

**THIS TEST REPORT IS VALID UP TO 30.09.2031**



**KIRLOSKAR OIL ENGINES LTD.,  
KIRLOSKAR MIN T6P 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

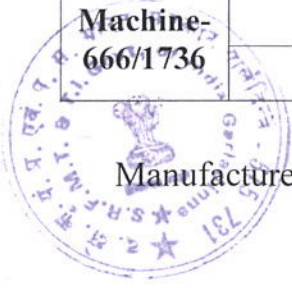
Southern Region Farm Machinery Training and Testing Institute

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

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

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Machine 666/1736	KIRLOSKAR OIL ENGINES LTD., KIRLOSKAR MIN T6P POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa)

: M/s. Kirloskar Oil Engines Limited,  
1<sup>st</sup> - Unit KMW Plot No. E-18, Opp -  
M/s Sektas India Ltd. 5 Star MIDC,  
Kagal – Hatkanangale Industrial Area,  
Kolhapur, 416202 Maharashtra, India.  
2<sup>nd</sup> - Plot no. 10/A, gate no. 458, A/P  
Bhare, Tal-Mulshi, Dist: - Pune-  
412115, Maharashtra, India.

Applicant

: M/s. Kirloskar Oil Engines Limited,  
Laxmanrao Kirloskar Road, Khadki,  
Pune- 411003, Maharashtra, India.

**KIRLOSKAR OIL ENGINES LTD.,  
KIRLOSKAR MIN T6P POWER WEEDER**

Report no.: Machine-666/1736

Month: October

Year: 2024



सत्यमेव जयते

**Government of India  
Ministry of Agriculture and Farmers Welfare  
Department of Agriculture and Farmers Welfare  
Southern Region Farm Machinery Training and Testing Institute  
Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)  
[An ISO 9001:2015 CERTIFIED INSTITUTE]**

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**SOUTHERN REGION FARM MACHINERY TRAINING &  
TESTING INSTITUTE, ANANTAPUR, (A.P.)**

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Machine- 666/1736	KIRLOSKAR OIL ENGINES LTD., KIRLOSKAR MIN T6P POWER WEEDER	COMMERCIAL (ICT)
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Type of test : COMMERCIAL (ICT)  
 Period of test : September, 2024 to October, 2024  
 Test Report No. : Machine-666/1736  
 Month / Year of release : October, 2024

- 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., KIRLOSKAR MIN T6P POWER WEEDER". This report is valid up to 30.09.2031, 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	<b>Force</b>	
	1 kgf	9.80665 N 2.20462 lbf
2	<b>Power</b>	
	1 hp	1.01387 metric hp (Ps) 745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	<b>Pressure</b>	
	1 psi	6.895 kPa
	1 kgf/cm <sup>2</sup>	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm <sup>2</sup>
	1 mm of Hg	1.3332 m-bar

Machine- 666/1736	KIRLOSKAR OIL ENGINES LTD., KIRLOSKAR MIN T6P POWER WEEDER	
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## 18. COMMENTS & RECOMMENDATIONS

### 18.1 Engine Performance:

- 18.1.1 The maximum and rated power were observed as 3.80 kW under natural ambient condition against the declared value of 4.0kW and 3.9 kW respectively.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 418 g/kWh against the declared value of 450 g/kWh.
- 18.1.3 Back up torque of engine was observed as 11.61 % against declared value of 10 %.
- 18.1.4 Max. torque was observed as 11.25 Nm against the declared value of 10.1 Nm.

### 18.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 296 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

### 18.3 Hardness and Chemical composition:

The hardness of rotary 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, interlaid, the following must be provided:




- i) Country of origin
- ii) Specific fuel consumption, (g/kWh)

### 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.

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**TESTING AUTHORITY**

Er. PRAMOD YADAV AGRICULTURAL ENGINEER	
Dr. B.M. NANDEDE DIRECTOR	 

**19. APPLICANT COMMENTS**

Reference	Applicant comments
18.2	We Will take corrective action to reduce the vibration.
18.3	We will take corrective action to meet the chemical composition as per IS 6690:1981.
18.4	We will take corrective action as per IS standard.
18.5	We will provide the manuals in Hindi & other regional languages as per IS standard.