

प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट
INITIAL COMMERCIAL TEST REPORT

संख्या/No. CSIR/CMERI/FMTTC/2025/007
माह/Month: January 2025

THIS TEST REPORT VALID UP TO : 31st December, 2031



**HANNI GREENTECH
POWER REAPER (MODEL: HG – 120A)**



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

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CSIR/CMERI/FMTTC/2025/007

**HANNI GREENTECH
POWER REAPER
(MODEL NO. – HG – 120A)
(INITIAL COMMERCIAL TEST)**

Name of Machine : Power Reaper
Type : Self-Propelled, walk behind
Make : Hanni Greentech
Model : HG – 120A
Name and address of Manufacturer : M/s. Hanni Greentech
Floor No. /Building no. Ward 2, Old Delhi
Road, Dankuni, Dist:- Hooghly, Pin:-
712310, West Bengal
Name and address of Applicant : M/s. Hanni Greentech
Floor No. /Building no. Ward 2, Old Delhi
Road, Dankuni, Dist:- Hooghly, Pin:-
712310, West Bengal
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 December, 2031
[vide DAC&FW OM No. 13-22/2020- M&T (I&P) dated 12.12.2023]



Report No.: CSIR/CMERI/FMTTC/2025/007

Month: January

Year: 2025

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

Report prepared by

Jehel

Report verified by

Subrata Kr Mandal

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

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Type of Test : Initial Commercial Test
 Period of Test : December 2024 to January 2025
 Test Report No. : CSIR/CMERI/FMTTC/2025/007
 Month and Year : January 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 pertains to the particular machine submitted by the applicant for test.
- iii. The results presented in this report do not in any way attribute to durability of the machine.
- iv. The report should not be reproduced in part or full without prior permission of the Director, CSIR- Central Mechanical Engineering Research Institute, M G Avenue, Durgapur -713209 (West Bengal)
- v. This test report is not covered under BIS Certification. Therefore, the manufacturers cannot market the machine with ISI mark, only on the strength of this report.
- vi. This report cannot be used for legal purposes.

SELECTED CONVERSIONS

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

3. Pressure

1 psi = 6.895 kPa
 1 kgf/sq.cm = 98.067 kPa
 = 735.56 mm of Hg
 1 bar = 100 kPa
 = 10 N/sq.cm.
 1 mm of Hg = 1.3333 m-bar

4. Area

1 ha = 10000m²
 = 2.471 Acres

Report prepared by

Jhel

Report verified by

Subrata kr Mandal

4 SPECIFICATIONS

4.1 General

Name of machine	:	Power Reaper
Type of machine	:	Self-Propelled, walk behind
Make	:	Hanni Greentech
Model	:	HG – 120A
Serial No.	:	2410070
Name and address of manufacturer	:	M/s. Hanni Greentech Floor No. /Building no. Ward 2, Old Delhi Road, Dankuni, Dist:- Hooghly, Pin:- 712310, West Bengal
Year of manufacture	:	2024
Country of origin	:	India
Recommended crop	:	Paddy, Mustard.

4.2 Details of prime mover

Name and address of manufacturer*	:	Hanni Greentech Industrial Area, Citi Complex, Bishnupur, Guwahati, Assam: 781016
Type	:	Petrol Engine 4 Stroke.
Make	:	Hanni Greentech
Model	:	170F
Sr. No.	:	Not Specified
Country of origin	:	Not Specified
Year of manufacture	:	2023
Engine speed (Manufacturer's recommended setting), (rpm)*	:	
High idle speed	:	3500 ± 50
Low idle speed	:	1800 ± 50
Rated speed, (rpm)*	:	3600 ± 50
No load engine speed for field operation, (rpm)*	:	3550
Speed at maximum torque, rpm*	:	3600 ± 100
Max Torque (Nm)*	:	11
Rated Power (kW)*	:	4
Max Power (kW)*	:	4.5

*As per specification sheet provided by applicant

Report prepared by

[Signature]

Report verified by
[Signature]

16 COMMENTS & RECOMMENDATION

- 16.1 The dimensions of the knife section and the knife back section do not conform to IS standards. It should be looked into.
- 16.2 The amplitude of mechanical vibration marked as (*) under section 7, are on higher side. It is not just directly concerned with operator's health, safety and comfort, but also adversely affects the useful life of the components. It needs to be corrected.
- 16.3 The noise level of this machine at By-stander's position and operator's ear level is higher than recommended. It should be looked into.
- 16.4 The user's manual, parts catalogue and service manual are provided. But it needs to be updated as per IS: 8132-1999.
- 16.5 Chemical analysis and Hardness of the knife blades does not confirm with the requirement as per IS standard. It should be looked into.
- 16.6 One labelling plate is riveted on the machine. It should be updated as per BIS standard.

Report prepared by



Report verified by



CSIR/CMERI/FMTTC/2025/007	HANNI GREENTECH POWER REAPER (MODEL NO. – HG – 120A) (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 manual book
- b) Parts' catalogue
- c) Service manual

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	<i>Jalal</i> 20/01/2025
Report Approved by	In-Charge, CSIR-CMERI Farm Machinery Training & Testing Centre	<i>Sudipta Kumar Mandal</i> 20/01/2025
Report Approved for release by	Head, Business Development Unit, CSIR-CMERI, Durgapur	<i>Sudip Samanta</i> 20/1/25

18 APPLICANT'S COMMENTS

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

