

प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट
INITIAL COMMERCIAL TEST REPORT

संख्या/No. CSIR/CMERI/FMTTC/2024/045

माह/Month: , September 2024

THIS TEST REPORT VALID UP TO

:

31st August, 2031



**HANNI GREENTECH
POWER WEEDER (MODEL: HGP 170 CHETAK)**



सत्यमेव जयते
Government Of India



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
Mahatma Gandhi Avenue, Durgapur
पश्चिम बंगाल - 713209
West Bengal - 713209
Website: <https://cmeri.res.in>

E-mail: fmttc.cmeri@gmail.com

Telephone: 9434592007 / 7001361295

Fax: +91-343-2546745

CSIR/CMERI/FMTTC/2024/045	HANNI GREENTECH POWER WEEDER (MODEL: HGP 170 CHETAK) (INITIAL COMMERCIAL TEST)
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Name of Machine : Power Weeder
Type : Self-propelled, Walk Behind
Make : Hanni Greentech
Model : HGP-170 Chetak
Name and address of Manufacturer : Hanni Greentech
Industrial Area, Citi Complex,
Bishnupur, Guwahati, Assam: 781016
Name and address of Applicant : Hanni Greentech
Industrial Area, Citi Complex,
Bishnupur, Guwahati, Assam: 781016
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/2024/045 **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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4 SPECIFICATIONS

4.1 General

Type of machine	:	Self-Propelled, Walk Behind Type
Make	:	Hanni Greentech
Model	:	HGP 170 Chetak
Serial No.	:	0004
Name and address of manufacturer	:	Hanni Greentech Industrial Area, Citi Complex, Bishnupur, Guwahati, Assam: 781016
Year of manufacture	:	2023
Country of origin	:	India

4.2 Details of prime mover

Name and address of manufacturer	:	Hanni Greentech Industrial Area, Citi Complex, Bishnupur, Guwahati, Assam: 781016
Type	:	Single Cylinder, Air Cooled, 4 Stroke, OHV, Spark Ignition Engine.
Make	:	Hanni Greentech
Model	:	170F
Sr. No.	:	A2311017485
Country of origin	:	India
Year of manufacture	:	2024 – 25
Engine speed (Manufacturer's recommended setting), (rpm)		
High idle speed*	:	4100 ± 50
Low idle speed*	:	1600 ± 50
Rated speed, (rpm)*	:	3600
No load engine speed for field operation, (rpm)	:	3900 ± 100
Speed at maximum torque, rpm	:	2942
Max Torque Observed (Nm)	:	11.5 @ 2942 rpm
Rated Power Observed (kW)	:	4.0 (5.36 HP)
Max Power Observed (kW)	:	4.0 (5.36 HP)

Report prepared by

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Report verified by

[Signature]

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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	1155	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	08	Conforms
10.	Types of flanges	Square/ circular/ rectangular	Square	Conforms
11.	Distance between consecutive flanges, mm	80 to 150	120	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.)	6.0	Conforms
15.	Material of blade	Boron (28MnCrB5) / High carbon steel EN 42	Mild Steel	Does not Confirm
16.	Hardness of Blade, HRC	38 (min.)	54.3	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	Not Provided	Does not Confirm
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
24.	Provision for transport Wheels	Must be provided	Provided	Conforms

Report prepared by *J. S. J.* Report verified by *Subhojit Kumar Mandal*

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17 TECHNICAL LITERATURE

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

- User's manual book
- Parts' catalogue
- Service manual

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

TESTING AUTHORITY

Report Prepared by	Sr. Technical Officer, CSIR-CMERI Farm Machinery Testing Centre	<i>Jalal</i> 12/09/2024
Report Verified & Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	<i>Subrata Kumar Mandal</i> 12/9/2024
Report Approved for release by	Head, Business Development Unit, CSIR-CMERI, Durgapur	<i>T. M. Mandal</i> 12/09/24

18 APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's Comments
18	16.1 to 16.6	We will take necessary step with your recommendation in future production.



Report prepared by

Jalal

Report verified by

Subrata Kumar Mandal

Farm Machinery Training and Testing Centre, CSIR-Central Mechanical Engineering Research Institute, Durgapur THIS REPORT IS VALID UPTO: 31 st August 2031	24 of 25
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