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

संख्या/No: Machine-743/1846

माह/Month: March, 2025

THIS TEST REPORT IS VALID UP TO 29.02.2032



NIKKO JAPAN, NJMBC-HW243P 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

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NIKKO JAPAN, NJMBC-HW243P BRUSH CUTTER

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COMMERCIAI (ICT)

Manufacturer, (apa)

M/s. JJ POWER TOOLS, Noori Complex,

Chiravkku, Taliparamba, Kannur, Kerala

670141

Name of Applicant

The Manufacturer

NIKKO JAPAN, NJMBC-HW243P BRUSH CUTTER

Report No.: Machine-743/1846 Month: March Year: 2025



Government of India
Ministry of Agriculture and Farmers Welfare
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COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: February, 2025

Test Report No.

Machine-743/1846

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 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 Brush Cutter named "NIKKO JAPAN, NJMBC-HW243P BRUSH CUTTER". 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	$100 \text{ kPa} = 10 \text{ N/cm}^2$	
	1 mm of Hg	1.3332 m-bar	

NIKKO JAPAN, NJMBC-HW243P BRUSH CUTTER THIS REPORT IS VALID UP TO 29.02.2032

COMMERCIAL (ICT)

17. COMMENTS & RECOMMENDATIONS

The maximum power was observed as 1.37 kW under natural ambient condition against the declared value of 1.45 kW.

- 17.2 The safety provisions, as mentioned at **Para 5.14**, have been provided by the applicant for safety aspect of operators.
- 17.3 A fuel on/off knob may be considered for providing in the fuel system of engine.

17.4 Noise measurement:

Max. Noise at operator's ear level was observed as 97 dB (A), which is on higher side, therefore suitable corrective action should be taken to reduce the noise level.

17.5 Mechanical vibration:

The equivalent mechanical vibration on engine cover was observed to the extent of 152 micron. This should be looked into for dampening the vibration.

17.6 Chemical analysis:

The chemical analysis of Straight blade (2 teeth) and Circular disc are not as per requirement of the relevant code IS 6025:1982 (Reaffirmed 1999) & therefore it should be looked into for the corrective action.

17.7 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, interlaid, the following must be provided:

- i) Rated rpm
- ii) Specific fuel consumption, (g/kWh)

17.8 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.

NIKKO JAPAN, NJMBC-HW243P BRUSH CUTTER THIS REPORT IS VALID UP TO 29.02.2032

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV
AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE
DIRECTOR

18. APPLICANT'S COMMENTS

Sl. No.	Para No.	Comments
1	17.1	We will improve it.
2	17.3	We will keep in our mind while improving the product.
3	17.4	We will reduce the noise levels in our improved product.
4	17.5	We will improve the vibration on the engine.
5	17.6	We will change the material used in the circular disc.
6	17.7	We will improve it.
7	17.8	We will improve our operator manual and parts catalogue as per Is 8132:1999 (Reaffirmed 2004).