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

संख्या/No: Machine-616/1673

माह/Month: July, 2024

THIS TEST REPORT IS VALID UP TO 30.06.2031



FORTUNE AGRO, FAI-540D 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 ट्रैक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतप्र (आं. प्र.)

Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

[An ISO 9001:2015CERTIFIEDINSTITUTE]

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Machine-616/1673

FORTUNE AGRO, FAI-540D POWER WEEDER

COMMERCIAL (ICT)

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Manufacturer

: M/s. FORTUNE AGRO IMPEX, Fortune

House, #343, 9th block, Sir M. Visvesvaraya layout, Kengunte 1st Main road, Bangalore-

560056, Karnataka.

Applicant

: The manufacturer

FORTUNE AGRO, FAI-540D POWER WEEDER

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

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FORTUNE AGRO, FAI-540D POWER WEEDER

COMMERCIAL (ICT)

THIS TEST REPORT IS VALID UPTO 30.06.2031

Type of test

: COMMERCIAL (ICT)

Period of test

March, 2024 to May, 2024

Test Report No.

Machine-616/1673

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 randomly selected for test by the testing authority by virtual mode.
- 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 "FORTUNE AGRO, FAI-540D 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.

SELECTED CONVERSIONS

Sl. 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



FORTUNE AGRO, FAI-540D POWER WEEDER

COMMERCIAL (ICT)

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18. COMMENTS & RECOMMENDATIONS

18/1

Engine Performance:

- 18.1.1 The maximum power was observed as 6.27 kW under natural ambient condition against the declared value of 5.9 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 309 g/kWh against the declared value of 304 g/kWh.
- 18.1.3 Back up torque of engine was observed as 5.6 % against declared value of 7 %.
- 18.1.4 Max. torque was observed as 15.0 Nm against the declared value of 18.0 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 690 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

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) Engine no.
- ii) Country of origin
- iii) Specific fuel consumption (g/kWh)

18.4 Technical literature:

Owner's manual, service manual and parts catalogue provided in booklet form in English for reference during the test. It is recommended that same must be revised in 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-616/1673

FORTUNE AGRO, FAI-540D POWER WEEDER

COMMERCIAL (ICT)

THIS TEST REPORT IS VALID UPTO 30.06.2031

TESTING AUTHORITY

Er. PRAMOD YADAV
AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE
DIRECTOR

19.APPLICANT COMMENTS

Your comments and recommendations will be taken care