व्यावसायिकपरीक्षणरिपोर्ट(प्रारंभिक)

संख्या/No:ICE/SRFMTTI, ANANTAPUR/2025-26/26/26/1913

COMMERCIAL TEST REPORT(INITIAL) माह/Month: August, 2025

THIS TEST REPORT IS VALID UP TO 31.07.2032



SHRACHI, 6D3 CHAMP POWER WEEDER



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, गार्लिदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.) Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

Website: http://srfmtti.dacnet.nic.in/ E-mail: fmti-sranic.in

SHRACHI, 6D3 CHAMP POWER WEEDER

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COMMERCIAL (ICT)

Manufacturer, (apa)

: Shrachi Agrimech Limited

Shrachi tower, 686, Anandapur EM By-

Pass RB Connector, Kolkata, West

Bengal-700107, India.

Applicant

: The Manufacturer

SHRACHI, 6D3 CHAMP POWER WEEDER

Report no.: ICE/SRFMTTI, ANANTAPUR/2025-26/26/26/1913

Month: August Year: 2025



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.)

Page 2 of 35

SHRACHI, 6D3 CHAMP POWER WEEDER THIS TEST REPORT IS VALID UP TO 31.07.2032

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: July, 2025 to August, 2025

Test Report No.

ICE/SRFMTTI, ANANTAPUR/2025-26/26/26/1913

Month / Year of release :

August, 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 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.).
- This is a report on Commercial Test of Power Weeder named "SHRACHI, 6D3 CHAMP POWER WEEDER". This report is valid up to 31.07.2032, 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)
	1 - 1 - 1	745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	Pressure	
	1 psi	6.895 kPa
7	1 kgf/cm ²	98.067 kPa = 735.56
		mm of Hg
	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$
	1 mm of Hg	1.3332 m-bar

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

Page 3 of 35

SHRACHI, 6D3 CHAMP POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.07.2032

COMMERCIAL (ICT)

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 4.12 kW under natural ambient condition against the declared value of 4.0 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 347 g/kWh against the declared value of 340 g/kWh.
- 18.1.3 Back up torque of engine was observed as 13.07% against declared value of 10%.
- 18.1.4 Max. torque was observed as 12.19 Nm against the declared value of 12.5 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 499 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Hardness & Chemical analysis:

The hardness & chemical analysis of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into corrective action.

18.4 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) Country of origin

18.5 Technical literature:

Operator's manual, service manual and parts catalogue of power weeder in separate booklet were supplied for reference during the test. It is however, recommended that same may be revised in Hindi and other regional languages as per IS 8132: 1999 (Reaffirmed 2004) for the sake of user & technical personnels.

SHRACHI, 6D3 CHAMP POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.07.2032

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER



Dr. P.P. RAO DIRECTOR

19. APPLICANT COMMENTS

Reference No.	Applicant Comments	
18.2	We will take corrective action to Reduce Mechanical vibration in future production.	
18.3	We will take corrective action to meet the requirement of blades as per IS 6690:1981 (Reaffirmed 2022) in future production.	
18.4	We will reveal all the required information in labelling plate for the future production.	
18.5	We will be brought out the literature as per IS 8132:1999 (Reaffirmed 2004).	