

**THIS TEST REPORT IS VALID UP TO 31.05.2031**



**AGRICARE, AC-BC-35 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/>

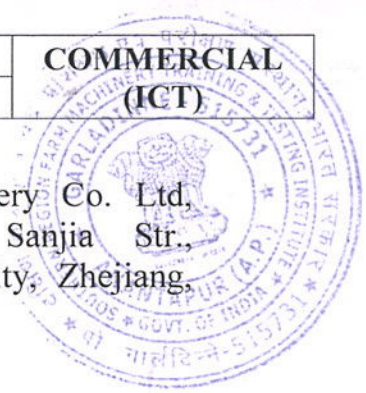
E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)

Tele.: 08551-286441

Machine- 590/1647	AGRICARE, AC-BC-35 BRUSH CUTTER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Taizhou Qinli Machinery Co. Ltd,  
Yanhai Industrial Zone, Sanjia Str.,  
Jiaojiang district, Taizhou city, Zhejiang,  
China.

Name of Applicant : M/s. Sri Sai Agri Tech,  
6-1-3949 Shivam Complex Gangavathi  
Road, Sindhanur (Tq), Raichur (dt),  
Karnataka-584128.



**AGRICARE, AC-BC-35 BRUSH CUTTER**

Report No.: Machine-590/1647

Month: June

Year: 2024



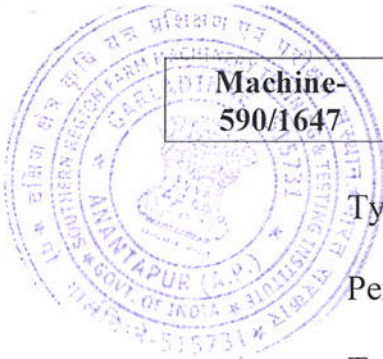
सत्यमेव जयते

**Government of India**  
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Machine- 590/1647	AGRICARE, AC-BC-35 BRUSH CUTTER	COMMERCIAL (ICT)
	THIS REPORT IS VALID UP TO 31.05.2031	

Type of test : COMMERCIAL (ICT)  
 Period of test : 29.04.2024 to 05.06.2024  
 Test Report No. : **Machine-590/1647**  
 Month / Year of release : June, 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 “**AGRICARE, AC-BC-35 BRUSH CUTTER**”. This report is valid up to 31.05.2031, 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	<b>Force</b>	
	1 kgf	9.80665 N 2.20462 lbf
2	<b>Power</b>	
	1 hp	1.01387 metric hp (Ps) 745.7 W
	1 Ps	735.5 W
	1 Kw	1.35962 Ps
3	<b>Pressure</b>	
	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

Machine- 590/1647	AGRICARE, AC-BC-35 BRUSH CUTTER	COMMERCIAL (ICT)
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**Valve, guides and timing gears:**

Any marked sign of overheating of valves

Pitting of seat/faces of valves

Any visual damage to the teeth of timing gears & belt

Clearance between valve guide and valve stem, (mm):

- Intake valve

- Exhaust valve

**Observation**

: None

: None

: None

: 0.10

: 0.15

**15.2 Clutch:**

No noticeable defects found

**15.3 Transmission system:**

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

**16. COMMENTS & RECOMMENDATIONS**

16.1 The maximum power was observed as 0.85 kW under natural ambient condition against the declared value of 0.90 kW.

16.2 The safety provisions, as mentioned at para 5.14, have been provided by the applicant for safety aspect of operators.

16.3 Max. Noise at operator's ear level was observed as 99 dB(A), which is on higher side, therefore suitable corrective action should be taken to reduce the noise level.

16.4 The equivalent mechanical vibration on engine cover was observed to the extent of 143 micron. This should be looked into for dampening the vibration.

16.5 A fuel on/off knob may be considered for providing in the fuel system of engine.





16.6 The chemical composition of circular disc 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.

**16.7 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.

Machine- 590/1647	AGRICARE, AC-BC-35 BRUSH CUTTER	COMMERCIAL (ICT)
	THIS REPORT IS VALID UP TO 31.05.2031	

**TESTING AUTHORITY**

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. P. KAMALABAI SENIOR AGRICULTURAL ENGINEER
 Dr. B.M. NANDEDE DIRECTOR	

**17. APPLICANT COMMENTS**

-Nil-

**ANNEXURE-I**

**FIELD PERFORMANCE RESULTS**

Attachments used : Nylon rope  
Place of test : Institute farm, SRFMT&TI, Anantapur  
Usage : For cutting the lawn grass

Sl. No.	Parameters	No. of tests		
		I	II	III
1	Date of test	30.04.24	01.05.24	02.05.24
2	Net test duration, (h)	4.00	6.00	6.00
3	Intensity of grass	Dense		
4	Av. height of grass, (cm)	0.66	0.69	0.68
5	Av. no. of grass per m <sup>2</sup>	388.3	416.6	410.0
6	Av. mass of grass per m <sup>2</sup> , (kg)	0.378	0.44	0.401
7	Area harvested, (ha/h)	0.108	0.083	0.096
8	Av. time required for one ha, (h)	9.25	12.04	10.41
9	Av. mass of grass harvested, (kg/h)	37.13	43.62	39.59
10	Av. fuel consumption:			
	- l/h	0.700	0.720	0.680
	- l/ha	6.48	8.67	7.08