व्यावसायिकपरीक्षणरिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT(INITIAL)

संख्या/No:Machine-571/1624

माह/Month: May,2024

THIS TEST REPORT IS VALID UPTO 30.04.2031



X1-POWER, X1-1050POWER WEEDER



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि एवं किसान कल्याण विभाग

Department of Agriculture 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.)

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Machine-571/1624

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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Hangzhou Joins Imp. & Exp. Co., Ltd., ur

Room 809, Binxing Road, Changhe Street, or IN

Binjiang District, Hangzhou-3100052, Zhejinag

Province, China.

Applicant

: M/s. BUSHRA IMPEX, First Floor, Old No 98, New No11, 4th Cross, Kalasipalayam, New Extension, Bangalore Urban, Karnataka-560002, India.

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

Page 2 of 33

Machine-571/1624

X1-POWER, X1-1050 POWER WEEDER

THIS TEST REPORT IS VALID UP TO 30.04.2031

COMMERCIAL (ICT)

Type of test

COMMERCIAL (ICT)

Period of test

12.03.2024 to 03.05.2024

Test Report No.

Machine-571/1624

Month / Year of release :

May, 2024

- i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.
- i) The data given in this report pertain to the particular machine randomly selected by testing authority.
- ii) The results presented in this report do not, in anyway, attribute to the durability of the machine.
- iii) This Test Report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training & Testing Institute, Garladinne, Anantapur (A.P.).
- iv) This is a report on Commercial Test of Power Weeder named "X1-POWER, X1-1050 POWER WEEDER". This report is valid up to 30.04.2031, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

SELECTED CONVERSIONS

| S. No. | Units | Conversion Factor |
|--------|-----------------------|---------------------------------------|
| 1 | Force | |
| | 1 kgf | 9.80665 N |
| | | 2.20462 lbf |
| 2 | Power | |
| | 1 hp | 1.01387 metric hp (Ps) |
| | | 745.7 W |
| | 1 Ps | 735.5 W |
| | 1 kW | 1.35962 Ps |
| 3 | Pressure | |
| | 1 psi | 6.895 kPa |
| | 1 kgf/cm ² | 98.067 kPa = 735.56 |
| | | mm of Hg |
| | 1 bar | $100 \text{ kPa} = 10 \text{ N/cm}^2$ |
| | 1 mm of Hg | 1.3332 m-bar |

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

Page 3 of 33

Machine- X1-POWER, X1-1050 POWER WEEDER CO 571/1624 THIS TEST REPORT IS VALID UP TO 30.04.2031

COMMERCIAL (ICT)

18, COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 4.05 kW under natural ambient condition against the declared value of 4.2 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 453 g/kWh against the declared value of 290g/kWh.
- 18.1.3 Back up torque of engine was observed as 7.21% against declared value of 10 %.
- 18.1.4 Max. torque was observed as 13.82 Nm against the declared value of 19.0 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 664 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

- 18.3 The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, inter alia, the following must be provided:
 - i) Address of manufacturer
 - ii) Address of applicant
 - iii) Engine serial no.
 - iv) Country of origin
 - v) Make
 - vi) Rated RPM
 - vii) Engine hp
 - viii) Specific fuel consumption (g/kWh)

18.4 Technical literature:

Owner's manual, service manual and parts catalogue provided in booklet form in English for reference during the test. It is recommended that same must be revised in and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel in booklet form.

Machine-571/1624 X1-POWER, X1-1050 POWER WEEDER

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COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

(During)

19. APPLICANTS COMMENTS

-Nil-