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

संख्या /No: Machine-417/1249 माह:/Month: January, 2021 Validity: 31.12.2025



FEDE MILYF 6 DE 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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Page 1 of 31

Manufacturer	:	M/s. Chongqing Guanteng Machinery Co. Ltd., Dazu High Tech Zone, Chongqing, China.
Applicant	:	M/s. Fede Industries Private Limited, 2 nd Floor, Room No. 2/92, Prangan Market, Bimal Sinha Road, Berhampore, Murshidabad - 742 101, West Bengal, 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 4.3 kW under natural ambient condition against the declared value of 4.4 kW & 4.1 kW respectively.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 287 g/kWh against the declared value of 165 g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 13.30 Nm against the declared value of 14.0 Nm.
- 17.1.4 Back up torque of engine was observed as 1.76 %, against the declared value of 15 %. 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 13.30 Nm & 11.90 Nm respectively, while further loading, sudden drop of engine speed and thick black smoke was noticed.
- **17.2** Max. Noise at operator's ear level was observed as 95 dB (A), which is higher side. Therefore, this should be 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 460 microns, which is higher side. Therefore necessary action to dampen the vibration should be taken in to account.
- **17.4** The hardness of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).
- 17.5 The chemical composition of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).
- **17.6** The provided labeling plate should be as per the requirement IS.

Machine-	
417/1249	

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17.7 Technical literature:

Operation and maintenance manual & parts catalogue of Power Weeder & operation manual and parts catalogue of engine in separate booklets in English were supplied with the 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 2004) for the sake of user & technical personnel.

TESTING AUTHORITY:

B.N. DIXIT AGRICULTURAL ENGINEER	* At-
P.C. MESHRAM SENIOR AGRICULTURAL ENGINEER	-
Dr. P.P. RAO DIRECTOR	PPRno

18. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
18.1	17.1.2	With consultation with our principal company we will try to reduce the fuel consumption nearby declared value.
18.2	17.1.4	We are contacting the engine and machine manufacturer to look into this deviation and to take immediate corrective action on this parameter.
18.3	17.1.5	That may be happened for opening of governor at full load fuel cut off point. But we are informing our principal to check the same at their end and do the need full for necessary correction
18.4	17.2	We will use more developed silencer muffler to restrict the noise to avoid harm to the user.
18.5	17.3	We will use more padding on the fastener joints to reduce the vibration for driver comfort, more over very soon we will provide thick rubber padding on the contact joints.
18.6	17.6	We are assuring the labels will be as per Indian Standard very soon.
18.7	17.7	We will do the same immediately as per your advice.

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