

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

संख्या/No: H&TH/SRFMTTI,  
ANANTAPUR/ 2025-26/02/02/1852  
माह/Month: April, 2025

**THIS TEST REPORT IS VALID UP TO 31.03.2032**



**JAWAN, JW-BC430, 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]**

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H&TH/SRFMTTI, ANANTAPUR/2025-26/ 02/02/1852	JAWAN, JW- BC430, BRUSH CUTTER THIS REPORT IS VALID UP TO 31.03.2032	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Feal International Company Limited  
No. 170 huaxia road, greatwall industry zone,  
yongkang, zhejiang, **China.**

Name of Applicant : M/s. Ganapathy Agro Industries  
71, Kattabomman Street, Ganapathy, Coimbatore,  
Tamil Nadu-641006

### JAWAN, JW-BC430, BRUSH CUTTER

Report No.: H&TH/SRFMTTI, ANANTAPUR/2025-26/02/02/1852

Month: April

Year: 2025

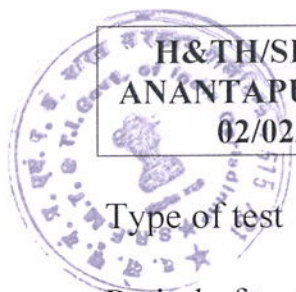


सत्यमेव जयते

**Government of India**  
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	THIS REPORT IS VALID UP TO 31.03.2032	

Type of test : COMMERCIAL (ICT)

Period of test : February, 2025 to March, 2025


Test Report No. : H&TH/SRFMTTI, ANANTAPUR/2025-26/02/02/1852

Month / Year of release : April, 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 "JAWAN, JW-BC430, BRUSH CUTTER". This report is valid up to 31.03.2032, 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 <sup>2</sup>	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm <sup>2</sup>
	1 mm of Hg	1.3332 m-bar


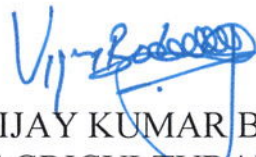
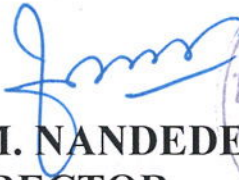
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## 17. COMMENTS & RECOMMENDATIONS

- 17.1** The maximum power was observed as 1.52 kW under natural ambient condition against the declared value of 1.6 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** A fuel on/off knob may be considered for providing in the fuel system of engine.
- 17.4 Noise measurement:**  
Max. Noise at operator's ear level was observed as 101 dB (A), which is on higher side, therefore suitable corrective action should be taken to reduce the noise level.
- 17.5 Mechanical vibration:**  
The equivalent mechanical vibration on engine cover was observed to the extent of 128 micron. This should be looked into for dampening the vibration.
- 17.6 Hardness and chemical analysis:**  
The hardness and chemical analysis of Straight blade (2 teeth) and Circular disc are not as per requirement of the relevant code IS 6025:1982 (Reaffirmed 1999) & therefore it should be looked into for the corrective action.
- 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
  - Engine number
  - Specific fuel consumption, (g/kWh)
- 17.8 Adequacy of literature supplied with the machine:**  
User's manual is not 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.
- Service manual
  - Parts catalogue

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### TESTING AUTHORITY

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

### 18. APPLICANT'S COMMENTS

We consider your comments & recommendations seriously & inform our management & manufacturing department to immediately take necessary corrective actions to rectify the issues according to your comments & recommendations.

### ANNEXURE-I

### FIELD PERFORMANCE RESULTS

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

Sl. No.	Parameters	Test No. I	Test No. II
1	Date of test	05.02.2025	06.02.2025
2	Net test duration, (h)	6.00	3.50
3	Intensity of grass	Dense	
4	Av. height of grass, (cm)	63.0	41.6
5	Av. no. of grass per m <sup>2</sup>	303	231
6	Av. mass of grass per m <sup>2</sup> , (kg)	0.329	0.251
7	Area harvested, (ha/h)	0.062	0.065
8	Av. time required for one ha, (h)	16.13	15.38
9	Av. mass of grass harvested, (kg/h)	34.98	27.41
10	Av. fuel consumption:		
	- l/h	0.75	0.78
	- l/ha	12.10	12.0