

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

संख्याNo: Machine-403/1232  
माहMonth: December, 2020  
Validity: 30.11.2025



## VARDHMAN – 2FP POWER REAPER



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि, सहकारिता एवं किसान कल्याण विभाग

Department of Agriculture, Cooperation 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/>

E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)

Tele./FAX: 08551-286441

Machine-403/1232	VARDHMAN – 2FP POWER REAPER	COMMERCIAL (ICT)
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Manufacturer : M/s. Orange Farm Equipments,  
13, Abhinandan States, Girnar  
Compound, Near Sabri Hotel, Katwada,  
Odhav, Ahmedabad -382 423, Gujarat,  
**India.**

Applicant : The Manufacturer

VARDHMAN – 2FP POWER REAPER

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Telephone No. 08551-286441  
Website: <http://srfmtti.dacnet.nic.in/>

Fax No.08551-286441  
E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)

Machine-403/1232	VARDHMAN – 2FP POWER REAPER	COMMERCIAL (ICT)
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Type of test : INTIAL COMMERCIAL TEST

Period of test : 09.11.2020 to 17.12.2020

Test Report No. : Machine-403/1232

Month / Year of release : December, 2020

- 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 is submitted by the applicant directly, hence method of selection is not known.
- iii) The results presented in this report do not in any way attribute to the durability of the machine.
- iv) This report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training and Testing Institute, Garladinne, Anantapur (A.P.).
- v) Initially the applicant has submitted this test sample under confidential testing but vide request letter received dated 30.12.2020, the applicant has requested to convert the report from confidential to commercial.
- vi) This is a report on commercial test of power reaper named "Vardhman – 2FP Power Reaper". **This report is valid up to 30.11.2025, vide ministry's order no.13-24/2018-M&T (I&P) dated 19.09.2018.**

### 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
3	Pressure	
	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

**17.9 Wear of critical components:**

- i) The wear rate of cutter bar on mass basis was recorded as 0.05 % per hour.
- ii) Hardness of movable & stationary blade do not conform to the requirement as per IS 6025:1982 (Reaffirmed 1999). Therefore, this should be taken care for necessary action.
- iii) The chemical composition of cutting (movable) blade and stationary blades are not conforming to the requirement of relevant code. Therefore, this should be taken care for corrective action.

**17.10 Provision for safety:**

A safety pin on the conveyor chain is not provided to take care of overloading of cutter bar. It needs to be provided at suitable place.

**17.11 Technical literature:**

The operation manual cum parts catalogue of reaper and engine in single booklet was supplied with the reaper for reference during the test. It is however, recommended that same may be revised and bought out in Hindi & other regional languages as per IS 8132 :1999 (Reaffirmed 2004) for the sake of user & technical personnel.

**TESTING AUTHORITY:**

B.N. DIXIT  
AGRICULTURAL ENGINEER



Dr. P.P. RAO  
DIRECTOR


**18. APPLICANT COMMENTS**

Para No.	Our reference	Applicant's comments
18.1	17.1.2	We will take corrective action.
18.2	17.1.3	We will inform to our engine supplier on this regard
18.3	17.2	We will try to reduce the noise level, in our future products
18.4	17.3	We will reduce the mechanical vibration in our future products as per possibility
18.5	17.5	We will look into it
18.6	17.11	We will make the literature as per your recommendations