

THIS REPORT IS VALID UPTO 31/12/2030



**CHOUDHARY ENGINEERING WORKS, JPC WDR 107
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

Tele.: 08551-286441

Machine- 537/1578	CHOUDHARY ENGINEERING WORKS, JPC WDR 107 POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31/12/2030	



Manufacturer, (apa) : M/S. Shaoxing Nosimon Engineering Company, 501-10, Fifth Floor, Longhua Star Garden, Keqiao District, Shaoxing City, **China**

Applicant : M/S. Choudhary Engineering Works, At/P.O: Bamra, Dist, Sambalpur, Odisha-768221

**CHOUDHARY ENGINEERING WORKS, JPC WDR 107
POWER WEEDER**

Report no.: Machine-537/1578

Month: **January**

Year: **2024**



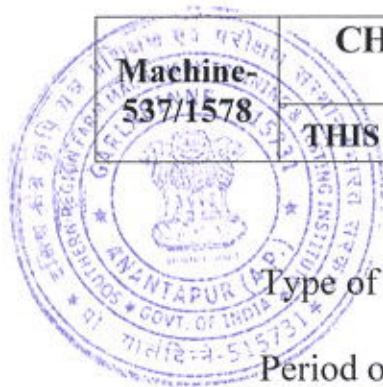
सत्यमेव जयते

**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]**

Telephone: 08551-286441

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

E-mail: fmti-sr@nic.in



Machine-
537/1578

**CHOUDHARY ENGINEERING WORKS,
JPC WDR 107 POWER WEEDER**

**COMMERCIAL
(ICT)**

THIS TEST REPORT IS VALID UP TO 31/12/2030

Type of test : COMMERCIAL
Period of test : 24.11.2023 to 28.12.2023
Test Report No. : **Machine-537/1578**

Month / Year of release : January, 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 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 "**CHOUDHARY ENGINEERING WORKS, JPC WDR 107**". This report is valid up to 31/12/2030, 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 kPa = 10 N/cm ²
	1 mm of Hg	1.3332 m-bar

Machine- 537/1578	CHOUDHARY ENGINEERING WORKS, JPC WDR 107 POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31/12/2030	

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

18.1.1 The maximum power was observed as 3.81 kW under natural ambient condition against the declared value of 4.0 kW.

18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 389 g/kWh against the declared value of 390 g/kWh.

18.1.3 Back up torque of engine was observed as 2.1 % against declared value of 7 %.

18.1.4 Max. torque was observed as 11.20 Nm against the declared value of 12.00Nm.

18.2 Mechanical vibration :

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 295 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

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

18.4 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) Make
- ii) Specific fuel consumption (g/kWh)
- iii) Serial no.

18.5 Technical literature:




User's manual cum parts catalogue provided but not in booklet form for reference during the test. It is recommended that same must be revised in booklet form 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- 537/1578	CHOUDHARY ENGINEERING WORKS, JPC WDR 107 POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31/12/2030	

19. APPLICANT COMMENTS

S.no	Para no	Comments
1	18.1.1	We will inform to our manufacturer to meet power as per declaration
2	18.2	We will take necessary action to reducing vibration of engine
3	18.3	We will take necessary action to meet IS 6690:1981 (Reaffirmed 2022)
4	18.4	We will make necessary changes as per your comments in leveling plate to meet IS standard
5	18.5	User's manual and parts catalogs we will provide in booklet form and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004)

TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. D.C. MOULI AGRICULTURAL ENGINEER
 Dr. B.M. NANDEDE DIRECTOR	

