

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

संख्या/No: Machine-725/1827  
माह/Month: February, 2025

**THIS TEST REPORT IS VALID UPTO 31.01.2032**



**SURYA AGRO, SURYA 2SSP BRUSH CUTTER**



भारतसरकार

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


ट्रेक्टरनगर, 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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Machine - 725/1827	SURYA AGRO, SURYA 2SSP BRUSH CUTTER THIS REPORT IS VALID UP TO 31.01.2032	COMMERCIAL (ICT)
		
Manufacturer, (apa) : M/S. Surya Agro Industries, Jayanagar, Hosa Holalu Road, K R PET Tq-571425, Mandya District, Karnataka.		
Name of Applicant : The Manufacturer		

### SURYA AGRO, SURYA 2SSP BRUSH CUTTER

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Machine - 725/1827	SURYA AGRO, SURYA 2SSP BRUSH CUTTER	COMMERCIAL (ICT)
	THIS REPORT IS VALID UP TO 31.01.2032	



Type of test : COMMERCIAL (ICT)

Period of test : December, 2024 to January, 2025

Test Report No. : Machine -725/1827

Month / Year of release : February, 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 "SURYA AGRO, SURYA 2SSP BRUSH CUTTER". This report is valid up to 31.01.2032, 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	<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
3	1 Kw	1.35962 Ps
	<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- 725/1827		SURYA AGRO, SURYA 2SSP BRUSH CUTTER		COMMERCIAL (ICT)
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1	2	3	4	5
29	Marking/labeling of machine	The labeling plate should be riveted on the body of the machine having name and address of manufacturer & applicant, country of origin, make, model, year of manufacturer, serial number, engine number, engine HP, rated rpm & SFC	Country of origin, year of manufacturer, engine number & SFC are not provided.	Does not conform
30	Literature	Operator manual, service manual and parts catalogue should be provided	Provided	Conform

### 17. COMMENTS & RECOMMENDATIONS




- 17.1** The maximum power was observed as 1.47 kW under natural ambient condition against the declared value of 1.46 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 99 dB (A), which is on higher side, there of resuitable 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 175 micron. This should be looked into for dampening the vibration.
- 17.6 Chemical analysis:**  
The chemical composition of straight blade and circular disc does not conform to the requirement of IS 6025:1982(Reaffirmed-1999). This should be looked into for 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:
- Country of origin
  - Year of manufacturer
  - Engine no.
  - Specific fuel consumption, (g/kWh)

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### 17.8 Adequacy of literature supplied with the machine:

The Operator's manual cum parts catalogue of brush cutter and engine in English was not 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

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



### 18. APPLICANT'S COMMENTS

Sl. No.	Para No.	Comments
1	17.1	We will inform to manufacturer, Corrective action taken in future products.
2	17.2	We will provide safety provisions in all brush cutter in future.
3	17.3	We will provide On/Off knob in fuel system in future machine.
4	17.4	We will inform our R&D to reduce the noise level.
5	17.5	Will discuss with our concerned department to provide vibration dampers to reduce the vibration.
6	17.6	We will make some changes in blade material to meet the requirements of IS 6025:1982 (Reaffirmed 1999).
7	17.7	We will provide all information in labeling plate in future.
8	17.8	We will brought out the literature as per IS 8132:1999 (Reaffirmed 2004)