व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

संख्या/No: Machine-631/1691

COMMERCIAL TEST REPORT (INITIAL)

माह/Month: August , 2024

THIS TEST REPORT IS VALID UPTO 31.07.2031



# AGRICARE, AC-9200D 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 9001:2015CERTIFIEDINSTITUTE]

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

# Machine-

# AGRICARE, AC-9200D POWER WEEDER 631/1691 THIS TEST REPORT IS VALID UP TO 31.07.2031

**COMMERCIAL** (ICT)

Manufacturer, (apa)

: M/s. Taizhou Qinli Machinery Co. Ltd, Yanhai Industrial Zone, Sanjia Str., Jiaojiang district, Taizhou city, Zhejiang, China.

Applicant

: M/s. SRI SAI AGRI TECH, 6-1-3949, Shivam Complex, Opp TVS Show room, Gangavathi Road, Sindhanur, Raichur District, Karnataka-584128.

## AGRICARE, AC-9200D POWER WEEDER

Report no.: Machine-631/1691 Month: August Year: 2024



#### 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.) [An ISO 9001:2015 CERTIFIED INSTITUTE]

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# AGRICARE, AC-9200D POWER WEEDER THIS TEST REPORT IS VALID UP TO 31.07.2031

COMMERCIAL (ICT)

Type of test

: COMMERCIAL(ICT)

Period of test

: May, 2024 to August, 2024

Test Report No.

Machine-631/1691

Month / Year of release

August, 2024

 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 "AGRICARE, AC-9200D 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                 | <b>Conversion Factor</b>              |
|--------|-----------------------|---------------------------------------|
| 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 <sup>2</sup> | 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                          |

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#### 18. COMMENTS & RECOMMENDATIONS

### 18.1 Engine Performance:

- 18.1.13 The maximum power was observed as 7.86 kW under natural ambient condition against the declared value of 6.75 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 288 g/kWh against the declared value of 350 g/kWh.
- 18.1.3 Back up torque of engine was observed as 18.34 % against declared value of 10 %.
- 18.1.4 Max. torque was observed as 26.84 Nm against the declared value of 19 Nm.

#### 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 318 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

#### 18.3 Hardness:

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 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, inter alia, the following must be provided:

- i) Name of the machine,
- ii) Address of the manufacturer
- iii) Address of applicant
- iv) Make
- v) Year of manufacturer
- vi) Engine number
- vii) Engine hp
- viii) Engine rated rpm
- ix) Specific fuel consumption (g/kWh)

#### 18.5 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
Nil