



AUToFARM PWZ55G 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 and Farmers Welfare

दक्षिणी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

Southern Region Farm Machinery Training and Testing Institute

ट्रेक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आ. प्र.)

Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

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Tele. 08551-286441

Machine-436/1394	AUTOFARM PWZ55G POWER WEEDER	COMMERCIAL (ICT)
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Name and Address of Assembler : M/S. Autofarm Agri India Pvt Ltd,
"Kaanchan" #9, North Huzur Road,
Coimbatore-641018, India

Name and Address of Applicant : M/S. Autofarm Agri India Pvt Ltd,
"Kaanchan" #9, North Huzur Road,
Coimbatore-641018, India

AUTOFARM PWZ55G POWER WEEDER

Report No. : **Machine-436/1394**

Month: **July**

Year: **2022**



सत्यमेव जयते

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17. COMMENTS & RECOMMENDATIONS

17.1 Engine Performance:



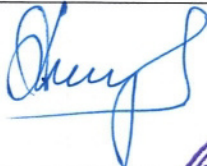
- 17.1.1 The maximum power and rated power were observed as 3.6 kW under natural ambient condition against the declared value of 4.1& 3.7 kW. respectively
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 474 g/kWh against the declared value of 440 g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 10.97 Nm against the declared value of 12.4 Nm.
- 17.1.4 Back up torque of engine was observed as 11.94 %, against the declared value of 12%.
- 17.2 Max. Noise at operator's ear level was observed as 91 dB (A),
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 412 microns, which is on higher side therefore corrective action to reduce 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 provided labeling plate should be as per the requirement of the IS.

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17.7 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 in booklet form.

TESTING AUTHORITY:

B.N.DIXIT AGRICULTURAL ENGINEER	
P. KAMALABAI SENIOR AGRICULTURAL ENGINEER	
K.K. NAGLE DIRECTOR	



13. Applicants Comments

Para No.	Our Ref. No.	Applicants comments
13.1	17.1.1,17.1.2,17.1.3 & 17.1.4	We will take-up the observed engine performance issues with the engine supplier, analyze the cause for the same to arrive at the required countermeasures
13.2	17.2 & 17.3	For the high noise (dB) level and high amplitude of vibration at stated machine locations will be analyzed and effective countermeasures will be taken.
13.3	17.4 & 17.5	The lower hardness and chemical composition with regard to the lower carbon (% of wt) non-conformance of rotary blades, we will implement required countermeasures to ensure hardness and chemical composition as per IS 6690:1981 (Reaffirmed 2017).
13.4	17.6	We will update and ensure that the labeling plate shall be as per the requirement of the IS.
13.5	17.7	The product literature, the operator manual , parts catalogue and service manual will be revised and brought out in Hindi & other regional languages as per IS 8132 : 1999 (Reaffirmed 2019)