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

संख्या/No: H&TH/SRFMTTI, ANANTAPUR/2025-26/09/09/1885

माह/Month: June, 2025

#### THIS TEST REPORT IS VALID UPTO 31.05.2032



## STIHL, FS 252 BRUSH CUTTER



#### भारत सरकार

Government of India
कृषिएवं किसान कल्याण मंत्रालय
Ministry of Agriculture and Farmers Welfare
कृषिएवं 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, गार्लिदिन्ने-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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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR(A.P.)

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STIHL, FS 252 BRUSH CUTTER
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COMMERCIAL (ICT)

Manufacturer, (apa)

M/s. ANDREAS STIHL POWER TOOKS CO. 171

QINGDAO, CHINA

(Design by Andreas Stihl AG & Co. KG, Germany & SKD Parts from china and Assembled by STIHL INDIA

under MII)

Name of Applicant

: M/s. ANDREAS STIHL PVT LTD

Plot No. E-2/5 & 2/6, Chakan MIDC Industrial Area, Phase III, Village Kharabwadi, Tai-Khad, Pune,

Maharashtra-410501.

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Month: June Year: 2025



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

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# STIHL, FS 252 BRUSH CUTTER THIS REPORT IS VALID UP TO 31.05.2032

COMMERCIAL (ICT)

ype of test

: COMMERCIAL (ICT)

Period of test

: May, 2025 to June, 2025

Test Report No.

: H&TH/SRFMTTI, ANANTAPUR/2025-26/09/09/1885

Month / Year of release : June, 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.
- 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 "STIHL, FS 252 BRUSH CUTTER". This report is valid up to 31.05.2032, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

#### SELECTED CONVERSIONS

S. No.	Units	<b>Conversion Factor</b>	
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	$100 \text{ kPa} = 10 \text{ N/cm}^2$	
	1 mm of Hg	1.3332 m-bar	

H&TH/SRFMTTI, ANANTAPUR/2025-26/ 09/09/1885

## STIHL, FS 252 BRUSH CUTTER THIS REPORT IS VALID UP TO 31.05.2032



## 17. COMMENTS & RECOMMENDATIONS

- 17.1 The maximum power was observed as 1.46 kW under natural ambient condition against the declared value of 1.60 kW.
- 17.1.1 Specific fuel consumption of engine corresponding to maximum power was recorded as 553 g/kWh against the declared value of 570 g/kWh.
- 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 100 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 350 micron. This should be looked into for dampening the vibration.

## 17.6 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:

- i) Country of origin
- ii) Specific fuel consumption, (g/kWh)

## 17.7 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.

H&TH/SRFMTTI, ANANTAPUR/2025-26/ 09/09/1885 STIHL, FS 252 BRUSH CUTTER THIS REPORT IS VALID UP TO 31.05.2032

COMMERCIAL (ICT)

#### **TESTING AUTHORITY**

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

mmm

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. P. P. RAO DIRECTOR

#### 18. APPLICANT'S COMMNETS

We acknowledge the comments and observations mentioned in the reports and will incorporate the necessary corrections as suggested.

#### ANNEXURE-I

#### FIELD PERFORMANCE RESULTS

Attachments used

: Nylon rope

Place of test

: Institute

Usage

: For cutting the grass

Sl. No.	Parameters	Test No. I	Test No. II	
1	Date of test	23.05.2025	24.05.2025	
2	Net test duration, (h)	7.00	7.00	
3	Intensity of grass	Dense		
4	Av. height of grass, (cm)	0.600	0.599	
5	Av. no. of grass per m <sup>2</sup>	219	220	
6	Av. mass of grass per m <sup>2</sup> ,(kg)	0.265	0.289	
7	Area harvested, (ha/h)	0.062	0.067	
8	Av. time required for one ha, (h)	16.13	14.92	
9	Av. mass of grass harvested, (kg/h)	28.11	31.15	
10	Av. fuel consumption:			
	- l/h	0.8	0.82	
	- l/ha	12.90	12.24	