



NIPHA 105D POWER WEEDER



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि, सहकारिता एवं किसान कल्याण विभाग

Department of Agriculture, Cooperation 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 (आ. प्र.)

Tractor Nagar, Garlandinne-515 731, District: Anantapur (A.P.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

Website: <http://srfmtti.dacnet.nic.in/>

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Tele.: 08551-286441

Machine-425/1369	NIPHA 105D POWER WEEDER	COMMERCIAL (ICT)
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Name and address of Assembler : M/S. Nipha India Pvt Ltd, 48, Ganga Jumuna, 28/1, Shakepeare Sarani Kolkata 7000017, India

Applicant : M/S. Nipha India Pvt Ltd, 48, Ganga Jumuna, 28/1, Shakepeare Sarani Kolkata 7000017, India

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Report No. : **Machine-425/1369**

Month: **April**

Year: **2022**



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17. COMMENTS & RECOMMENDATIONS

17.1 Engine Performance:

- 17.1.1 The maximum power and rated power were observed as 4.1 kW & 1.8 kW under natural ambient condition against the declared value of 4.5 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 705 g/kWh against the declared value of 350g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 12.89 Nm against the declared value of 18 Nm.
- 17.1.4 Back up torque of engine was observed as 9.98 %, against the declared value of 12%. This should be looked into for corrective action.
- 17.2 Max. Noise at operator's ear level was observed as 95 dB (A),
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 360 microns, which is on higher side therefore corrective action to read the vibration should be taken .
- 17.4 The hardness of rotary blades do not conform to the requirement of IS 6690:1981 (Reaffirmed 2017). This should be looked into for corrective action.
- 17.5 Chemical composition of rotary blade is not as per the requirement of IS 6690:1981 (Reaffirmed 2017). This should be looked into for corrective action.
- 17.6 Air cleaner oil pull over was observed as Nil to 0.90%. Which was on higher side, Therefore this should be looked into for corrective action.
- 17.7 The provided labeling plate should be as per the requirement of the IS.

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17.7 Technical literature:

Users manual and parts catalogs of power weeder were supplied with test sample for reference during the test. It is however, recommended that same may be revised and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed: 2019) for the sake of user & technical personnel.

TESTING AUTHORITY:

B.N.DIXIT AGRICULTURAL ENGINEER	
P. C. MESHARAM SENIOR AGRICULTURAL ENGINEER	
Dr. P. P. RAO DIRECTOR	

18. APPLICANTS COMMENTS

We have noted all the points and will take necessary corrective action to meet the desired parameters