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

संख्या/No: Machine-558/1609

माह/Month: April, 2024

THIS TEST REPORT IS VALID UPTO 31.03.2031



CHAKRADHAR CHEMICALS PVT.LTD, PADDY HARVESTER BP-35 **BRUSH CUTTER (Back Mounted)**



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/

Tele.: 08551-286441 E-mail: fmti-sr@nic.in

CHAKRADHAR CHEMICALS PVT.LTD, PADDY HARVESTER BP-35 BRUSH CUTTER (Back Mounted)

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COMMERCIAL (ICT)

Manufacturer

: M/S. Chakradhar Chemicals Pvt Ltd,

Office: E 3-5.UPSIDC, Begrajpur Industrial

Area, Pradesh 251203

Branch: #53,2nd Floor, Infantry Road,

Bangalore-560001, Karnataka.

Name of Applicant

: M/S. Sampoorti Farmtec Pvt. Ltd A-903, Mayflower Block Brigade Millennium,7th

Phase J.P Nagar, Banglore-560078

CHAKRADHAR CHEMICALS PVT.LTD, PADDY HARVESTER BP-35 BRUSH CUTTER (Back Mounted)

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

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CHAKRADHAR CHEMICALS PVT.LTD, PADDY HARVESTER BP-35 BRUSH CUTTER (Back Mounted)

COMMERCIAL (ICT)

THIS REPORT IS VALID UPTO 31.03.2031

Type of test

COMMERCIAL (ICT)

Period of test

31.01.2024 to 16.04.2024

Test Report No.

Machine-558/1609

Month / Year of release:

April, 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 at applicant's site.

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 "CHAKRADHAR CHEMICALS PVT.LTD, PADDY HARVESTER BP-35 BRUSH CUTTER (Back Mounted)". This report is valid up to 31.03.2031, 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		

CHAKRADHAR CHEMICALS PVT.LTD, PADDY HARVESTER BP-35 BRUSH CUTTER (Back Mounted)

COMMERCIAL (ICT)

THIS REPORT IS VALID UPTO 31.03.2031

16. COMMENTS & RECOMMENDATIONS

- 16.1 The maximum power was observed as 0.72 kW under natural ambient condition against the declared value of 1.2 kW.
- The safety provisions, as mentioned at para 5.14, have been provided by the applicant for safety aspect of operator's.
- Max. Noise at operator's ear level was observed as 92 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 291 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 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.

17.APPLICANT'S COMMENTS

We have received proposed draft test report, we request you to kindly proceed the final copy.

CHAKRADHAR CHEMICALS PVT.LTD, PADDY HARVESTER BP-35 BRUSH CUTTER (Back Mounted)

THIS REPORT IS VALID UPTO 31.03.2031

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER Er. P.KAMALABAI SENIOR AGRICULTURAL ENGINEER

P K Ga

Dr. B.M. NANDEDE DIRECTOR

ANNEXURE-I

FIELD PERFORMANCE RESULTS

Attachments used

: Nylon rope

Place of test

: Institute farm, SRFMT&TI,

Anantapur

Usage

: For cutting the lawn grass

SI.	Danamatana	No. of tests				
No.	Parameters	I	II	III		
1	Date of test	31.01.24	1.02.24	02.02.24		
2	Net test duration, (h)	6.00	5.50	6.00		
3	Intensity of grass	Dense				
4	Av. height of grass, (cm)	84	79.7	90		
5	Av. no. of grass per m ²	416.7	418.3	409.7		
6	Av. mass of grass per m ² ,(kg)	0.465	0.458	0.489		
7	Area harvested, (ha/h)	0.092	0.092	0.099		
8	Av. time required for one ha, (h)	10.86	10.87	10.10		
9	Av. mass of grass harvested, (kg/h)	73.97	70.69	73.61		
10	Av. fuel consumption:					
	- l/h	0.420	0.450	0.430		
	- 1/ha	4.56	4.89	4.34		