



**MHASWADKAR BAM 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

ट्रैक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.)

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

**[An ISO 9001:2015 CERTIFIED INSTITUTE]**

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<b>Machine-349/1165</b>	<b>MHASWADKAR BAM 732 POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
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Manufacturer : M/s. Zhejiang Pacesetter Power & Machine Co. Ltd., No.7, Weiliu West Road, Hardware Industrial Zone, Tongqin Town, Wuyi, Zhejiang, **China**

Applicant : M/s. Mhaswadkar Autolines Pvt. Ltd., 283/3/1B, Karanje, New Radhika Road, Near Market Yard, Satara - 415 001, Maharashtra, **India.**

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Report No. : Machine-349/1165

Month: June

Year: 2020



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<b>Valve, guides and timing gears:</b>	<b>Observation</b>
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Any marked sign of overheating of valves	:	None
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Pitting of seat/faces of valves	:	None
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Any visual damage to the teeth of timing gears	:	None
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Clearance between valve guide and valve stem (mm)	:	
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- Intake valve	:	0.10 ± 0.03
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- Exhaust valve	:	0.15 ± 0.03
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**16.3 Transmission gears:**

All the Gears and sprockets of the transmission system were found in normal working condition.

**16.4 Rotary drive unit:**

The rotary drive unit was dismantled and all the components were found in normal working condition.

### 17. COMMENTS & RECOMMENDATIONS

**17.1 Engine Performance:**

17.1.1 The maximum power and rated power were observed as 6.7 & 6.6 kW respectively under natural ambient condition against the declared value of 5.2 & 5.1 kW respectively.

17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 255 g/kWh against the declared value of 295 g/kWh.

17.1.3 Max. Torque was observed as 21.80 Nm against the declared value of 16.5 Nm.

17.1.4 Back up torque of engine was observed as 4.5 %, against the declared value of 11%. This should be looked into for corrective action.

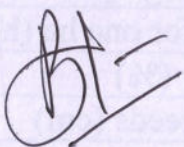
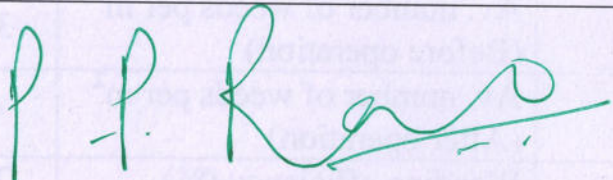
**17.2** Max. Noise at operator's ear level was observed as 94 dB (A). Which is on higher side as per ILO.



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- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed to the maximum extent of 486 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 conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).
- 17.5 All the constituents of chemical composition of rotary blades conforms to the requirement of IS 6690:1981 (reaffirmed 2012).
- 17.6 The provided labeling plate should be as per the requirement IS.
- 17.7 **Technical literature:**  
Owner's manual and parts catalogue of power weeder and engine in separate booklets 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
18.2	17.2	We will look into it regarding this matter
18.3	17.3	We will look into for reducing the mechanical vibration in future products
18.5	17.6	Point is noted and will try to implement for further
18.6	17.7	We will brought out the literature as per your recommendation