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

संख्या/No: ICE/SRFMTTI, ANANTAPUR/2025 -26/35/35/1937

माह/Month: October, 2025

THIS TEST REPORT IS VALID UP TO 30.09.2032



KIRLOSKAR OIL ENGINES LTD., MIN T8De POWER WEEDER



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare
कृषि एवं किसान कल्याण विभाग

Department of Agriculture 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 9001:2015CERTIFIEDINSTITUTE]

Website: http://srfmtti.dacnet.nic.in/
E-mail: fmti-sr@nic.in

ICE/SRFMTTI, ANANTAPUR/2025 -26/ 35/35/1937 -

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Manufacturer, (apa)

M/s. Chongqing Meidoing Machinery Co., Ltd. Add: No.2 Factory, Panlong Printing Center, No.3, Juyuan Rd., Shuangfu St., Jiangjin Dist., Chongqing City, China.

Applicant

M/s. Kirloskar Oil Engines Ltd. (KOEL) Laxmanrao Kirloskar road, Khadki, Pune, Maharashtra-INDIA-411003 Telephone- +91 (20) 66084000/25810341 Fax- +91 (20) 25813208, 25810209

KIRLOSKAR OIL ENGINES LTD., MIN T8De POWER WEEDER

Report no.: ICE/SRFMTTI, ANANTAPUR/2025 -26/35/35/1937 Month: October Year: 2025



Government of India

Ministry of Agriculture and Farmers Welfare
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COMMERCIAL (ICT)

Type of test

: COMMERCIAL (ICT)

Period of test

: August, 2025 to October, 2025

Test Report No.

ICE/SRFMTTI, ANANTAPUR/2025 -26/35/35/1937

Month / Year of release

October, 2025

i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.

- ii) The data given in this report pertain to the particular machine randomly selected by testing authority.
- iii) The results presented in this report do not, in any way, attribute to the durability of the machine.
- iv) This Test Report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training & Testing Institute, Garladinne, Anantapur (A.P.).
- v) This is a report on Commercial Test of Power Weeder named "KIRLOSKAR OIL ENGINES LTD., MIN T8De POWER WEEDER". This report is valid up to 30.09.2032, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

SELECTED CONVERSIONS

S. No.	Units	Conversion Factor	
1	Force		
	1 kgf	9.80665 N	
	*	2.20462 lbf	
2	Power		
	1 hp	1.01387 metric hp (Ps)	
	~	745.7 W	
	1 Ps	735.5 W	
	1 kW	1.35962 Ps	
3	Pressure		
	1 psi	psi 6.895 kPa	
	1 kgf/cm ²	98.067 kPa = 735.56	
	(K.)	mm of Hg	
	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$	
	1 mm of Hg	1.3332 m-bar	

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COMMERCIAL (ICT)

1	2	3	4	5
25	Provision for cover on	Must be provided	Provided	Conforms
	exhaust			
26	Direction of exhaust	Must be provided	Provided	Conforms
	emission away from			
	operator	-		
27	Marking/labeling of	The labeling plate should be	Manufacturing	Does not
	machine	riveted on the body of the	address is not	conform
		machine having name and	provided.	
		address of manufacturer &		
		applicant, country of origin,		
		make, model, year of		
		manufacturer, serial number,		
		engine number, engine HP,		1
15		rated rpm & SFC		
28	Literature	Operator manual, service	Provided	Conforms
		manual and parts catalogue		
		should be provided		

18. COMMENTS & RECOMMENDATIONS

18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 6.45 kW under natural ambient condition against the declared value of 6.5 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 292g/kWh against the declared value of 280 g/kWh.
- 18.1.3 Back up torque of engine was observed as 7.66 % against declared value of 11%.
- 18.1.4 Max. torque was observed as 18.28 Nm against the declared value of 18.3 Nm.

18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 1322 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

18.3 Chemical analysis:

The Chemical composition of rotor blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into for corrective action.

18.4 Marking /labeling:

The labeling plate does not reveal all the required information. it is therefore recommended that a suitable labeling plate covering all essential components, inter alia, the following must be provided:

i) Manufacturing address

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COMMERCIAL (ICT)

18.5 Technical literature:

User's manual cum parts catalogue provided in booklet form for reference during the test. It is recommended that same must be revised in booklet form and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel in booklet form.

TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER

mmm

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. P.P. RAO DIRECTOR

19. APPLICANT'S COMMNETS

Sl. No.	Para No.	Comments	
1	18.2	We Will take corrective action to reduce the vibration	
2	18.3	We will take corrective action to meet the chemical	
	-	composition as per IS 6690:1981	
3	18.4	We will update the serial number plate as per standards.	
4	18.5	We will provide the manuals in Hindi & other regional	
		language as per IS standard.	