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

संख्या/No:Machine-575/1630

माह/Month: June, 2024

THIS TEST REPORT IS VALID UPTO 31.05.2031



DIBYANKA, DP-500P 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

ट्रैक्टरनगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.)

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

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DIBYANKA, DP-500P POWER WEEDER

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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Chongqing

Haofa

Machinery

Manufacturing Co. Ltd., Sajiao Industrial Park,

Yongchuan District, Chongqing, China.

Applicant

: M/s. Dibyanka Argo (India) Private limited, Tadada, Plotno-1149/1420/1424, Jamsuli,

Singla, Balasore, Odisha-756081, India.

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

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DIBYANKA, DP-500P POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.05.2031

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

15.05.2024 to 04.06.2024

Test Report No.

Machine-575/1630

Month / Year of release

June, 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 selected randomly 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 "DIBYANKA, DP-500P POWER WEEDER". This report is valid up to 31.05.2031, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023

SELECTEDCONVERSIONS

S. No.	Units	Conversion Factor
1	Force	18
	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	l .
	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

DIBYANKA, DP-500P POWER WEEDER

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COMMERCIAL (ICT)

... 18. COMMENTS & RECOMMENDATIONS

18.1 Engine performance:

- 18.1.1 The maximum power was observed as 3.77 kW under natural ambient condition against the declared value of 4.2 kW respectively.
- Specific fuel consumption of engine corresponding to maximum power was recorded as 408 g/kWh respectively against the declared value of 360 g/kWh.
- 18.1.3 Max. Torque was observed as 11.95 Nm against the declared value of 15.0 Nm.
- 18.1.4 Back up torque of engine was observed as 6.22% against declared value of 10%.
 - The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 291 microns, which is higher than the limit specified by the ILO. Therefore necessary action to dampen the vibration should be taken in to account.

18.3 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) Manufacturer address
- ii) Country of origin
- iii) Year of manufacturer
- iv) Specific fuel consumption (g/kWh)

18.5 Technical literature:

Instruction manual and parts catalogue of power weeder and engine in a single booklet was supplied with the test sample for reference during the test. It is however, recommended that same may be revised and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel.

DIBYANKA, DP-500P POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.05.2031

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

Arminm

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19. Applicant's Comments

We have noted your comments & recommendation and forwarded same to the principal manufacturer, we will take corrective action as suggested by you.