 9HPBR POWER WEEDER

Report no.: Machine-698/1793 Month: January Year: 2025



Government of India Ministry of Agriculture and Farmers Welfare Department of Agriculture and Farmers Welfare Southern Region Farm Machinery Training and Testing Institute Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.) **FAn ISO 9001:2015 CERTIFIED INSTITUTE**

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

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COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: November, 2024 to January, 2025

Test Report No.

Machine-698/1793

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 "NEW BHARATH, 9HPBR 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	
rielisW	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
	ERTIFIED INS	mm of Hg
	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$
	1 mm of Hg	1.3332 m-bar

NEW BHARATH, 9HPBR POWER WEEDER

COMMERCIAL (ICT)

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18. COMMENTS & RECOMMENDATIONS

18.1 **Engine Performance:**

- The maximum power was observed as 6.62 kW under natural ambient 18.1.1 condition against the declared value of 6.7 kW.
- Specific fuel consumption of engine corresponding to maximum power was 18.1.2 recorded as 390 g/kWh against the declared value of 330 g/kWh.
- Back up torque of engine was observed as 25.37% against declared value of 18.1.3 10%.
- 18.1.4 Max. torque was observed as 21.94 Nm against the declared value of 22.0 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 250 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

Air cleaner oil pullover: 18.3

The percentage of air cleaner oil pull over was recorded as 0.20 to 0.40 % against the declaration of 0.20%. The percentage of air cleaner oil pull over was considered very high and 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. Make
- Country of origin ii.
- iii. Year of manufacturer
- Specific fuel consumption (g/kWh) iv.

18.5 **Technical literature:**

User's manual is not 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.

- Service manual i)
- ii) Parts catalogue

NEW BHARATH, 9HPBR POWER WEEDER

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COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

16. APPLICANT COMMENTS

reference	Comments	
18.1.2	We will inform it to our component manufacturer for	
&	making necessary possible changes in the machine	
18.1.4	13 Av height of weeds (cm) 42.0 44.2 57	
18.2	We will insist strongly to the manufacturer to put some vibration dampeners	
18.3	We will make some changes in Air cleaner design to meet the requirements	
18.4	Your suggestion is noted, we will modify the labeling plate of machine as per your recommendations	
18.5	We will brought out the literature as per IS 8132:1999 (Reaffirmed 2004)	