

THIS TEST REPORT IS VALID UP TO 31.12.2031



BALAJI, BC-2S BRUSH 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://srfmtti.dacnet.nic.in/>

E-mail: fmti-sr@nic.in

Machine- 700/1797	BALAJI, BC-2S BRUSH CUTTER THIS REPORT IS VALID UP TO 31.12.2031	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. Balaji Trailor Works Gangavathi Road,
Sindhanur, Raichur Dist, Karnataka-584128.

BALAJI, BC-2S BRUSH CUTTER

Report No.: Machine-700/1797

Month: **January**

Year: **2025**



सत्यमेव जयते

Government of India
Ministry of Agriculture and Farmers Welfare
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Website: <http://srfmtti.dacnet.nic.in/>

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Type of test : COMMERCIAL (ICT)

Period of test : December, 2024

Test Report No. : Machine-700/1797

Month / Year of release : January, 2025

- 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 through virtual mode.
- 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 "**BALAJI, BC-2S BRUSH CUTTER**". This report is valid up to 31.12.2031, 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- 700/1797	BALAJI, BC-2S BRUSH CUTTER	COMMERCIAL (ICT)
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17. COMMENTS & RECOMMENDATIONS

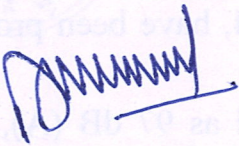
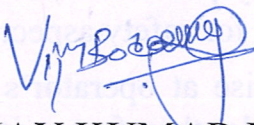
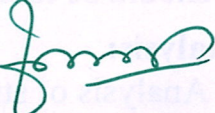
- 17.1 The maximum power was observed as 1.13 kW under natural ambient condition against the declared value of 1.2 kW.
- 17.2 The safety provisions, as mentioned at **Para 5.14**, have been provided by the applicant for safety aspect of operators.
- 17.3 Max. Noise at operator's ear level was observed as 97 dB (A), which is on higher side, therefore suitable corrective action should be taken to reduce the noise level.
- 17.4 The equivalent mechanical vibration on engine cover was observed to the extent of 198 micron. This should be looked into for dampening the vibration.
- 17.5 **Hardness & Chemical Analysis:**
The Hardness & Chemical Analysis of straight blade are not as per requirement of the relevant code IS 6690:1981 (Reaffirmed 2012) & therefore it should be looked into for the corrective action.
- 17.6 A fuel on/off knob may be considered for providing in the fuel system of engine.
- 17.7 **Marking /labeling:**
The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, interlaid, the following must be provided:
- Address of manufacturer & applicant
 - Country of origin
 - Year of manufacturer
 - Engine number
 - Specific fuel consumption (g/kWh)
- 17.8 **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.

18. Applicant's Comments

Reference	Our Comments
1	There is no changes request from our end and proceed with existing draft for final report.

Machine- 700/1797	BALAJI, BC-2S BRUSH CUTTER	COMMERCIAL (ICT)
	THIS REPORT IS VALID UP TO 31.12.2031	

TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER
 Dr. B.M. NANDEDE DIRECTOR	



ANNEXURE-I

FIELD PERFORMANCE RESULTS

Attachments used : Nylon rope
Place of test : Institute
Usage : For cutting of weeds & grass

		Test No. I	Test No. II
1	Date of test	03.12.2024	04.12.2024
2	Net test duration, (h)	6.50	6.50
3	Intensity of grass	Dense	
4	Av. height of grass, (cm)	7.4	9.9
5	Av. no. of grass per m ²	205	213
6	Av. mass of grass per m ² , (kg)	0.68	0.73
7	Area harvested, (ha/h)	0.042	0.047
8	Av. time required for one ha, (h)	23.72	21.93
9	Av. mass of grass harvested, (kg/h)	67.3	72.7
10	Av. fuel consumption:		
	- l/h	0.90	0.85
	- l/ha	21.35	18.64