

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)
COMMERCIAL TEST REPORT
(INITIAL)

संख्याNo: Machine-388/1216
माहMonth: October, 2020
Validity: 30.09.2025



KIRLOSKAR KUBIX 243 (KBX 243) BRUSH CUTTER



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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Machine-388/1216	KIRLOSKAR KUBIX 243 (KBX 243) BRUSH CUTTER	COMMERCIAL (ICT)
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Manufacturer : M/s. Farmech Enterprise Co. Ltd.,
No. 15, Lane 1265, Chung- Cheng Road,
Wu-Fong District., Taichung- 41350 City,
Taiwan.

Name of Applicant : M/s. Kirloskar Oil Engines Ltd. (KOEL),
Laxmanrao Kirloskar road, Khadki,
Pune- 411 003, Maharashtra, **India.**

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Machine-388/1216	KIRLOSKAR KUBIX 243 (KBX 243) BRUSH CUTTER	COMMERCIAL (ICT)
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Ring end gap:

Rings	Ring end gap, (mm)			Max. permissible end gap limit, (mm)
	Top	Middle	Bottom	
1 st comp. Ring	0.20	0.20	0.23	Not specified
2 nd comp. Ring	0.20	0.20	0.23	

Ring side clearance:

Rings	Ring side clearance, (mm)	Max. permissible clearance limit, (mm)
1 st Compression ring	0.03	Not specified
2 nd Compression ring	0.04	

15.2 Transmission system:

All the gears of the transmission system were found in normal condition.

16. COMMENTS & RECOMMENDATIONS

- 16.1** The safety provisions, as mentioned at para 5.14, have been provided by the applicant for safety aspect of operator's.
- 16.2** Max. Noise at operator's ear level was observed as 94 dB (A), which is on higher side as per ILO. As the Sound Pressure level is directly influencing the Human/Operator's Health, Safety and Comfort; and therefore suitable corrective action may be taken.
- 16.3** The equivalent mechanical vibration on engine cover was observed to the extent of 146 micron. The mechanical vibration is directly concerned with Operator's Health, Safety and Comfort; apart from the useful life of the machine's components. In view of the above. This should be looked into for dampening the vibration.
- 16.4** The capacity of fuel tank is only 0.90 liters, which does not appear to be adequate. this calls for necessary modification.
- 16.5** A fuel on/off knob may be considered for providing in the fuel system of engine.
- 16.6** The hardness of straight and circular disc were recorded as 40.8 to 42.6 & 36.4 to 37.8 respectively, against the requirement of 48 to 58 HRC as per IS 6025:1982 (Reaffirmed 1999). This should be looked into for necessary improvements in the quality of material of blades.



Machine- MBH/1216	KIRLOSKAR KUBIX 243 (KBX 243) BRUSH CUTTER	COMMERCIAL (ICT)
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The chemical composition of straight blade and circular disc were not as per requirement of the relevant code IS 6025:1982 (Reaffirmed 1999) & therefore it should be looked into for the corrective action.

Adequacy of literature supplied with the machine:

The Operators manual cum parts catalogue of brush cutter in English was supplied with the brush cutter for reference during the test. It is however, recommended that same may be revised and brought out as per IS: 8132- 1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY:

M. N. DIXIT AGRICULTURAL ENGINEER	
Dr. P.P. RAO DIRECTOR	

17. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
17.1	16.2	We will take corrective action for further reduction of noise level to improve the Operator's comfort.
17.2	16.3	We will take corrective action to Reduce the Vibrations.
17.3	16.4	We will examine the possibility to increase the fuel tank capacity.
17.4	16.5	We will examine the possibility to accommodate Fuel On /Off knob.
17.5	16.6	We will take corrective action to achieve the hardness of blade material as per requirements.
17.6	16.7	We will take corrective action to achieve the chemical composition of blade material as per requirement.
17.7	16.8	We will provide Operators Manual cum part catalogue as per IS 8132 Requirement.