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

संख्या/No:LD/SRFMTTI, ANANTAPUR/2025-26/03/03/1899 माह/Month: July, 2025

#### THIS TEST REPORT IS VALID UP TO 30.06.2032



## STIHL, BT 230 EARTH AUGER



#### 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: <a href="http://srfmtti.dacnet.nic.in/">http://srfmtti.dacnet.nic.in/</a>
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LD/SRFMTTI, ANANTAPUR/2025-26/ 03/03/1899

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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Andreas Stihl Power Tools Co. Ltd.,

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.

## STIHL, BT 230 EARTH AUGER

Report No.: LD/SRFMTTI, ANATAPUR/2025-26/03/03/1899

Month: July Year: 2025



#### Government of India

Ministry of Agriculture and Farmers Welfare
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## LD/SRFMTTI, ANANTAPUR/2025-26/ 03/03/1899

# STIHL, BT 230 EARTH AUGER THIS TEST REPORT IS VALID 30.06.2032

COMMERCIAL (ICT)

Type of test

: COMMERCIAL(ICT)

Period of test

: May, 2025 to June, 2025

Test Report No.

LD/SRFMTTI, ANATAPUR/2025-26/03/03/1899

Month / Year

: July, 2025

i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.

ii) The test sample was selected randomly 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 Post hole digger named" STIHL, BT 230 EARTH AUGER" This report is valid up to 30.06.2032, 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	$100 \text{ kPa} = 10 \text{ N/cm}^2$		
	1 mm of Hg	1.3332 m-bar		

LD/SRFMTTI, ANANTAPUR/2025-26/		STIHL, BT 230 EARTH AUGER THIS TEST REPORT IS VALID		COMMERCIAL
03/03/1899		30.06.2032		(ICT)
1	2	3	4	181 181
7	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	manufacturer, Country of origin & SFC are not	Does not conform
8	Literature	Operator manual, service manual and parts catalogue should be provided	Provided	Conforms

#### 17. COMMENTS & RECOMMENDATIONS

## 17.1 Engine Performance:

- 17.1.1 The maximum power was observed as 1.39 kW under natural ambient condition against the declared value of 1.55 kW.
- 17.2 The augur bit should be removable but it is welded to augur attachment. Whereas, for easy repair and replacement, it should be detachable type.
- 17.3 A fuel on/off knob may be considered for providing in the fuel system of engine.
- 17.4 The safety gadgets as mentioned in **Para 4.0**, were provided by the applicant during the test.
- 17.5 Transmission drive safety provision in the Post hole digger is not provided, whereas it is essential from the safety point of view. Therefore, it must be provided in the future product.

### 17.6 Noise measurement:

Max. Noise at operator's ear level was observed as 106 dB (A), which appears to be on higher side. Therefore, suitable corrective action to reduce the noise level should be taken.

#### 17.7 Mechanical vibration:

The equivalent mechanical vibration on engine cover was observed to the maximum extent of 747 micron. Therefore, suitable corrective measure to reduce the vibration in the machine should be taken.

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## STIHL, BT 230 EARTH AUGER THIS TEST REPORT IS VALID 30.06.2032

COMMERCIAL (ICT)

17.8

## Hardness & Chemical analysis:

The Hardness & chemical composition of augur blade, warm and augur impact bit were does not conform the IS: 6690-1981(Reaffirmed 2012). This should be looked into for corrective action.

## 17.9 Labeling Plate:

The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, inter alia, the following must be provided:

- i) Address of the manufacturer
- ii) Country of origin
- iii) Specific fuel consumption, (g/kWh)

## 17.10 Adequacy of literature supplied with the machine:

A printed manual containing operation, maintenance, troubleshooting instructions and spare parts description in English, is provided by the applicant, which is not sufficient and it needs to be developed as per IS: 8132-1999 and also in other regional languages for the sake of users & technical personnels.

#### **TESTING AUTHORITY**

Er. PRAMOD YADAV AGRICULTURAL ENGINEER Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. P.P. RAO DIRECTOR

### 18. APPLICANT'S COMMENTS

We will incorporate the necessary corrections as suggested.