

THIS REPORT IS VALID UPTO 31.10.2028



**VARSHA - SEAL 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 9001:2015 CERTIFIED INSTITUTE]**

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Tele.: 08551-286441

Machine- 530/1566	VARSHA - SEAL POWER WEEDER	COMMERCIAL
	THIS TEST REPORT IS VALID UP TO 31.10.2028	



Manufacturer, (apa) : M/S. Chongqing Shinery Agri Machinery Co Ltd., 8-Shinery Road , Hangpu Town , Juilongpu Dist- Chongqing **China.**

Applicant : M/S. Varshaa Agro Mach. Engg. Pvt. Ltd., No.1976-1, Iyyer Hospital Road, Singanallur Coimbatore, Tamilnadu -641005, India

**VARSHA - SEAL POWER WEEDER**

Report no.: Machine-530/1566

Month: November

Year: 2023



**Government of India**  
**Ministry of Agriculture and Farmers Welfare**  
**Department of Agriculture and Farmers Welfare**  
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Machine- 530/1566	VARSHA - SEAL POWER WEEDER	COMMERCIAL THIS TEST REPORT IS VALID UP TO 31.10.2028



Type of test : COMMERCIAL

Period of test : 01.08.2023 to 08.11.2023

Test Report No. : Machine-530/1566

Month / Year of release : November , 2023

- 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 "VARSHA - SEAL POWER WEEDER ". This report is valid up to 31.10.2028, Vide Ministry's O.M. No. 13-24/2018-M&T (I&P) dated 19.09.2018.

**SELECTED CONVERSIONS**

S. No.	Units	Conversion Factor
1	<b>Force</b>	
	1 kgf	9.80665 N
		2.20462 lbf
2	<b>Power</b>	
	1 hp	1.01387 metric hp (Ps) 745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	<b>Pressure</b>	
	1 psi	6.895 kPa
	1 kgf/cm <sup>2</sup>	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm <sup>2</sup>
	1 mm of Hg	1.3332 m-bar

Machine- 530/1566	VARSHA - SEAL POWER WEEDER	COMMERCIAL
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### 17. COMMENTS & RECOMMENDATIONS

#### 17.1 Engine Performance:

- 17.1.1 The maximum power was observed as 4.75 kW under natural ambient condition against the declared value of 6.0 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power engine speed was recorded as 363 g/kWh against the declared value of 370 g/kWh.
- 17.1.3 Back up torque of engine was observed as 8.76% against declared value of 10%.
- 17.1.4 Max. crankshaft torque was observed as 14.53 Nm against the declared value of 14.5 Nm.




#### 17.2 Mechanical vibration :

The amplitude of mechanical vibration on various assemblies of the Power Weeder was observed to the extent of 364 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

#### 17.3 Technical literature:

User's manual cum parts catalogue or service manuals are not provided in a booklet form for reference during the test. It is recommended that same must be revised 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.

### TESTING AUTHORITY

 <b>Er. PRAMOD YADAV</b> AGRICULTURAL ENGINEER	 <b>Er. D.C. MOULI</b> AGRICULTURAL ENGINEER
 <b>Dr. B.M. NANDEDE</b> DIRECTOR	

### 18. APPLICANT'S COMMENTS

We shall follow the suggestions & instructions given by your good office to improve our product performance.