

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)

COMMERCIAL TEST REPORT (INITIAL)

संख्या/No: Machine-734/1836

माह/Month: February, 2025

* THIS TEST REPORT IS VALID UPTO 31.01.2032



NAGA AGRITECH, NATO 600 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- 734/1836	NAGA AGRITECH, NATO 600 POWER WEEDER THIS TEST REPORT IS VALID UP TO 31.01.2032	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s. Chongqing Diligence General Machinery Co. Ltd., Building 1 No.1 Kangchao Road, Huaxi Banan, District Chongqing, **China**.

Applicant : M/s. Naga Agritech, No.354/8, Kempalinganahalli, Service Road, Kunigal Bypass, Nelamangala-Taluk, Bengaluru rural - District, Karnataka-562123.

NAGA AGRITECH, NATO 600 POWER WEEDER

Report no.: **Machine-734/1836**

Month: **February**

Year: **2025**

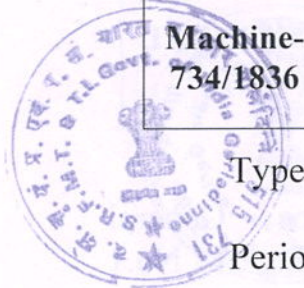


सत्यमेव जयते

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Machine- 734/1836	NAGA AGRITECH, NATO 600 POWER WEEDER	COMMERCIAL (ICT)
	THIS TEST REPORT IS VALID UP TO 31.01.2032	

Type of test : COMMERCIAL (ICT)

Period of test : December, 2024 to January, 2025

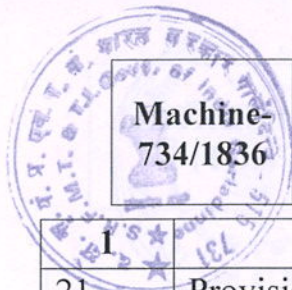
Test Report No. : Machine-734/1836

Month / Year of release : February, 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 Power Weeder named “**NAGA AGRITECH, NATO 600 POWER WEEDER**”. This report is valid up to **31.01.2032**, 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



**Machine-
734/1836**

**NAGA AGRITECH, NATO 600
POWER WEEDER**

THIS TEST REPORT IS VALID UP TO 31.01.2032


**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 mud & 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	Name and address of manufacturer, Country of origin, SFC are not provided.	Does not conform
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 4.62 kW under natural ambient condition against the declared value of 4.6 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 421 g/kWh against the declared value of 320 g/kWh.
- 18.1.3 Back up torque of engine was observed as 7.04 % against declared value of 10%.
- 18.1.4 Max. torque was observed as 13.07 Nm against the declared value of 15 Nm.

Machine- 734/1836	NAGA AGRITECH, NATO 600 POWER WEEDER	
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18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 380 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Air cleaner oil pullover:

The percentage of air cleaner oil pull over power weeder tilted 15° laterally on LHS was recorded as 0.55 % against the declaration of 0.20 %. The percentage of air cleaner oil pull over was considered very high at aforesaid position and this should be looked into for corrective action.

18.4 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.

18.5 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, interlaid, the following must be provided:

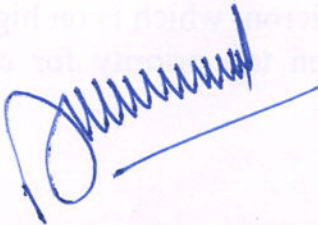
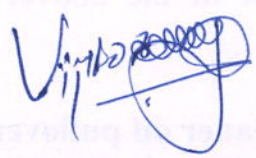

- i) Address of the manufacturer
- ii) Country of origin
- iii) Specific fuel consumption (g/kWh)

18.6 Technical literature:

User's manual, service catalogue, warranty certificate and parts catalogue of power weeder was provided for reference during the test. It is However, the same must be brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the guidance of users.

Machine- 734/1836	NAGA AGRITECH, NATO 600 POWER WEEDER	COMMERCIAL (ICT)
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TESTING AUTHORITY

 Er. PRAMOD YADAV AGRICULTURAL ENGINEER	 Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER
 Dr. B.M. NANDEDE DIRECTOR	



19. APPLICANT COMMENTS

Sl. No.	Para No.	Comments
1	18.2	We will take corrective action in future productions.
2	18.3	We will take corrective action as per IS 6690:1981(Reaffirmed 2022).
3	18.4	We will take corrective action in future productions.
4	18.5	suitable labeling plate covering with all essential components will be taken care in the future productions.
5	18.6	We will take corrective action as per IS standard. we will make the product literature available in all the regional languages.