

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

संख्या/No: Machine-658/1721
माह/Month: September, 2024

THIS TEST REPORT IS VALID UP TO 31.08.2031



DOUBLE EAGLE, DE-175 BRUSH CUTTER



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

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Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

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Machine- 658/1721	DOUBLE EAGLE, DE-175 BRUSH CUTTER	COMMERCIAL (ICT)
	THIS REPORT IS VALID UP TO 31.08.2031	



Manufacturer, (apa) : M/s. Changzhou Machinery & Equipment Imp. & Exp. Co. Ltd., Xinggang Road, Changzhou, Jiangsu, China.

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

DOUBLE EAGLE, DE-175 BRUSH CUTTER

Report No.: Machine-658/1721

Month: September

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सत्यमेव जयते

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Machine- 658/1721	DOUBLE EAGLE, DE-175 BRUSH CUTTER	COMMERCIAL (ICT)
	THIS REPORT IS VALID UP TO 31.08.2031	

Type of test : COMMERCIAL (ICT)

Period of test : August, 2024 to September 2024

Test Report No. : **Machine-658/1721**

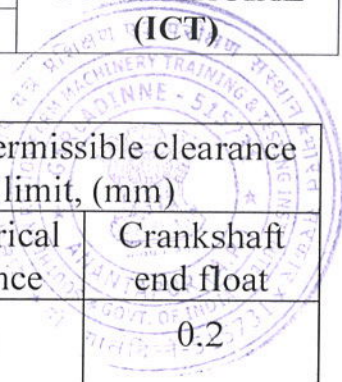
Month / Year of release : September, 2024

- 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 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 Brush Cutter named “ **DOUBLE EAGLE, DE-175 BRUSH CUTTER**”. This report is valid up to **31.08.2031, 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	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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Main bearings:

Bearing No.	Type of bearings	Diametrical clearance, (mm)	Crankshaft end float, (mm)	Max. permissible clearance limit, (mm)	
				Diametrical clearance	Crankshaft end float
1.	Ball bearing	NA	0.13	NA	0.2
2.	Ball bearing	NA			

Big end bearings:

Bearing No.	Clearance, (mm)		Max. permissible clearance limit, (mm)	
	Diametrical	Axial	Diametrical	Axial
1.	--	0.16	0.13	0.40

15.2 Clutch:
No noticeably defects found.

15.3 Transmission system:
All the gears of the transmission system were found in normal working condition.

16. COMMENTS & RECOMMENDATIONS

16.1 The maximum power was observed as 1.45 kW under natural ambient condition against the declared value of 1.45 kW.

16.2 The safety provisions, as mentioned at **Para 5.14**, have been provided by the applicant for safety aspect of operators.

16.3 Noise measurement:
Max. Noise at operator's ear level was observed as 100 dB (A), which is on higher side, therefore suitable corrective action should be taken to reduce the noise level.

16.4 Mechanical vibration:
The equivalent mechanical vibration on engine cover was observed to the extent of 368 micron. This should be looked into for dampening the vibration.



16.5 A fuel on/off knob may be considered for providing in the fuel system of engine.

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16.6 Adequacy of literature supplied with the machine:

The Operator's manual cum parts catalogue of brush cutter and engine in English was supplied with the brush cutter for reference during the test. It is however, recommended that same may be revised and brought out as per IS: 8132- 1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY

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



17. APPLICANT COMMENTS

Reference No.	Comments
16.3 & 16.4	We will inform it to our manufacturer for making necessary possible changes in the machine.
16.6	We will brought out the literature as per IS 8132:1999 (Reaffirmed 2004).