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

संख्या / No: Machine-314/1086 Month: October, 2019 Validity: 30.09.2024



KRISHI CRAFT KC-PWP- 7 HP 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/

Machine- 314/1086

KRISHI CRAFT KC-PWP- 7 HP 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

Applicant : M/s. Kishan Agrotech,

Lukhy Garage, Dhamdha Road, Durg - 491 001, Chhattisgarh, India.

E-mail: fmti-sr@nic.in

Tele./FAX: 08551-286441

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17. COMMENTS & RECOMMENDATIONS

17.1 Engine Performance:

- 17.1.1 The maximum power and rated power were observed as 4.9 kW & 2.2 kW under natural ambient condition against the declared value of 4.0 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 233 g/kWh against the declared value of 275 g/kWh.
- 17.1.3 Max. Torque was observed as 17.7 Nm against the declared value of 18 Nm.
- 17.1.4 Back up torque of engine was observed as 2.72 %, 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 17.74 Nm & 16.80 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 90 dB (A).
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed to the maximum extent of 315 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 does not conform to the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.
- 17.5 Carbon and manganese content of chemical composition of rotary blades are not conforming to the requirement of IS 6690:1981 (reaffirmed 2012). This should be looked into for corrective action.
- 17.6 Labeling plate provided should be as per the requirement of IS.

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COMMERCIAL (ICT)

17.7 Technical literature:

The Operation, maintenance manual & parts catalogue of power weeder and engine 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 61-

Dr. P.P. RAO DIRECTOR P-1. Rao

18. APPLICANT'S COMMENTS

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