

THIS TEST REPORT IS VALID UP TO 31.12.2031



**MALLIKARJUNA ENTERPRISES, ME170F PW 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.)**

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<b>Machine- 712/1814</b>	<b>MALLIKARJUNA ENTERPRISES, ME170FPW POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UP TO 31.12.2031</b>	

Manufacturer : M/s. Chongqing Shineray Agricultural Machinery Co., Ltd No.8 Shineray Road, Hangu Town, Gaoxin District, Chongqing, China.

Applicant, : M/s. Mallikarjuna Enterprises  
Stall No. A5, Block No. 5, City Corporation Commercial Complex, Gadigi Channappa Circle, Ballari, Karnataka-583101

**MALLIKARJUNA ENTERPRISES, ME170FPW POWER WEEDER**

Report no.: **Machine-712/1814**

Month: **January**

Year: **2025**



**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.)**  
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Machine-  
712/1814

MALLIKARJUNA ENTERPRISES, ME170FPW  
POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.12.2031

COMMERCIAL  
(ICT)

Type of test : COMMERCIAL (ICT)

Period of test : December, 2024 to January, 2025

Test Report No. : Machine-712/1814

Month / Year of release : January, 2025

- 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 by testing authority.
- iii) The results presented in this report do not, in any way, 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 "MALLIKARJUNA ENTERPRISES, ME170FPW POWER WEEDER". This report is valid up to 31.12.2031, 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
3	Pressure	
		1 kW
		1.35962 Ps
		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



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1	2	3	4	5
22	Provision for shield/cover to prevent flying of mud and stone from rotor	Must be provided	Provided	Conforms
23	Depth control mechanism	Must be provided	Provided	Conforms
24	Provision for transport wheels	Must be provided	Provided	Conforms
25	Provision for cover on exhaust	Must be provided	Provided	Conforms
26	Direction of exhaust emission away from operator	Must be provided	Provided	Conforms
27	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.	Address of manufacturer Country of origin and SFC are not provided.	Does not conform
28	Literature	Operator manual, service manual and parts catalogue.	Provided	Conforms

## 18. COMMENTS & RECOMMENDATIONS

### 18.1 Engine Performance:

- 18.1.1 The maximum and rated power was observed as 3.97 kW under natural ambient condition against the declared value of 4.2 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 405 g/kWh against the declared value of 420 g/kWh.
- 18.1.3 Back up torque of engine was observed as 6.66% against declared value of 10%.
- 18.1.4 Max. torque was observed as 11.20 Nm against the declared value of 10.03 Nm.

### 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 391 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

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### 18.3 Hardness & Chemical composition:

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

### 18.4 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, interlaid, the following must be provided:

- Address of manufacturer
- Country of origin
- Specific fuel consumption, (g/kWh)

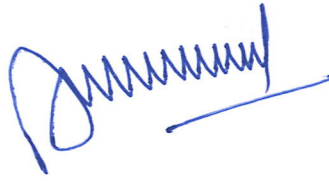



### 18.5 Technical literature:

User's manual is 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.

- Service manual
- Parts catalogue

### TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER
<div style="text-align: center;">   Dr. B.M. NANDEDE  DIRECTOR </div> <div style="text-align: right;">  </div>	

### 19. APPLICANT COMMENTS

-NIL-