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

संख्या / No: Machine-374/1200 Month: September, 2020 Validity: 31.08.2025



## KISANKRAFT KK-IC-406D 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: अनंतप्र (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.in Tele./FAX: 08551-286441

Machine-374/1200

## KISANKRAFT KK-IC-406D POWER WEEDER

COMMERCIAL (ICT)

Manufacturer : M/s. Weima Agricultural Machinery Co. Ltd.,

B, Luohuang Industry Zone, Jiangjin District,

Chongqing, China

Applicant : M/s. KisanKraft Ltd.,

Sri Huchhanna Tower, # 4, 1<sup>st</sup> Main, 7-A Cross, Maruthi Layout, Dasarahalli,

HAF Post, Hebbal, Bengaluru - 560 024,

Karnataka, India.

## KISAN KRAFT KK-IC-406D POWER WEEDER

Report No.: Machine-374/1200 Month: September Year: 2019



#### **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: <a href="http://srfmtti.dacnet.nic.in/">http://srfmtti.dacnet.nic.in/</a>

E-mail: <a href="mailto:fmti-sr@nic.in">fmti-sr@nic.in</a>

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

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# KISANKRAFT KK-IC-406D POWER WEEDER

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#### 17. COMMENTS & RECOMMENDATIONS

# 17.1 Engine Performance:

- 17.1.1 The maximum power and rated power were observed as 5.5 & 1.6 kW respectively under natural ambient condition against the declared value of 6.2 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 432 g/kWh against the declared value of 350 g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 15.23 Nm against the declared value of 18.0 Nm.
- 17.1.4 Back up torque of engine was observed as 1.53 %, 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 15.23 Nm & 14.30 Nm respectively, while further loading, sudden drop of engine speed and thick black smoke was noticed.
- Max. Noise at operator's ear level was observed as 96 dB (A), against the max. limit of ILO of 90 dB (A). 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 to the maximum extent of 417 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 The chemical analysis 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 of IS.

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# KISANKRAFT KK-IC-406D POWER WEEDER

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## 17.7 Technical literature:

User manual cum parts catalogue of power weeder and in a single booklet was 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<br>AGRICULTURAL ENGINEER |           |
|-------------------------------------|-----------|
| Dr. P.P. RAO<br>DIRECTOR            | P.P. Rose |

### 18. APPLICANT'S COMMENTS

| Para<br>No. | Our<br>reference | Applicant's comments   |
|-------------|------------------|--|
| 18.1        | 17.1.1           | The suggestions are noted and we will talk with our principle manufacturer   |
| 18.2        | 17.1.2           | We will take necessary changes in future products  |
| 18.3        | 17.1.4           | The suggestions are noted and we will talk with our principle manufacturer   |
| 18.4        | 17.1.5           | The suggestions are noted and we will talk with our principle manufacturer and will ask them to change in future product |
| 18.5        | 17.2             | We will take necessary changes in future products and will take corrective action  |
| 18.6        | 17.3             | The suggestions are noted and we will talk with our principle manufacturer   |
| 18.7        | 17.6             | We will provide in our future product  |
| 18.8        | 17.7             | We will provide as per IS standard   |