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

संख्या/No: Machine-690/1777

माह/Month: December, 2024

THIS TESTREPORT IS VALID UPTO 30.11.2031



AONE, A1P-91-38 POWER WEEDER



भारत सरकार

Government of India कृषिएवं किसान कल्याण मंत्रालय Ministry of Agriculture and Farmers Welfare कृषिएवं 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 9001:2015CERTIFIEDINSTITUTE]

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

E-mail: fmti-sr@nic.in

Machine-690/1777 AONE, A1P-91-38 POWER WEEDER

THIS TEST REPORT IS VALID UP TO 30.11.2031

COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s Pooja Agro Industries, D.No. 7-1-273/67,

Ward No. 30, Vala Ballary Road, Sindhanur,

Raichur District, Karnataka, India.

Applicant

: The manufacturer

AONE, A1P-91-38 POWER WEEDER

Report no.: Machine-690/1777 Month: December, 2024

Year: 2024



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

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

Page 2 of 30

Machine-

AONE, A1P-91-38 POWER WEEDER

COMMERCIAL

THIS TEST REPORT IS VALID UP TO 30.11.2031

(ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

October, 2024 to December, 2024

Test Report No.

Machine-690/1777

Month / Year of release

December, 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 "AONE, A1P-91-38 POWER WEEDER". This report is valid up to 30.11.2031, 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	
GIUT	TRIED INST	mm of Hg	
	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$	
	1 mm of Hg	1.3332 m-bar	

Machine-690/1777

AONE, A1P-91-38 POWER WEEDER

COMMERCIAL (ICT)

THIS TEST REPORT IS VALID UP TO 30.11.2031

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum and rated power were observed as 3.91 kW under natural ambient condition against the declared value of 3.8 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 427 g/kWh against the declared value of 420 g/kWh.
- 18.1.3 Back up torque of engine was observed as 9.26 % against declared value of 10%.
- 18.1.4 Max. torque was observed as 10.97 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 302 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Hardness & Chemical analysis:

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:

- i) Make
- ii) Year of manufacturer
- iii) Country of origin
- iv) Specific fuel consumption (g/kWh)

18.5 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

Machine-690/1777

AONE, A1P-91-38 POWER WEEDER

THIS TEST REPORT IS VALID UP TO 30.11.2031

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

human

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

19. APPLICANT COMMENTS

Sl. No.	Para No.	Comments
1	18.1.2 & 18.1.4	We will inform it to our manufacturer for making necessary possible changes in the future machine.
2	18.2	We will insist strongly to the manufacturer to put some vibration dampeners.
3	18.3	We will make some changes in blade material to meet the requirements of IS 6690:1981 (Reaffirmed 2022).
4	18.4	Your suggestion is noted, we will modify the labeling plate of machine as per your recommendations.
5	18.5	We will brought out the literature as per IS 8132:1999 (Reaffirmed 2004).