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

संख्या/No: Machine-605/1662

माह/Month: July, 2024

THIS TEST REPORT IS VALID UP TO 30.06.2031



FARMERS WING, FW-210 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: अनंतप्र (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: <u>fmti-sr@nic.in</u> Tele.: 08551-286441

Machine - 605/1662

FARMERS WING, FW-210 BRUSH CUTTER
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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Linyi Dazhuang Machinery Co. Ltd. West of

Huawu Road, Luozhuang District, Linyi city,

Shandong, China.

Name of Applicant

: M/s. Sri Venkateshwara Enterprises, Kadekal Post

Office, Ground Floor 01, SVE Agri Towers,

Unnamed Road,

Mathuru,

Shivamogga,

Karnataka-577203.

FARMERS WING, FW-210 BRUSH CUTTER

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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR, (A.P.)

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FARMERS WING, FW-210 BRUSH CUTTER THIS REPORT IS VALID UP TO 30.06.2031

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: January, 2024 to June, 2024

Test Report No.

Machine-605/1662

Month / Year of release

July, 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 "FARMERS WING, FW-210 BRUSH CUTTER". This report is valid up to 30.06.2031, 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	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 ²	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		

Machine -	FARMERS WING, FW-210 BRUSH CUTTER	COMMERCIAL
605/1662	THIS REPORT IS VALID UP TO 30.06.2031	(ICT)

Big end bearings:

Bearing	Clearance, (mm)		Max. permissible clearance limit, (mm)	
No.	Diametrical	Axial	Diametrical	Axial
APUR U	*Needle bearing	0.45	*	0.50

^{*}Measurement of big end bearing clearance not possible, as the piston along with connecting rod could not detachable

15.2 Clutch:

No noticeable defects observed.

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 1.36 kW under natural ambient condition against the declared value of 1.5 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 Noise measurement:

Max. Noise at operator's ear level was observed as 93 dB (A), which is on higher side, therefore suitable corrective action should be taken to reduce the noise level.

16.4 Mechanical vibration:

The equivalent mechanical vibration on engine cover was observed to the extent of 162 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 straight blade and circular disc blade are not as per requirement of the relevant code IS 6690:1981 (Reaffirmed 2012) & therefore it should be looked into for the corrective action.

Machine - FARMERS WING, FW-210 BRUSH CUTTER COMMERCIAL (ICT)

16.7 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, inter alia, the following must be provided:

- i) Address of manufacturer
- ii) Country of origin
- iii) Engine no.
- iv) Specific fuel consumption (g/kWh)

16.8 Technical literature:

User's manual cum parts catalogue provided but not in booklet form for reference during the test. It is recommended that same must be revised in booklet form and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel in booklet form.

TESTING AUTHORITY

Er. PRAMOD YADAV
AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE
DIRECTOR

17. APPLICANTS COMMENTS

We consider your comments & recommendations seriously & with immediate effect we inform our production & marketing team to take corrective actions before dispatch.