

THIS TEST REPORT IS VALID UPTO 31.10.2031



**CHOUHARY ENGINEERING WORKS,
JPC WDR 177F 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]

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Machine- 677/1751	CHOUDHARY ENGINEERING WORKS, JPC WDR 177F POWER WEEDER	COMMERCIAL (ICT)
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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 177F POWER WEEDER**

Report no.: **Machine-677/1751**

Month: **November**

Year: **2024**

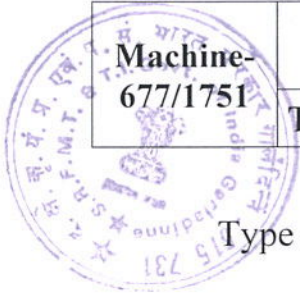


सत्यमेव जयते

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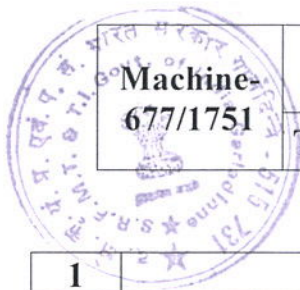
Machine- 677/1751	CHOUDHARY ENGINEERING WORKS, JPC WDR 177F POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.10.2031	

Type of test : COMMERCIAL (ICT)
Period of test : September, 2024 to October, 2024
Test Report No. : **Machine-677/1751**
Month / Year of release : November, 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 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 "**CHOUDHARY ENGINEERING WORKS, JPC WDR 177 F POWER WEEDER**". This report is valid up to **31.10.2031** 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 kPa = 10 N/cm ²
	1 mm of Hg	1.3332 m-bar



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1	2	3	4	5
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	Manufacturers address, size of the machine, country of origin & SFC are not provided.	Does not conform
28	Literature	Operator manual, service manual and parts catalogue should be provided	Provided	Conforms

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 5.03 kW under natural ambient condition against the declared value of 5.2 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 358 g/kWh against the declared value of 390 g/kWh.
- 18.1.3 Back up torque of engine was observed as 10.53 % against declared value of 7%.
- 18.1.4 Max. torque was observed as 14.70 Nm against the declared value of 12 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 290 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 Air cleaner oil pullover:

The percentage of air cleaner oil pull over was recorded as 0.33 to 1.00% 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.

18.4 Chemical Analysis:

The 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.

18.5 Marking /labeling:

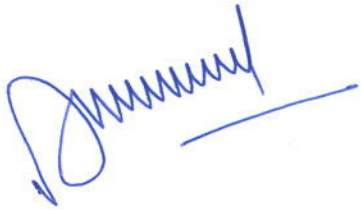

The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, inter alia, the following must be provided:

- i) Manufacturers address
- ii) Size of the machine
- iii) Country of origin
- iv) Specific fuel consumption (g/kWh)

18.6 Technical literature:

Operators manual and parts catalogue of power weeder were supplied with test sample for reference during the test. It is however , recommended that same way be revised and brought out in Hindi & other regional languages as per IS:8132-1999(reaffirmed 2019) for the sake of user & technical personnel in booklet form.

TESTING AUTHORITY

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

19. APPLICANT COMMENTS

We will work on your comments and recommendation in future lot.