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

संख्या/No: Machine-685/1771

माह/Month: December, 2024

THIS TESTREPORT IS VALID UPTO 30.11.2031



AONE, A1D-720D 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 9001:2015CERTIFIEDINSTITUTE]

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

E-mail: fmti-sr@nic.in

AONE, A1D-720D POWER WEEDER

COMMERCIAL (ICT)

THIS TEST REPORT IS VALID UP TO 30.11.2031

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, A1D-720D POWER WEEDER

Report no.: Machine-685/1771

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

Page 2 of 33

AONE, A1D-720D POWER WEEDER

COMMERCIAL (ICT)

THIS TEST REPORT IS VALID UP TO 30.11.2031

Type of test

: COMMERCIAL (ICT)

Period of test

: November, 2024 to December, 2024

Test Report No.

Machine-685/1771

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, A1D-720D 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	
		mm of Hg	
	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$	
	1 mm of Hg	1.3332 m-bar	

AONE, A1D-720D POWER WEEDER

COMMERCIAL (ICT)

THIS TEST REPORT IS VALID UP TO 30.11,2031

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1	2	3	5 2 4	* 5
21	Provision for easy start of engine	Must be provided	Provided	Conforms
22	Depth control mechanism	Must be provided	Provided 5151	Conforms
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	Make, year of manufacturer Country of origin & SFC are not provided.	Does not conform
27	Literature	Operator manual, service manual and parts catalogue should be provided	Not Provided	Does not conform

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power and rated power were observed as 6.53 kW under natural ambient condition against the declared value of 6.3 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 390 g/kWh against the declared value of 330g/kWh.
- 18.1.3 Back up torque of engine was observed as 21.60 % against declared value of 10%.
- 18.1.4 Max. torque was observed as 21 Nm against the declared value of 21 Nm.

AONE, A1D-720D POWER WEEDER

THIS TEST REPORT IS VALID UP TO 30.11.2031

COMMERCIAL (ICT)

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 230 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

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:

- 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-
685/1771*AONE, A1D-720D POWER WEEDER
THIS TEST REPORT IS VALID UP TO 30.11.2031COMMERCIAL
(ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

19. APPLICANT COMMENTS

Sl. No.	Para No.	Comments
1	18.1.1 & 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 be brought out the literature as per IS 8132:1999 (Reaffirmed 2004)