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

संख्या/No: Machine-426/1264 माह/Month: March, 2021 Validity: 28.02.2026



FARMWORLD FWMT 210P 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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Year: 2021

Manufacturer	•	M/s. Chongqing Genkins power ltd., No-6, Gangcheng East loop road, Jiangbei district, Chongqing, China
Applicant	:	M/s. Farmworld Agrotech pvt. Ltd, SF 08, Shreemad Bhavan, Opp. Kanta Stree Vikas Gruh, Dhebar Road, Rajkot-360002, Gujarat, India

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Government of India Ministry of Agriculture and Farmers Welfare Department of Agriculture, Cooperation 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]

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



17. COMMENTS & RECOMMENDATIONS

17.1 Engine performance:

- 17.1.1 The maximum power and rated power were observed as 3.8 kW under natural ambient condition against the declared value of 4.4 kW. This should be looked into for corrective action.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 440 g/kWh against the declared value of 380 g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 10.0 Nm against the declared value of 11.0 Nm.
- 17.1.4 Back up torque of engine was observed as Nil against the declared value of 4.0 %. This should be looked into for corrective action.
- 17.1.5 During varying speed test of engine at both natural & high ambient conditions after attaining max. torque at 10.0 Nm & 9.1 Nm respectively, while further loading, black smoke and sudden drop of engine rpm was observed. The Governor hunting was also observed after rated engine speed.
- 17.2 Max. Noise at operator's ear level was observed as 88 DB (A).
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power weeder exceeds the limit of 100 micron. Therefore necessary action to reduce vibration should be taken.
- 17.4 The hardness of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).
- 17.5 Chemical composition of the rotary blade conforms to the requirement of IS 6690:1981 (Reaffirmed-2012).
- 17.6 The provided labeling plate should be as per the requirement IS.

17.7 Technical literature:

Operator's & service manual, multifunctional manual and spare parts catalogue are required to provide in separate booklet with adequate related information in separate booklet. It is however, recommended that same may be revised and brought out in Hindi & other regional languages also as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY:

B.N. DIXIT AGRICULTURAL ENGINEER	BT:-
P.C. MESHRAM SENIOR AGRICUTRAL ENGINEER	fet -
Dr. P.P. RAO DIRECTOR	PPRac

18. APPLICANT 'S COMMENTS

Para No	Our reference	Applicant's Comments
18.1	17.1.1	We will work on comments for better performance of engine, in support with our R &D and Production team. We will make all possible necessary changes our product future.
18.2	17.1.2	We will work on comments for better result of fuel consumption, In Support with our R &D and Production team. We will make all possible necessary changes our product future.
18.3	17.1.4	We will work on comments for better result of back up torque of engine, In support with our R &D and Production team. We will make all possible necessary changes in our product in future.
18.4	17.1.5	We will work on comments for better results in with support with R&D and Production team. We will make all possible necessary changes in our product in future.
18.5	17.2	In future we will give positive efforts to decrease further and maintain standards which are specified by ILO. We will make all possible necessary changes our product in future.

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