व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

COMMERCIAL TEST REPORT (INITIAL)

संख्या/No: H&TH/SRFMTTI, ANANTAPUR/2025-26/16/16/1902

माह/Month: August, 2025

THIS TEST REPORT IS VALID UPTO 31.07.2032



NAGA AGRITECH, Unicorn Nato-BC-300 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 ट्रैक्टर नगर, गार्लदिन्ने-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/

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E-mail: fmti-sr@nic.in

NAGA AGRITECH, UnicornNato-BC-300 BRUSH CUTTER

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COMMERCIA (ICT)

Manufacturer, (apa)

M/s. Chongqing Diligence General Machinery Co. Ltd., Building 1 No.1 Kangchao Road, Huaxi Banan, District

Chongqing, China.

Name of Applicant

M/s. NAGA AGRITECH,

No.354/8, Vishweswarapura village, Kempalinganahalli Service Road, Kunigal Bypass, Nelamangala Taluk, Bengaluru rural

District, Karnataka 562123.

NAGA AGRITECH, UnicornNato-BC-300 BRUSH CUTTER

Report no.: H&TH/SRFMTTI, ANANTAPUR/2025-26/16/16/1902

Month: August Year: 2025



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.)

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

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NAGA AGRITECH, UnicornNato-BC-300 BRUSH CUTTER

THIS TEST REPORT IS VALID UP TO 31.07.2032

COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

December, 2024 to January, 2025

A delay of six months was incurred due to non-

submission of comments by the applicant.

Test Report No.

H&TH/SRFMTTI, ANANTAPUR/2025-26/16/16/1902

Month / Year of release

: August, 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 name "NAGA AGRITECH, UNICORN NATO-BC-300 BRUSH CUTTER". This report is valid up to 31.07.2032, 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	ire		
	1 psi	6.895 kPa		
	1 kgf/cm ²	98.067 kPa = 735.56 mm of Hg		
1.3	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$		
	1 mm of Hg	1.3332 m-bar		

NAGA AGRITECH, UnicornNato-BC-300 BRUSH CUTTER

THIS TEST REPORT IS VALID UP TO 31.07.2032

COMMERCIAL (ICT)

1	E S Wall Co. 2	. 3	4	5
29	Marking/labelling of	The labeling plate should		
	machine	be riveted on the body of		
		the machine having		
		name and address of	Address of the	
		manufacturer &	manufacturer,	Does not
		applicant, country of	country of the	conform
		origin, make, model,	origin, not	Comoini
		year of manufacturer,	provided	
	* * *	serial number, engine		19
	5	number, engine HP,	*	
		rated rpm & SFC		
30	Literature	Operator manual, service		
		manual and parts	Provided	Conforms
		catalogue should be	riovided	Comornis
		provided		

17. COMMENTS & RECOMMENDATIONS

- 17.1 The maximum power was observed as 0.87 kW under natural ambient condition against the declared value of 0.90 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 The equivalent mechanical vibration on engine cover was observed to the extent of 169 micron. This should be looked into for dampening the vibration.
- 17.4 A fuel on/off knob may be considered for providing in the fuel system of engine.

17.5 Chemical analysis:

The chemical composition of Circular Disc blade is not as per requirement of the relevant code IS 6690:1981 (Reaffirmed 2012) & therefore it should be looked into for the corrective action.

17.6 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) Address of manufacturer
- ii) Country of origin

17.7 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 personnels.

SOUTHERN REGION FARM MACHINERY TRAINING & TESTING INSTITUT	E,
ANANTAPUR (A.P.)	

NAGA AGRITECH, UnicornNato-BC-300 BRUSH CUTTER

THIS TEST REPORT IS VALID UP TO 31.07.2032

COMMERCIAL (ICT)

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

Amamm

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. P.P.RAO DIRECTOR

18. APPLICANT'S COMMENTS

Reference	Applicant's comments	
17.3	We will take corrective action in future production.	
17.4	We will check with the design engineer on possibility of providing	
	ON/OFF Knob to the engine.	
17.5	We will take corrective action in future productions.	
17.6	Suitable labeling plate covering with all essential components will be	
3	taken care in the future productions along with manufacturer and	
ş*	country of origin details will be mentioned in the name plate.	
17.7	We will take corrective action as per IS standard. we will make the	
2	product literature available in all the regional languages in future	
	productions.	