

THIS TEST REPORT IS VALID UPTO 31.07.2031



AGRIWHALE, AW-WD-7HP POWER WEEDER



सत्यमेव जयते

भारत सरकार

Government of India

कृषिएवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषिएवं 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]

Machine- 640/1902	AGRIWHALE, AW-WD-7HP POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Zhejiang Yongli Machiner Co
Ltd., Dengfang Avenue, Luqiao
district, Taizhou Zhejiang, **China.**

Applicant : M/s. SRI SHAKTHI ENTERPRISES
#107/1-2, Shahzad Building, J C
Road, Bangalore-560002.

AGRIWHALE, AW-WD-7HP POWER WEEDER

Report no.: Machine-640/1902

Month: August

Year: 2024



सत्यमेव जयते

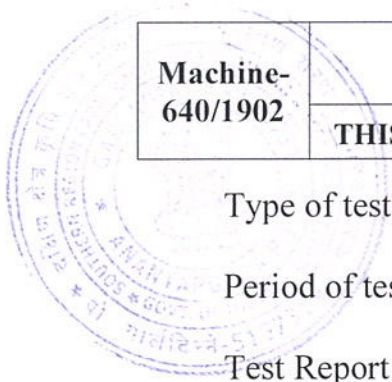
Government of India
Ministry of Agriculture and Farmers Welfare
Department of Agriculture and Farmers Welfare
Southern Region Farm Machinery Training and Testing Institute
Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)
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**SOUTHERN REGION FARM MACHINERY TRAINING &
TESTING INSTITUTE, ANANTAPUR, (A.P.)**

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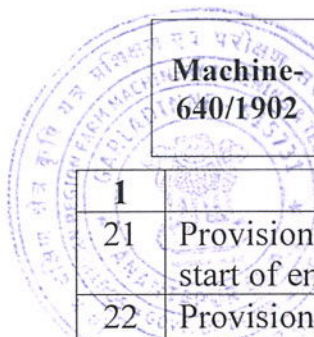
Machine-640/1902	AGRIWHALE, AW-WD-7HP POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.07.2031	

Type of test* : COMMERCIAL (ICT)
Period of test : May, 2024 to August, 2024
Test Report No. : **Machine-640/1902**
Month / Year of release : August, 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 “AGRIWHALE, AW-WD-7HP 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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1	2	3	4	5
21	Provision for easy start of engine	Must be provided	Not Provided	Does not conform
22	Provision for shield/cover to prevent flying of mud and stone from rotor	Must be provided	Provided	Conforms
23	Depth control mechanism	Must be provided	Provided	Conforms
24	Provision for transport wheels	Must be provided	Provided	Conforms
25	Provision for cover on exhaust	Must be provided	Provided	Conforms
26	Direction of exhaust emission away from operator	Must be provided	Provided	Conforms
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	Name of machine, Country of origin, size of the machine, Engine HP & 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 3.35 kW under natural ambient condition against the declared value of 5.2 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 541 g/kWh against the declared value of 320 g/kWh.
- 18.1.3 Back up torque of engine was observed as 10.48 % against declared value of 12 %.
- 18.1.4 Max. torque was observed as 9.80 Nm against the declared value of 15.20 Nm.

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18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 339 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 chemical composition of blades does not confirm to as per IS 6690:1981(Reaffirmed 2012). This should be looked into for corrective action.

18.5 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) Name of machine
- ii) Country of origin
- iii) Size of the machine
- iv) Engine hp.
- v) Specific fuel consumption (g/kWh)


18.6 Technical literature:

User's manual is 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

TESTING AUTHORITY

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