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

संख्या/No: Machine-620/1677

माह/Month: July, 2024

THIS TEST REPORT IS VALID UPTO 30.06.2031



BONHOEFFER, BON-GT-500B POWER WEEDER



भारतसरकार

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.)
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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Chongqing Zongshen General Power Machine Co. Ltd., Zongshen Industrial Park, Chaoyouchang Banan, Chongqing (District)-

400054, China.

Applicant

: M/s. Bonhoeffer Machines Pvt. Ltd. No.756, 2nd Floor, Udyog Vihar, Phase-5, Sector 19, Gurugram-122016, Haryana, India.

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Ministry of Agriculture and Farmers Welfare
Department of Agriculture and Farmers Welfare
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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR, (A.P.)

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सशीवरा

BONHOEFFER, BON-GT-500B POWER WEEDER

THIS TEST REPORT IS VALID UP TO 30.06.2031

COMMERCIAL (ICT)

Type of test

COMMERCIAL (ICT)

Period of test

: May, 2024 to July, 2024

Test Report No.

Machine-620/1677

Month / Year of release

July, 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 "BONHOEFFER, BON-GT-500P POWER WEEDER". This report is valid up to 30.06.2031. 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	
	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-620/1677

BONHOEFFER, BON-GT-500B POWER WEEDER

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COMMERCIAL (ICT)

** 18. COMMENTS & RECOMMENDATIONS

18.1 Engine performance:

- 18.1.1 The maximum power was observed as 2.60 kW under natural ambient condition against the declared value of 2.70 kW respectively.
- Specific fuel consumption of engine corresponding to maximum power was recorded as 624 g/kWh respectively against the declared value of 405 g/kWh.
- 18.1.3 Max. Torque was observed as 7.94 Nm against the declared value of 7.20 Nm.
- 18.1.4 Back up torque of engine was observed as 9.67 % against declared value of 5 %.
 - The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 398 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) Rated RPM
- ii) 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.

TESTING AUTHORITY

Er. PRAMOD YADAV
AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE
DIRECTOR

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

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