

**THIS TEST REPORT IS VALID UPTO 31.10.2031**



**RALLI, RRT-100P-N 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 9001:2015 CERTIFIED INSTITUTE]**

Machine- 679/1757	<b>RALLI, RRT-100P-N POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UP TO 31.10.2031</b>	

Manufacturer, (apa) : M/s. Chongqing Shineray Agricultural Machinery Co. Ltd, No.8, Shineray Road, Hangu Town, Gaoxin District, Chongqing, China.

Applicant : M/s. Ralli Agrotech Limited, Survey No.278 & 279, N.H. No.8, Village - Nandawala, Taluka & Valsad-396035, Gujarat.

### **RALLI, RRT-100P-N POWER WEEDER**

Report no.: **Machine-679/1757**

Month: **November**

Year: **2024**



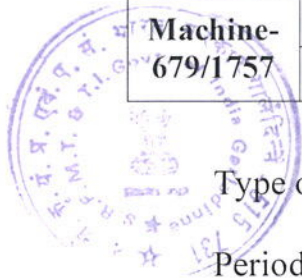
**Government of India**  
**Ministry of Agriculture and Farmers Welfare**  
**Department of Agriculture and Farmers Welfare**  
**Southern Region Farm Machinery Training and Testing Institute**  
**Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)**  
**[An ISO 9001:2015 CERTIFIED INSTITUTE]**

Website: <http://srfmtti.dacnet.nic.in/>

E-mail: [fmti-sr@nic.in](mailto:fmti-sr@nic.in)

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

**Page 2 of 32**



Machine- 679/1757	<b>RALLI, RRT-100P-N POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UP TO 31.10.2031</b>	

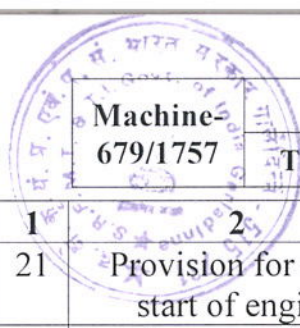
Type of test : COMMERCIAL (ICT)  
Period of test : October, 2024 to November, 2024  
Test Report No. : **Machine-679/1757**  
Month / Year of release : November, 2024

- 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 "**RALLI, RRT-100P-N POWER WEEDER**". **This report is valid up to 31.10.2031, 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	<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-  
679/1757

**RALLI, RRT-100P-N POWER WEEDER**  
THIS TEST REPORT IS VALID UP TO 31.10.2031

**COMMERCIAL  
(ICT)**

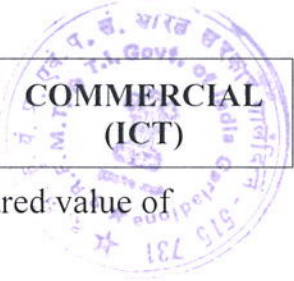
1	2	3	4	5
21	Provision for easy start of engine	Must be provided	Provided	Conforms
22	Provision for shield/cover to prevent flying of mud and stone from rotor	Must be provided	Provided	Conforms
23	Depth control mechanism	Must be provided	Provided	Conforms
24	Provision for transport wheels	Must be provided	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	<b>Name &amp; Address of the manufacturer, country of the origin, size of the machine, rated rpm &amp; SFC are not provided.</b>	<b>Does not conform</b>
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 3.81 kW under natural ambient condition against the declared value of 3.8 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 468 g/kWh against the declared value of 300 g/kWh.
- 18.1.3 Back up torque of engine was observed as 11.22 % against declared value of 10 %.

Machine- 679/1757	<b>RALLI, RRT-100P-N POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UP TO 31.10.2031</b>	



18.1.4 Max. torque was observed as 11.20 Nm against the declared value of 10.1 Nm.

**18.2 Mechanical vibration:**

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 388 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

**18.3 Hardness & chemical:**

The hardness & chemical 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 Air cleaner oil pullover:**

The percentage of air cleaner oil pull over was recorded as 0.23 to 1.13 % 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.

**18.5 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 & Address of the manufacturer
- ii) Country of origin
- iii) Size of the machine
- iv) Rated rpm
- v) Specific fuel consumption (g/kWh)

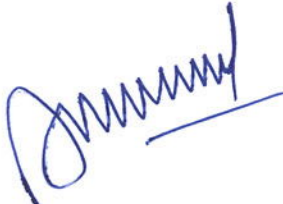


**18.6 Technical literature:**

Operators manual and parts catalogue of power weeder were supplied with test sample for reference during the test. It is however, recommended that same way be revised and brought out in Hindi & other regional languages as per IS:8132-1999(reaffirmed 2019) for the sake of user & technical personnel in booklet form.



Machine- 679/1757	RALLI, RRT-100P-N POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.10.2031	

### TESTING AUTHORITY

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

### 19. APPLICANT COMMENTS

Sl. No.	Para No.	Comments
1	18.1	It will be looked by our manufacturing unit & corrective action will be taken.
2	18.2	It will be looked by the technical team.
3	18.3	We will take corrective action.
4	18.4	We will take corrective action.
5	18.5	We will provide the suitable name plate with all the details require as per IS standard.
6	18.6	We will provide product literature with contains service manual, parts catalog in Hindi and other languages as per IS 8132: 1999(Reaffirmed 2004)