व्यावसायिकपरीक्षणरिपोर्ट (प्रारंभिक)

संख्या/No: Machine-565/1616

COMMERCIAL TEST REPORT (INITIAL)

माह/Month: May, 2024

THIS TEST REPORT IS VALID UPTO 30.04.2031



X1- POWER, X1-750P POWER WEEDER



भारत सरकार

Government of India

कृषिएवं किसान कल्याण मंत्रालय Ministry of Agriculture and Farmers Welfare

कृषिएवं 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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COMMERCIAL (ICT)

Manufacturer, (apa)

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

Room 809, Binxing Road, Changhe Street,

District Binjiang, Hangzhou – 310052,

Zhejiang Province, China.

Applicant

: M/s. Bushra Impex,

First Floor, Old no. 98, New no. 11, 4th Cross, Kalasipalayam, New Extension, Bangalore Urban, Karnataka-560002, **India**.

X1- POWER, X1-750P POWER WEEDER

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Ministry of Agriculture and Farmers Welfare
Department of Agriculture and Farmers Welfare
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X1- POWER, X1- 750P POWER WEEDER

THIS TEST REPORT IS VALID UP TO 30.04.2031

:

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (INITIAL)

Period of test

March, 2024 to April, 2024

Test Report No.

Machine-565/1616

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.

- ii) The data given in this report pertain to the particular machine randomly selected by testing authority.
- iii) The results presented in this report do not, in anyway, attribute to the durability of the machine.
- iv) 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.).
- v) This is a report on Commercial Test of Power Weeder named "X1-POWER, X1-750P 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

X1- POWER, X1- 750P POWER WEEDER

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COMMERCIAL (ICT)

** 18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 4.78 kW under natural ambient condition against the declared value of 4.8 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 359 g/kWh against the declared value of 380 g/kWh.
- 18.1.3 Back up torque of engine was observed as 3.10 % against declared value of 10 %.
- 18.1.4 Max. torque was observed as 15.64 Nm against the declared value of 17 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 578 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) The machine having name and address of manufacturer & applicant
 - ii) Country of origin
 - iii) Engine no.
 - iv) Engine Hp
 - v) Rated rpm
 - vi) Specific fuel consumption (g/kWh)

18.4 Technical literature:

User's manual is provided during the test. However, the same **MUST** be brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the guidance of users.

The following literature should be provided.

- i) Service manual
- ii) Parts catalogue

X1- POWER, X1- 750P POWER WEEDER

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COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

Arrimm

19. APPLICANTS COMMENTS
-Nil-