



**NIPHA 135D 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, Garladinne-515 731, District: Anantapur (A.P.)**

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Tele.: 08551-286441

<b>Machine-422/1366</b>	<b>NIPHA 135D POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
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Name and address of assembler : M/S. Nipha India Pvt Ltd,  
48, Ganga Jamuna, 28/1 Shakespeare Sarani  
Kolkata 7000017, India

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

### **NIPHA 135D POWER WEEDER**

Report No. : **Machine-422/1366**

Month: **April**

Year: **2022**



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## 17. COMMENTS & RECOMMENDATIONS

### 17.1 Engine Performance:



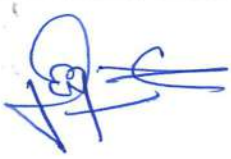

- 17.1.1 The maximum power and rated power were observed as 6.7 kW under natural ambient condition against the declared value of 6.0 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 598 g/kWh against the declared value of 350g/kWh. This should be looked into for corrective action.
- 17.1.3 Max. Torque was observed as 21.47Nm against the declared value of 18 Nm.
- 17.1.4 Back up torque of engine was observed as 17.90 %, against the declared value of 12%.
- 17.2 Max. Noise at operator's ear level was observed as 108 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 317 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 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 1.24 to 1.67% this should be looked into corrective action.
- 17.7 The provided labeling plate should be 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. C. MESHARAM SENIOR AGRICULTURAL ENGINEER		
Dr. P. P. RAO DIRECTOR		

### 18. APPLICANTS COMMENTS

Para No.	Our Ref. No.	Applicants comments
18.1	17.1.2	With consultation and technical expertise of the manufacturer of prime mover , we will take necessary corrective action
18.2	17.2	We will take corrective action as suggested
18.3	17.3	We will introduce anti vibration pad and gasket on the handle bar joints to reduce the vibration and operator comfort
18.4	17.4	We will correct it
18.5	17.5	We will correct it
18.6	17.6	We will take corrective action as suggested
18.7	17.7	We will do the same from the next production