## व्यावसायिक परीक्षण रिपोर्ट(प्रारंभिक) COMMERCIAL TEST REPORT (INITIAL)

संख्या/No: ICE/SRFMTTI, ANANTAPUR/2025-26/30/30/1923

माह/Month: September, 2025

#### THIS TEST REPORT IS VALID UP TO 31.08.2032



## ROYAL KISSAN AGRO, RK-ICP-P177 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-sr@nic.in

ICE/SRFMTTI, ANANTAPUR/2025-26/ 30/30/1923

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COMMERCIAL (ICT)

Manufacturer, (apa)

: M/s. Shaoxing Nosimon Engineering

Company, 501-10, Fifth Floor, Longhua Star Garden, Keqiao District, Shaoxing city, **China** 

Applicant

: M/s. Royal Kissan Agro

Plot No. A-18, Dombivali Industrial Area Phase 2, Manpada Road, Dombivili East, Kalyan, Thane, Pin code- 421203,

Maharashtra.

#### ROYAL KISSAN AGRO, RK-ICP-P177 POWER WEEDER

Report no.: ICE/SRFMTTI, ANANTAPUR/2025-26/30/30/1923

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#### **Government of India**

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## ROYAL KISSAN AGRO, RK-ICP-P177 POWER WEEDER

# THIS TEST REPORT IS VALID UP TO 31.08.2032

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: June, 2025 to July, 2025

Test Report No.

ICE/SRFMTTI, ANANTAPUR/2025-26/30/30/1923

Month / Year of

: September, 2025

release

- 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.).
- v) This is a report on Commercial Test of Power Weeder named "ROYAL KISSAN AGRO, RK-ICP-P177 POWER WEEDER". This report is valid up to 31.08.2032, 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)
	25.7	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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## ICE/SRFMTTI, ANANTAPUR/2025-26/ 30/30/1923

## ROYAL KISSAN AGRO, RK-ICP-P177 POWER WEEDER

# THIS TEST REPORT IS VALID UP TO 31.08.2032



### 18. COMMENTS & RECOMMENDATIONS

### 18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 5.37 kW under natural ambient condition against the declared value of 5.30 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 338 g/kWh against the declared value of 360 g/kWh.
- 18.1.3 Back up torque of engine was observed as 10.03% against declared value of 8%.
- 18.1.4 Max. torque was observed as 15.47 Nm against the declared value of 16.0 Nm.

#### 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 304 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

### 18.3 Air cleaner oil pullover

The percentage of air cleaner oil pull over was recorded as 0.15 to 0.53 % against the declaration of 0.20%. The percentage of air cleaner oil pull over was considered very high and this should be looked into for corrective action.

## 18.4 Hardness & Chemical analysis:

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

## 18.5 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 and address of manufacturer
- ii) Name and address of applicant
- iii) Country of origin
- iv) Make
- 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.

ICE/SRFMTTI, ANANTAPUR/2025-26/ 30/30/1923 ROYAL KISSAN AGRO, RK-ICP-P177
POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.08.2032

COMMERCIAL (ICT)

### **TESTING AUTHORITY**

Er. PRAMOD YADAV AGRICULTURAL ENGINEER Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. P.P. RAO DIRECTOR

19.APPLICANT'S COMMENTS
-NIL-