व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

संख्या/No: Machine- 542/1586

COMMERCIAL TEST REPORT (INITIAL)

माह/Month: February, 2024

THIS TEST REPORT IS VALID UPTO 31.01.2031



DIBYANKA, DP-600D 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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Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

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

E-mail: fmti-sr@nic.in Tele.: 08551-286441

Machine - 542/1586

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COMMERCIAL (ICT)

Manufacturer, (apa)

M/S. Chongqing Haofa Machinery Manufacturing

: Co. Ltd., Sanjiao Industrial Park, Yongchuan

District, Chongqing City, China.

Applicant

: M/S. Dibyanka Agro India Pvt. Ltd, Plot no -

1149/1420/1424, Tadada, Jamsuli, Singla, Balasore,

- 756081, Odisa, India.

DIBYANKA, DP-600D POWER WEEDER

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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.)

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

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Type of test

Machine -542/1586

: COMMERCIAL

Period of test

07.11.2023 to 04.01.2024

Test Report No.

Machine - 542/1586

Month / Year of release

February, 2024

- 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 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 "DIBYANKA, DP-600D 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	$100 \text{ kPa} = 10 \text{ N/cm}^2$
	1 mm of Hg	1.3332 m-bar

Machine - 542/1586

THIS TEST REPORT IS VALIDUP TO 31.01.2031



18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 4.5 kW under natural ambient condition against the declared value of 4.5 kW.
- Specific fuel consumption of engine corresponding to maximum power was recorded as 424 g/kWh against the declared value of 394 g/kWh.
- 18.1.3 Back up torque of engine was observed as 6.5 % against declared value of 7 %.
- 18.1.4 Max. torque was observed as 15.23 Nm against the declared value of 19.00Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power 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.

- 18.3 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.
- 18.4 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) Make
 - ii) Specific fuel consumption (g/kWh)
 - iii) Serial no.

18.5 Technical literature:

User's manual provided but not in booklet form for reference during the test. It is recommended that same must be revised in booklet form 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.

Machine -542/1586

THIS TEST REPORT IS VALIDUP TO 31.01.2031

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER Er. D.C.MOULI AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

19. APPLICANTS COMMENTS

We have noted your comments and recommendations and forwarded the same to our principle manufacturer, we will take corrective action as suggested by you.