



NIPHA 100GG 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 (आ. प्र.)

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

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Tele. 08551-286441

Machine-427/1372	NIPHA 100GG POWER WEEDER	COMMERCIAL (ICT)
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Name and address of assembler : M/S. Nipha India Pvt Ltd,
48, Ganga Jamuna, 28/1 Shakespeare
Sarani Kolkata 700017, India

Applicant : M/S. Nipha India Pvt Ltd,
48, Ganga Jamuna, 28/1 Shakespeare
Sarani Kolkata 700017, India

NIPHA 100GG POWER WEEDER

Report No. : **Machine-427/1372**

Month: **May**

Year: **2022**



सत्यमेव जयते

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17. COMMENTS & RECOMMENDATIONS

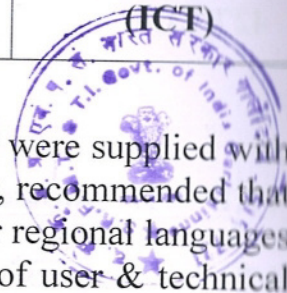
17.1 Engine Performance:

- 17.1.1 The maximum power and rated power were observed as 3.4&1.2 kW respectively under natural ambient condition against the declared value of 4.2 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 450 g/kWh against the declared value of 400g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 10.27 Nm against the declared value of 12.5 Nm.
- 17.1.4 Back up torque of engine was observed as 2.29 %, against the declared value of 8%.
- 17.2 Max. Noise at operator's ear level was observed as 93 dB (A), which on higher side therefore necessary corrective action should be taken.
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 315 microns, which is on higher side therefore corrective action to reduce 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 2019). This should be looked into for corrective action.
- 17.6 The percentage of air cleaner oil pull was during air cleaner oil pull over test power weeder was observed as from Nil to 1.34% this should be looked into corrective action.
- 17.7 The provided labeling plate is not as per the requirement of the IS.



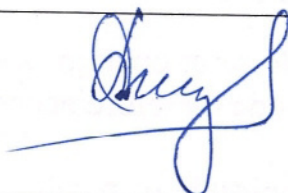
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17.8 Technical literature:

Operators 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 2004) for the sake of user & technical personnel.



TESTING AUTHORITY:

B.N.DIXIT AGRICULTURAL ENGINEER	
P.KAMALABAI SENIOR AGRICULTURAL ENGINEER	
K.K. NAGLE DIRECTOR	

18. APPLICANTS COMMENTS

We have observed all the valuable comments and we will do the needful to meet the discrepancies to make the machine more efficient

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