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

संख्या/No:Machine-569/1622

माह/Month: May, 2024

THIS TEST REPORT IS VALID UPTO 30.04.2031



MOUNTFIELD, MF-700P POWER WEEDER



भारतसरकार

Government of India

कृषिएवंकिसानकल्याणमंत्रालय

Ministry of Agriculture and Farmers Welfare कृषिएवंकिसानकल्याणविभाग

Department of Agriculture and Farmers Welfare दक्षिणीक्षेत्रकृषिमशीनरीप्रशिक्षणएवंपरीक्षणसंस्थान

Southern Region Farm Machinery Training and Testing Institute ट्रैक्टरनगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.)

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MOUNTFIELD, MF 700P POWER WEEDER

COMMERCIAL (ICT)

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Manufacturer, (apa)

: Chongqing Diligence General Machinery Co.,

Ltd.No. 1, Kangachao Road, Banan District,

Chongqing, China-400054

Applicant

: S V R AGRO IMPEX

Ground 01, Matur Main Road, Kadekal Mattur

Circle, Shivamogga, Karnataka-577203

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

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MOUNTFIELD, MF 700P POWER WEEDER

COMMERCIAL (ICT)

THIS TEST REPORT IS VALID UP TO 30.04.2031

Type of test

COMMERCIAL (ICT)

Period of test

20.02. 2024 to 15.04. 2024

Test Report No.

Machine-569/1622

Month / Year of release

May, 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 "MOUNTFIELD, MF-700P POWER WEEDER". This report is valid up to 30.04.2031, 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

MOUNTFIELD, MF 700P POWER WEEDER

COMMERCIAL (ICT)

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18. COMMENTS & RECOMMENDATIONS

- 18.1 Engine performance:
- 18.1.1 The maximum power was observed as 5.18 kW under natural ambient condition against the declared value of 5.2 kW respectively.
- Specific fuel consumption of engine corresponding to maximum power was recorded as 411 g/kWh respectively against the declared value of 374 g/kWh.
- 18.1.3 Max. Torque was observed as 15.64 Nm against the declared value of 15.8 Nm.
- 18.1.4 Back up torque of engine was observed as 4.48 % 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 695 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 Hardness of the rotary blade is not as per the requirement of IS 6690:1981. This should be looked into for corrective action.
- 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) Serial no.
 - ii) Engine no.
 - iii) Rated RPM
 - iv) Country of origin
 - v) 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.

MOUNTFIELD, MF 700P POWER WEEDER

COMMERCIAL

(ICT)

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TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER Dr. B.M. NANDEDE DIRECTOR

19. APPLICANTS COMMENTS

We consider your comments & recommendations seriously & with immediate effect we inform our production & marketing team to take corrective actions before dispatch.