

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

संख्या/No: Machine-606/1663

COMMERCIAL TEST REPORT (INITIAL)

माह/Month: July, 2024

THIS TEST REPORT IS VALID UPTO 30.06.2031



**SHREE SHIVAM AGRO INDUSTRIES, SSAI-WD-7WGQ4
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

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.)

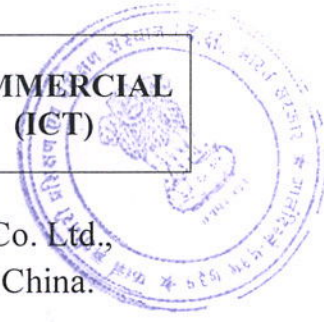
[An ISO 9001:2015 CERTIFIED INSTITUTE]

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Machine- 606/1663	SHREE SHIVAM AGRO INDUSTRIES, SSAI-WD-7WGQ4 POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Xian Far East Import & Export Co. Ltd.,
No. 34, South Hancheng Road, Xian, China.

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

**SHREE SHIVAM AGRO INDUSTRIES, SSAI-WD-7WGQ4
POWER WEEDER**

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सत्यमेव जयते

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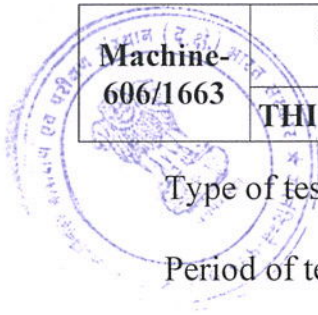
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**SOUTHERN REGION FARM MACHINERY TRAINING &
TESTING INSTITUTE, ANANTAPUR, (A.P.)**

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Type of test : COMMERCIAL (ICT)
 Period of test : March, 2024 to June, 2024
 Test Report No. : Machine-606/1663
 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 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, SSAI-WD-7WGQ4 POWER WEEDER". 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 kPa = 10 N/cm ²
	1 mm of Hg	1.3332 m-bar

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18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 3.83 kW under natural ambient condition against the declared value of 4.8 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 369 g/kWh against the declared value of 210 g/kWh.
- 18.1.3 Back up torque of engine was observed as 8.50 % against declared value of 7.24 %.
- 18.1.4 Max. torque was observed as 10.9 Nm against the declared value of 13.77 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 299 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

- 18.3 The hardness of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into for corrective action.
- 18.4 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) Country of origin
 - ii) Engine no.
 - iii) Address of manufacturer
 - iv) Make, Rated RPM, & SFC (g/kWh)
 - v) Year of manufacture
 - vi) Size of machine

18.4 Technical literature:




User's manual is not provided during the test. However, the same must be brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the guidance of users.

The following literature should be provided.

- i) Service manual
- ii) Parts catalogue

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TESTING AUTHORITY

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

19. APPLICANT COMMENTS

We have gone through your comments and recommendations, we will do the corrective action on particular comments in our future products.