

प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट

INITIAL COMMERCIAL TEST REPORT

THIS TEST REPORT VALID UP TO

:

संख्या/No. CSIR/CMERI/FMTTC/2024/043

माह/Month: September, 2024

31st AUGUST, 2031



**NIPHA POWER WEEDER
(MODEL: NIPHA 105 GG)**



कृषि मशीनरी प्रशिक्षण और परीक्षण केंद्र

Farm Machinery Training and Testing Centre

सीएसआईआर- केन्द्रीय यांत्रिक अभियांत्रिकी अनुसंधान संस्थान

CSIR - Central Mechanical Engineering Research Institute

महात्मा गांधी एवेन्यू, दुर्गापुर

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CSIR/CMERI/FMTTC/2024/043	NIPHA POWER WEEDER (MODEL - NIPHA 105 GG) (INITIAL COMMERCIAL TEST)
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Name of Machine : Petrol Engine Operated Power Weeder

Type : Self-propelled, Walk Behind

Make : Nipha India Pvt. Ltd.

Model : NIPHA 105 GG

Name and address of Manufacturer : Nipha India Pvt. Ltd.
48, Ganga Jamuna, 28/1 Shakespeare Sarani,
Kolkata – 700017

Name and address of Applicant : Nipha India Pvt. Ltd.
48, Ganga Jamuna, 28/1 Shakespeare Sarani,
Kolkata – 700017

Test Conducted at : Farm Machinery Training and Testing Centre
CSIR - Central Mechanical Engineering
Research Institute, M G Avenue, Durgapur,
Pin – 713209, West Bengal.

THIS TEST REPORT IS VALID UP TO: 31ST AUGUST, 2031
[vide DAC&FW OM No. 13-22/2020- M&T (I&P) dated 12.12.2023]



Report No.: CSIR/CMERI/FMTTC/2024/043 **Month:** September **Year:** 2024

**CSIR - Central Mechanical Engineering Research Institute,
Durgapur - 713209
(W.B.), INDIA**

Report prepared by

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Report verified by
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15 CRITICAL TECHNICAL SPECIFICATIONS

Vide ministry's letter no. 13-9/2019- M&T (I&P)- Part dated 26.04.2019 and F. No. 9-4/2019 M&T (I&P) dated 20.08.2019

Sl. No.	Parameters	Specifications	Observed	Remarks
1.	Type	Self-propelled, walk behind	Self - propelled, walk behind	Conforms
2.	Working width, mm	300-1500	1200	Conforms
3.	Type of engine	Compression/ Spark ignition	Spark ignition	Conforms
4.	Starting method	Manual/ recoil/ self-starting	Recoil	Conforms
5.	Type of clutch	Dry/ Wet	Wet	Conforms
6.	Type of primary gear box	Sliding/constant mesh or combination of both	Sliding mesh	Conforms
7.	Type of secondary gear box	Gear type, chain & sprocket Type	Gear type	Conforms
8.	Material for rotor shaft	SAE 1045 (CRS) / EN8 / EN9	Mild Steel	Does not Confirm
9.	No. of flanges	4 – 10	8	Conforms
10.	Types of flanges	Square/ circular/ rectangular	Square	Conforms
11.	Distance between consecutive flanges, mm	80 to 150	129.3	Conforms
12.	No. of blades in each flange	3 - 6	04	Conforms
13.	No. of rotor blade	12 (min.)	32	Conforms
14.	Thickness of rotor blade (mm)	5 (min.)	5.3	Conforms
15.	Material of blade	Boron (28MnCrB5) / High carbon steel EN 42	High carbon steel	Conforms
16.	Hardness of Blade, HRC	38 (min.)	48.6	Conforms
17.	Shape of rotor blade	C / J shape	J shape	Conforms
18.	Provision for handle height Adjustment	Must be provided	Provided	Conforms
19.	Provision for handle Rotation	Must be provided	Provided	Conforms
20.	Provision for emergency stop of engine	Must be provided	Provided	Conforms
21.	Provision for easy start of Engine	Must be provided	Provided	Conforms
22.	Provision for shield/cover to prevent flying of mud & stone from rotor	Must be provided	Provided	Conforms
23.	Depth control mechanism	Must be provided	Provided	Conforms

CSIR/CMERI/FMTTC/2024/043	NIPHA POWER WEEDER (MODEL - NIPHA 105 GG) (INITIAL COMMERCIAL TEST)
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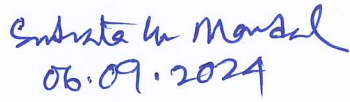
17 TECHNICAL LITERATURE

The following literatures are provided by the applicant during the test along with the application form.

- a) User's or service manual
- b) Parts' catalogue

These manuals need to be updated as per IS: 8132-1999.

TESTING AUTHORITY

Report Prepared by	Sr. Technical Officer, CSIR-CMERI Farm Machinery Testing Centre	 06/09/2024
Report Verified & Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	 06.09.2024
Report Approved for release by	Head, Business Development Unit, CSIR-CMERI, Durgapur	 06/9/24


18 APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's Comments
18	16.1 to 16.5	As soon as possible we will comply with all your recommendations as stated in the DTR



Farm Machinery Training and Testing Centre, CSIR-Central Mechanical Engineering Research Institute, Durgapur THIS REPORT IS VALID UPTO: 31st AUGUST 2031	26 of 27
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Report prepared by



Report verified by
