



VIJAY KRUSHI AVAJARE VKA-170G POWER WEEDER



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि, सहकारिता एवं किसान कल्याण विभाग

Department of Agriculture, Cooperation 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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Tele.: 08551-286441

Machine-424/1328	VIJAY KRUSHI AVAJARE VKA-170G POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer : M/S. Chongqing Fuchai Power Machine Manufactur Co.Ltd., No.8, Jiangjia Yan Road, East City of Tongliang Country, Chongqing, China

Applicant : M/s.Vijay Krushi Avajare, H.No 1993, Takawade Road, Takawade-416 121, Tal. Shirol, Dist. Kolhapur, Maharashtra, INDIA

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Report No. : **Machine-424/1328**

Month: **April**

Year: **2022**



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17. COMMENTS & RECOMMENDATIONS





17.1 Engine Performance:

- 17.1.1 The maximum power and rated power were observed as 3.4 kW and 2.4 kW respectively under natural ambient condition against the declared value of 3.8 kW. This should be looked into for corrective action.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 391 g/kWh against the declared value of 330 g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 10.27 Nm against the declared value of 14Nm. This should be looked into for corrective action.
- 17.1.4 Back up torque of engine was observed as 2.70 %, against the declared value of 10%. This should be looked into for corrective action.
- 17.2 Max. Noise at operator's ear level was observed as 98 dB (A), which is on higher side. This may looked into for corrective action.
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 309 microns, which is on higher side, therefore corrective action to read the vibration should be taken.
- 17.4 The hardness of rotary blades do not conform to the requirement of IS 6690:1981 (Reaffirmed 2017). This should be looked into for corrective action.
- 17.5 Chemical composition of rotary blade is not as per the requirement of IS 6690:1981 (Reaffirmed 2017). This should be looked into for corrective action.
- 17.6 The percentage of oil pull over during air cleaner oil pull over test power weeder was observed as from Nil to 0.90%. this should be looked into for corrective action
- 17.7 The provided labeling plate should be as per the requirement of the IS.

Machine-
424/1368VIJAY KRUSHI AVAJARE VKA-170G
POWER WEEDERCOMMERCIAL
(ICT)**17.8 Technical literature:**

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

TESTING AUTHORITY:

B. N. DIXIT AGRICULTURAL ENGINEER		
P. C. MESHARAM SENIOR AGRICULTURAL ENGINEER		
Dr. P. P. RAO DIRECTOR		

18. APPLICANTS COMMENTS

Para No.	Our Ref. No.	Applicants comments
18.1	17.1.1	We will take corrective action in our future products
18.2	17.1.2	We will take corrective action in our future products
18.3	17.1.4	The comments is noted we will take necessary action in future products
18.4	17.2	We will inform our principle manufacturer to reduce noise level
18.5	17.3	We will inform our principle manufacturer to reduce mechanical vibration
18.6	17.4	The blades material will be improved and supplied during our next products supply
18.7	17.5	The blades material will be improved and supplied during our next products supply
18.8	17.6	We will look in to it and will take corrective action against this
18.9	17.7	The plate will be provided as per your recommendation
18.10	17.8	We have noted your comment, will develop the manual as per your recommendation