



OLEO-MAC-OM-MH 180 RK 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.)

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Tele./FAX: 08551-286441

Machine-355/1175	OLEO-MAC-OM-MH 180 RK POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer : M/s. Emak Spa,
Member of Yama Group Via Fermi,
42011, Bagnola In Piano, **Italy**

Applicant : M/s. Ratnagiri Impex Pvt. Ltd.,
Annapurna House, #1/1G 7th Cross,
New Guddadahalli, Mysore Road,
Bangalore-5600 26, Karnataka, **India.**

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Report No. : Machine-355/1175 Month: June Year: 2020



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16. COMMENTS & RECOMMENDATIONS

16.1 Engine performance:

- 16.1.1 The maximum power and rated power were observed as 3.1 & 2.7 kW under natural ambient condition against the declared value of 4.2 & 3.4 kW respectively.
- 16.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 437 g/kWh against the declared value of 395 g/kWh.
- 16.1.3 Max. Torque was observed as 8.40 Nm against the declared value of 10.5 Nm.
- 16.1.4 Back up torque of engine was observed as 2.82 % against the declared value of 7.8 %. This should be looked into for corrective action.
- 16.1.5 **During varying speed test of engine at both natural & high ambient conditions after attaining max. torque at 8.40 Nm & 7.94 Nm respectively, while further loading, sudden drop of engine rpm was observed.**
- 16.2 Max. Noise at operator's ear level was observed as 87 dB (A).
- 16.3 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 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.
- 16.4 The hardness of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).
- 16.5 Chemical composition of rotary blades does not conform to the requirement of IS 6690:1981. This should be looked in to for corrective action.
- 16.6 The provided labeling plate should be as per the requirement IS.

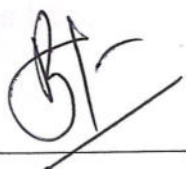

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16.7 The rotary chain case of the said machine is welded one. It is suggested to provide detachable type, so that inspection/repair may be possible if need arises

16.8 Technical literature:

User manual, maintenance manual and spare parts catalogue of power weeder in single booklet was 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	

17. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
17.1	16.1.5	We will inform to our principal manufacturer to take corrective action against this.
17.2	16.3	We will take corrective action .
17.3	16.5	We will improve blade chemical composition for our future supplies
17.4	16.6	Point is noted, we will work on it
17.5	16.7	As per your suggestion we will search for the possibilities to implement it.