व्यावसायिक परीक्षण रिपोर्ट(प्रारंभिक)

COMMERCIAL TEST REPORT (INITIAL)

संख्या/No: Machine-740/1843

माह/Month: March, 2025

THIS TEST REPORT IS VALID UP TO 29.02.2032



SHREE SHIVAM AGRO INDUSTRIES, FLYING FARMER FF DK-186 POWER WEEDER



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

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COMMERCIAL

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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-FFDK 186 POWER WEEDER

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Government of India

Ministry of Agriculture and Farmers Welfare
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SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE, ANANTAPUR (A.P.)

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THIS TEST REPORT IS VALID UP TO 29.02.2032

COMMERCIAL (ICT)

Type of test

: COMMERCIAL(ICT)

Period of test

: January, 2025 to February, 2025

Test Report No.

: Machine-740/1843

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 by testing authority through virtual mode
- iii) The results presented in this report do noting 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 Power Weeder named "SHREE SHIVAM AGRO INDUSTRIES, FLYING FARMER-FFDK 186 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
	CAR WIGHT IN	mm of Hg
	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$
	1 mm of Hg	1.3332 m-bar

SHREE SHIVAM AGRO INDUSTRIES, FLYING FARMER FF DK-186 POWER WEEDER

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COMMERCIAL (ICT)

18. COMMENTS & RECOMMENDATIONS

18.1 / Engine Performance:

- 18.1.1 The maximum power was observed as 5.81 kW under natural ambient condition against the declared value of 6.0 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 294 g/kWh against the declared value of 280 g/kWh.
- 18.1.3 Back up torque of engine was observed as 11.39 % against declared value of 12.0%.
- 18.1.4 Max. torque was observed as 20.63 Nm against the declared value of 12 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 484 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 0.26 to 0.49 % 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 analysis:

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

Operators manual and parts catalogue of power weeder were supplied with test sample for reference during the test. It is however, recommended that same way be revised and brought out in Hindi & other regional languages as per IS:8132-1999(reaffirmed 2019) for the sake of user & technical personnel in booklet form.

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

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COMMERCIAL (ICT)

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.