

THIS TEST REPORT IS VALID UPTO 30.04.2031



X1-POWER, X1-630BRUSH CUTTER



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.)

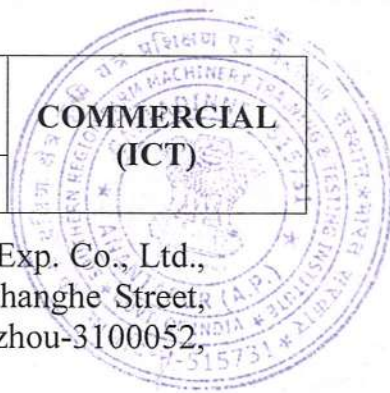
[An ISO 9001:2015 CERTIFIED INSTITUTE]

Website: <http://srfmmti.dacnet.nic.in/>

E-mail: fmti-sr@nic.in

Tele.: 08551-286441

Machine- 567/1618	X1-POWER, X1-630 BRUSH CUTTER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s Hangzhou Joins Imp. & Exp. Co., Ltd.,
Room 809, Binxing Road, Changhe Street,
Binjiang District, Hangzhou-3100052,
Zhejinag Province, **China.**

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

X1-POWER, X1-630 BRUSH CUTTER

Report No.: **Machine-567/1618**

Month: **May**

Year: **2024**



सत्यमेव जयते

Government of India
Ministry of Agriculture and Farmers Welfare
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Southern Region Farm Machinery Training and Testing Institute
Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)
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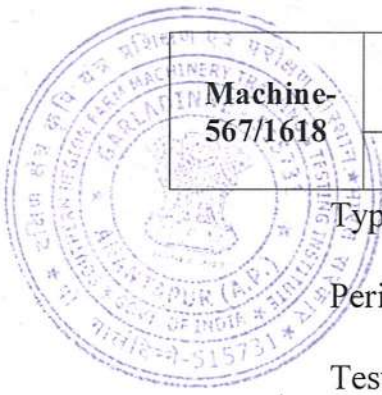
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**SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE,
ANANTAPUR, (A.P.)**

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Machine-
567/1618

X1-POWER, X1-630 BRUSH CUTTER
THIS REPORT IS VALID UPTO 30.04.2031

**COMMERCIAL
(ICT)**

Type of test : COMMERCIAL (ICT)
Period of test : March, 2024 to April, 2024
Test Report No. : **Machine-567/1618**
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 any way, 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 Brush Cutter named "**X1-POWER, X1-630 BRUSH CUTTER**". 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 kPa = 10 N/cm ²
	1 mm of Hg	1.3332 m-bar

Machine-
567/1618

X1-POWER, X1-630 BRUSH CUTTER
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**COMMERCIAL
(ICT)**

Main bearings:

Bearing No.	Type of bearings	Diametrical clearance, (mm)	Crankshaft end float, (mm)	Max. permissible clearance limit,(mm)	
				Diametrical clearance	Crankshaft end float
1.	Ball bearing	NA	NA	NA	--
2.	Ball bearing	NA		NA	--

Big end bearings:

Bearing No.	Clearance, (mm)		Max. permissible clearance limit,(mm)	
	Diametrical	Axial	Diametrical	Axial
1.	Needle bearing	1.95	NA	0.70

Remarks: Measurement of big end bearing clearance was not possible, as the piston along with connecting rod was not detachable.

15.2 Clutch:

No noticeable defects observed.

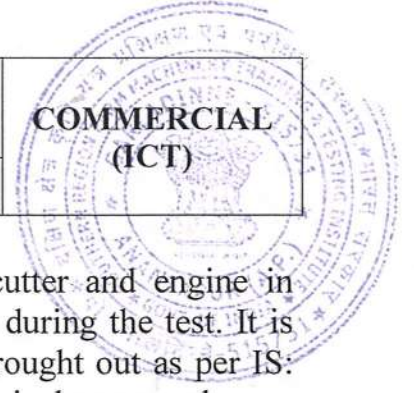
15.3 Transmission gears:

All the gears of the transmission system were found in normal condition.

16. COMMENTS & RECOMMENDATIONS

- 16.1 The maximum power was observed as 1.20 kW under natural ambient condition against the declared value of 1.20kW.
- 16.2 The safety provisions, as mentioned at para 5.14, have been provided by the applicant for safety aspect of operator's.
- 16.3 The equivalent mechanical vibration on engine cover was observed to the extent of 305 micron. This should be looked into for dampening the vibration.
- 16.4 A fuel on/off knob may be considered for providing in the fuel system of engine.
- 16.5 The chemical composition of straight blade (2 teeth blade) is not as per requirement of the relevant code IS 6025:1982 (Reaffirmed 1999) & therefore it should be looked into for the corrective action.
- 16.6 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) Serial no.
 - ii) Engine no.
 - iii) Rated RPM
 - iv) Country of origin
 - v) Specific fuel consumption (g/kWh)

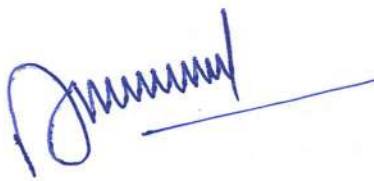

Machine- 567/1618	X1-POWER, X1-630 BRUSH CUTTER	COMMERCIAL (ICT)
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16.7 Adequacy of literature supplied with the machine:

The Operator's manual cum parts catalogue of brush cutter and engine in English was supplied with the brush cutter for reference during the test. It is however, recommended that same may be revised and brought out as per IS: 8132- 1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY

<p>Er. PRAMOD YADAV AGRICULTURAL ENGINEER</p>	
<p>Dr. B.M. NANDEDE DIRECTOR</p>	

17. APPLICANTS COMMENTS

-Nil-