व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT (INITIAL) संख्या/No: Machine-350/1166 माह/Month: June, 2020 Validity: 31.05.2025



GAJARAJ G-PW-7P 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]

Website: http://srfmtti.dacnet.nic.in/E-mail: fmti-sr@nic.inTele./FAX: 08551-286441

Page 1 of 31

Machine- 350/1166	GAJARAJ G-PW	-7P POWER WEEDER	COMMERCIAL (ICT)
Manufacturer		: M/s. Chongqing Amm Machinery Manufacturing Co. Ltd., No. 188, Tomng Shan Qiao Industrial Zone, XI Yong Town, Sha Ping Ba District, Chongqing, China.	
Applicar	ıt	: M/s. Ganesh Trading Company, 421, Shastri Nagar, Opp. Sagra Church, Lametha Road, Jabalpur-482 001, Madhya Pradesh, 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]

Telephone: 08551-286441 Website: <u>http://srfmtti.dacnet.nic.in/</u> Fax: 08551-286441 E-mail: fmti-sr@nic.in

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17. COMMENTS & RECOMMENDATIONS

17.1 Engine performance:

- 17.1.1 The maximum power and rated power were observed as 3.1 & 2.1 kW under natural ambient condition against the declared value of 5.1 kW respectively.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 324 g/kWh against the declared value of 275 g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 10.5 Nm against the declared value of 18.0 Nm. This should be looked into for corrective action.
- 17.1.4 Back up torque of engine was observed as 1.94 % against the declared value of 10 %. 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 10.5 Nm & 9.8 Nm respectively, while further loading, sudden drop of engine rpm was observed.
- 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 680 microns, Which is directly concerned with Operator's Health, Safety and Comfort. Besides, it also adversely affect the useful life of the components. In view of the above, this should be taken care for corrective action.
- **17.4** The hardness of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).
- **17.5** Chemical composition of rotary blades conforms to the requirement of IS 6690:1981.

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17.6 The provided labeling plate should be as per the requirement IS.

17.7 Technical literature:

Owner's manual and parts catalogue of power weeder and in separate booklets were supplied with the test sample for reference during the test. It is however, recommended that same may be revised and bought 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	BE
Dr. P.P. RAO DIRECTOR	P-P. Rap

18.APPLCIANT'S COMMENTS

"We will inform all your recommendations to our manufacturer to make all possible and necessary changes for our future products".

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