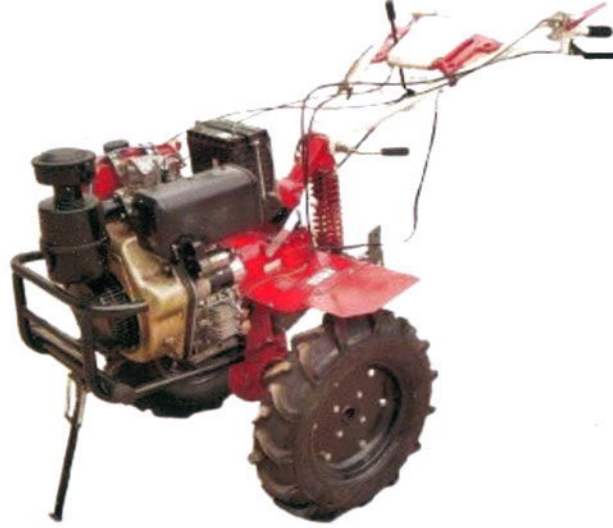


व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)  
COMMERCIAL TEST REPORT (INITIAL)

संख्या/No: Machine-668/1741  
माह/Month: October, 2024

**THIS TEST REPORT IS VALID UP TO 30.09.2031**



**FORTUNE AGRO, FAI-120D 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: 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](mailto:fmti-sr@nic.in)

Machine- 668/1741	<b>FORTUNE AGRO, FAI-120D POWER WEEDER</b>	
	<b>THIS TEST REPORT IS VALID UPTO 30.09.2031</b>	

Manufacturer, (apa) : M/s. FORTUNE AGRO IMPEX,  
Fortune House, #343, 9<sup>th</sup> block, Sir M.  
Visvesvaraya layout, Kengunte 1<sup>st</sup> Main  
Road, Bangalore-560056, Karnataka

Applicant : The Manufacturer

**FORTUNE AGRO, FAI-120D POWER WEEDER**

Report no.: Machine-668/1741

Month: October

Year: 2024



सत्यमेव जयते

**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.)**  
**[An ISO 9001:2015 CERTIFIED INSTITUTE]**

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

E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)

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

**Page 2 of 32**




Machine-668/1741	<b>FORTUNE AGRO, FAI-120D POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UPTO 30.09.2031</b>	

Type of test : COMMERCIAL (ICT)  
Period of test : May, 2024 to September, 2024  
Test Report No. : Machine-668/1741  
Month / Year of release : October, 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-120D POWER WEEDER**". This report is valid up to **30.09.2031**, 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	<b>Force</b>	
	1 kgf	9.80665 N
		2.20462 lbf
2	<b>Power</b>	
	1 hp	1.01387 metric hp (Ps)
		745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	<b>Pressure</b>	
	1 psi	6.895 kPa
	1 kgf/cm <sup>2</sup>	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm <sup>2</sup>
	1 mm of Hg	1.3332 m-bar

Machine- 668/1741	<b>FORTUNE AGRO, FAI-120D POWER WEEDER</b>	 <b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UPTO 30.09.2031</b>	

1	2	3	4	5
23	Provision for transport wheels	Must be provided	Provided	Conforms
24	Provision for cover on exhaust	Must be provided	Provided	Conforms
25	Direction of exhaust emission away from operator	Must be provided	Provided	Conforms
26	Marking/labeling of machine	The labeling plate should be riveted on the body of the machine having name and address of manufacturer & applicant, country of origin, make, model, year of manufacturer, serial number, engine number, engine HP, rated rpm & SFC	<b>SFC is not provided.</b>	<b>Does not conform</b>
27	Literature	Operator manual, service manual and parts catalogue should be provided	<b>Not Provided</b>	<b>Does not conform</b>

## 18. COMMENTS & RECOMMENDATIONS

### 18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 6.75 kW under natural ambient condition against the declared value of 6.7 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 546 g/kWh against the declared value of 374 g/kWh.
- 18.1.3 Back up torque of engine was observed as 12.4 % against declared value of 10%.
- 18.1.4 Max. torque was observed as 21.24 Nm against the declared value of 22.0 Nm.

### 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 340 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

Machine- 668/1741	<b>FORTUNE AGRO, FAI-120D POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UPTO 30.09.2031</b>	

**18.3 Hardness and chemical analysis:**

The hardness and chemical analysis of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022) does not conform. This should be looked into corrective action.

**18.4 Air cleaner oil pullover:**

The percentage of air cleaner oil pull over was recorded as 0.20 to 1.42% against the declaration of 0.20%. the percentage of air cleaner oil pull over was considered very high and this should be looked into for corrective action.

**18.5 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. Specific fuel consumption (kg/kWh)

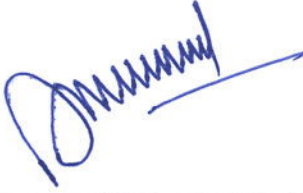


**18.6 Technical literature:**

User's manual is not provided during the test. However, the same must be brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the guidance of users.

The following literature should be provided.

- i) Service manual
- ii) Parts catalogue

**TESTING AUTHORITY**

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

**19. APPLICANT COMMENTS**

We will take care about your suggestions and advice to rectify any improvement regarding performance of the machine. We will kindly obey your suggestions regarding weeder performance.