व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT(INITIAL) माह/Month: November, 2024

संख्या/No: Machine-680/1758

THIS TEST REPORT IS VALID UPTO 31.10.2031



VIJAY KRUSHI AVAJARE, VKA-700T 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, गार्लिदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.) Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

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VIJAY KRUSHI AVAJARE, VKA-700T POWER WEEDER

COMMERCIAL (ICT)

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Manufacturer, (apa)

: M/s. Chongqing Fuchai Power Machine, No.8, Jiang Jia Yan Road, East City of Tongliang

District, Chongqing, China.

Applicant

: M/s.Vijay Krush Avajare, H.No 1993, Gat No.721 jay Sangli Naka to Takawade Road Kolhapur, Maharashtra-416121, India.

VIJAY KRUSHI AVAJARE, VKA-700T POWER WEEDER

Report no.: Machine-680/1758

Month: November

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.) IAn ISO 9001:2015 CERTIFIED INSTITUTE

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Page 2 of 31

VIJAY KRUSHI AVAJARE, VKA-700T POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.10.2031

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

October, 2024 to November, 2024

Test Report No.

Machine-680/1758

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 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 "VIJAY KRUSHI AVAJARE, VKA-700T 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	$100 \text{ kPa} = 10 \text{ N/cm}^2$	
	1 mm of Hg	1.3332 m-bar	

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

Page 3 of 31

VIJAY KRUSHI AVAJARE, VKA-700T POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.10.2031

COMMERCIAL (ICT)

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- Salta 20	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	Name & address of the manufacturer, Country of origin, year of manufacture & SFC are not provided.	Does not conform
28	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 and rated power were observed as 4.58 kW under natural ambient condition against the declared value of 4.84 kW and 4.51 kW respectively.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 359 g/kWh against the declared value of 330 g/kWh.
- 18.1.3 Back up torque of engine was observed as 7.85 % against declared value of 10%.
- 18.1.4 Max. torque was observed as 12.83 Nm against the declared value of 14 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power-weeder was observed to the extent of 386 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

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VIJAY KRUSHI AVAJARE, VKA-700T POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.10.2031

COMMERCIAL (ICT)

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) Name & address of the manufacturer
- ii) Country of origin
- iii) Year of manufacturing
- 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

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER	Dumming
Dr. B.M. NANDEDE DIRECTOR	To the state of th

19. APPLICANT COMMENTS

We have gone through all your comments and we will inform our manufacturing facility about your comments and recommendations.

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Page 30 of 31