

THIS TEST REPORT IS VALID UP TO 31.07.2031



SHIVA AGRO, SAE 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

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]

Machine- 632/1693	SHIVA AGRO, SAE 186 POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Hangzhou joins imp & Exp Co., LTD,
Room 809, No-1451, Binxing, Changhe street,
Binjiang, District Hangzhou, 310052 Zhejiang
province, **China**.

Applicant : M/s. Shiva Irrigation System
SY No 121/7, Mudigere, Kasara Hobli Taluk,
Tumkur-572216.



SHIVA AGRO, SAE 186 POWER WEEDER

Report no.: **Machine-632/1693**

Month: **August**

Year: **2024**

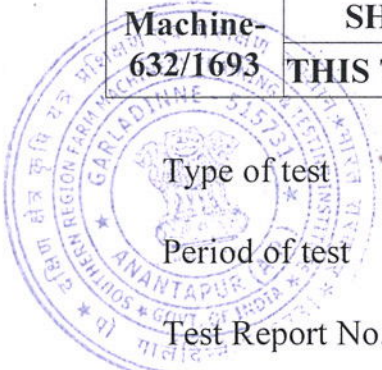


सत्यमेव जयते

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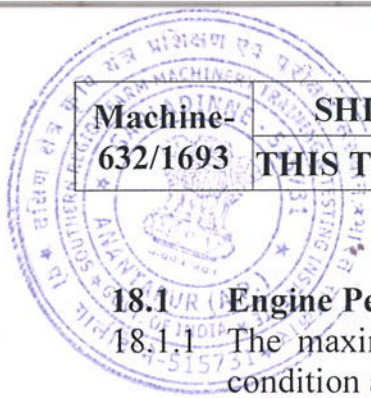
 Machine-632/1693	SHIVA AGRO, SAE 186 POWER WEEDER	COMMERCIAL (ICT)
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Type of test : COMMERCIAL (ICT)
 Period of test : July, 2024 to August, 2024
 Test Report No. : **Machine-632/1693**
 Month / Year of release : July, 2024

- 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 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 **“SHIVA AGRO, SAE 186 POWER WEEDER ”**. This report is valid up to **31.07.2031**, 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 6.76 kW under natural ambient condition against the declared value of 7.3 kW.

18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 320 g/kWh against the declared value of 280 g/kWh.

18.1.3 Back up torque of engine was observed as 5.43 % against declared value of 12 %.

18.1.4 Max. torque was observed as 22.73Nm against the declared value of 12.73 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 466 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 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, interlaid, the following must be provided:




- i. Name of the machine
- ii. Address of the manufacturer
- iii. Country of origin
- iv. Engine hp

18.4 Technical literature:

User's manual cum parts catalogue provided but not in booklet form for reference during the test. It is recommended that same must be revised in booklet form and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel in booklet form.

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TESTING AUTHORITY

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

19. APPLICANT COMMENTS

Para. No	Comments
18.2	We will work on to reduce the vibration of the machine.
18.3	We will give labeling plate as per your information in report in future product.
18.4	We will provide the Operator's manual cum parts catalogue of weeder as per IS: 8132- 1999 (Reaffirmed 2004) in future products.