

THIS TEST REPORT IS VALID UPTO 29.02.2032



DOUBLE EAGLE, DE-173D 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]

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Machine- 737/1839	DOUBLE EAGLE, DE-173D POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Chongqing Hua Tian Hao Li Machinery Manufacturing Co. LTD., No. 13 Jingaheng Road, Jinghou Street, Shapingha District, Chongqing, China.

Applicant : M/s. Eagle Enterprises,
801/1-A, Kalapatti Road, Kalapatti Post,
Coimbatore- 641048. Tamil Nadu

DOUBLE EAGLE, DE-173D POWER WEEDER

Report no.: Machine-737/1839

Month: March

Year: 2025

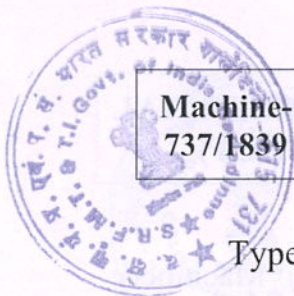


सत्यमेव जयते

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Machine-
737/1839

DOUBLE EAGLE, DE-173D POWER WEEDER

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**COMMERCIAL
(ICT)**

Type of test : COMMERCIAL (ICT)

Period of test : November, 2024 to February, 2025

Test Report No. : Machine-737/1839

Month / Year of release : March, 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.
- 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 **"DOUBLE EAGLE, DE-173D POWER WEEDER"**. This report is valid up to **29.02.2032**, 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)
		745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	Pressure	
	1 psi	6.895 kPa
	1 kgf/cm ²	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm ²
	1 mm of Hg	1.3332 m-bar

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18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 3.89 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 275 g/kWh against the declared value of 420 g/kWh.
- 18.1.3 Back up torque of engine was observed as 9.05% against declared value of 10%.
- 18.1.4 Max. torque was observed as 11.20 Nm against the declared value of 12 Nm.

18.2 Hardness and chemical composition:

The Hardness and chemical composition 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.

18.3 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 machine
- ii) Address of manufacturer
- iii) Country of origin
- iv) Specific fuel consumption (g/kWh)

18.4 Technical literature:

Operators manual and parts catalogue of power weeder were supplied with test sample for reference during the test. However, it is 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- 737/1839	DOUBLE EAGLE, DE-173D POWER WEEDER	COMMERCIAL (ICT)
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TESTING AUTHORITY

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

19. APPLICANT'S COMMENTS

Sl. No.	Para No.	Comments
1	18.1.1	We will forward the comment to the engine manufacturer and will ask them to take corrective measures in future production.
2	18.1.2	We will take action as per recommendation of institute in future production.
3	18.1.3	We will forward the comment to the engine manufacturer and will ask them to take corrective measures in future production.
4	18.1.4	We will forward the comment to the engine manufacturer and will ask them to take corrective measures in future production.
5	18.2	We will take action as per recommendation of institute.
6	18.3	We will take action as per recommendation of institute.
7	18.4	We will take action as per recommendation of institute.