



**e-AGROCARE SHAURYA 732 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

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

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<b>Machine- 321/1094</b>	<b>e-AGROCARE SHAURYA 732 POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
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Manufacturer : e-AgroCare Machineries & Equipments Pvt.  
Ltd., D- 45, Shendra MIDC,  
Aurangabad- 431 154,  
Maharashtra, **India.**

Applicant : The manufacturer

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Report No. : Machine-321/1094 Month: November

Year: 2019



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## **17. COMMENTS & RECOMMENDATIONS**

### **17.1 Engine Performance:**

17.1.1 The maximum power and rated power were observed as 7.3 & 7.2 kW respectively under natural ambient condition against the declared value of 6.8 kW.

17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 245 g/kWh against the declared value of 290 g/kWh.

17.1.3 Max. Torque was observed as 20.16 Nm against the declared value of 21 Nm.

17.1.4 Back up torque of engine was observed as 7.52 %, against the declared value of 10%.

**17.2** Max. Noise at operator's ear level was observed as 95 dB (A), which is on higher side against the limit of ILO. This should be looked into for corrective action.

**17.3** The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed to the maximum extent of 462 microns, Which is directly concerned with Operator's Health, Safety and Comfort. Besides, it also adversely affect the useful life of the components. In view of the above, this should be taken care for corrective action.

**17.4** The hardness of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.

**17.5** All the constituents except carbon content of chemical composition of rotary blades conforms to the requirement of IS 6690:1981 (reaffirmed 2012). This should be looked into for corrective action.

**17.6** Labeling plate provided should be as per the requirement of IS.

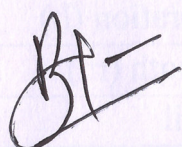



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### 17.7 Technical literature:

The Operation & service manual and parts catalogue of power weeder and engine were supplied with the test sample for reference during the test. It is however, recommended that same may be revised and bought 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	
Dr. P.P. RAO DIRECTOR	

### 18. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
18.1	17.1.4	The suggestion is noted and we will inform the engine manufacture to improve it.
18.2	17.2	We will make some necessary changes to reduce noise level in our future production.
18.3	17.3	We will make some necessary changes to reduce vibration in our future production.
18.4	17.4	The suggestion is noted and we will take corrective action to improve the hardness of blades to confirm to required standards.
18.5	17.5	The suggestion is noted and we will change the blade material to conform to required standards.
18.6	17.6	Labeling will be done as per required IS standards
18.7	17.7	The literature will be revised and bought out in Hindi & other regional languages as per IS 8132:1999 (reaffirmed 2004) for the sake of user & technical personnel.