व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) संख्या/No: Machine-739/1842

COMMERCIAL TEST REPORT (INITIAL) माह/Month: March, 2025

THIS TEST REPORT IS VALID UP TO 29.02.2032

SHREE SHIVAM AGRO INDUSTRIES, FLYING FARMER – FFCR-2P-HL-177 POWER WEEDER

सत्यमेव जयते

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 9001:2015CERTIFIEDINSTITUTE]

Website: http://srfmtti.dacnet.nic.in/ E-mail: fmti-sr@nic.in

Manufacturer, **(apa)** : M/s. Chongqing Hua Tian Li Machinery Llc Yangjiawan Jingkau Street, Shapingba District, Chongqing, China 400032

Applicant : M/s. Shree Shivam Agro Industries Near Punjab Natonal Bank Jaipatna, Kalahandi, Odisha Pin-766018.

SHREE SHIVAM AGRO INDUSTRIES, FLYING FARMER – FFCR-2P-HL-177 POWER WEEDER

Report no.: **Machine-739/1842** Month: **March** Year: **2025**

सत्यमेव जयते

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website: http://srfmtti.dacnet.nic.in/ E-mail: fmti-sr@nic.in

Type of test : COMMERCIAL (ICT)

Period of test : January, 2025 to February, 2025

Test Report No. : **Machine-739/1842**

Month / Year of release : March, 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 through virtual mode by testing authority.

iii) The results presented in this report do not, in anyway, 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 Power Weeder named **"SHREE SHIVAM AGRO INDUSTRIES, FLYING FARMER – FFCR-2P-HL-177 POWER WEEDER ".** This report is valid up to **29.02.2032, 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^2	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm^2
	1 mm of Hg	1.3332 m-bar

1	2	3	4	5
27	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.	**Address of manufacturer, Country of origin, and SFC are not provided.**	**Does not conform**
28	Literature	Operator manual, service manual and parts catalogue should be provided.	Provided	Conforms

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

18.1.1 The maximum power was observed as 5.21 kW under natural ambient condition against the declared value of 5.5 kW.

18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 294 g/kWh against the declared value of 300 g/kWh.

18.1.3 Back up torque of engine was observed as 8.36 % against declared value of 10%.

18.1.4 Max. torque was observed as 15.23 Nm against the declared value of 12.00 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the weeder was observed to the extent of 294 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Air cleaner oil pullover:

The percentage of air cleaner oil pull over was recorded as 0.27 to 0.79 % against the declaration of 0.20%. The percentage of air cleaner oil pull over was considered very high and this should be looked into for corrective action.

18.4 Chemical composition:

The Chemical analysis of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into for corrective action.

18.5 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. Specific fuel consumption (g/kWh)

18.6 Technical literature:

Operator's manual, service manual and parts catalogue of power weeder in separate booklet were supplied for reference during the test. It is however, recommended that same may be revised in Hindi and other regional languages as per IS 8132: 1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER	
Dr. B.M. NANDEDE **DIRECTOR**	

19. APPLICANTS COMMENTS

We have gone thought the comments and recommendations we will do the necessary corrective action in future lot.