

THIS TEST REPORT VALID UP TO : 31st July, 2030



**PARAMOUNT LASER SOLUTIONS, PLS
LASER LAND LEVELER**



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

उत्तरी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

Northern Region Farm Machinery Training and Testing Institute

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[ISO 9001:2015 CERTIFIED]

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16.3 Fuel Consumption:

l/h : 3.48 to 3.98

l/ha : 55.20 to 67.72

16.4 Wear of blades:**16.4.1 Mass basis:**

The wear of the terracer blade was measured after 26.91 hrs. of field operation and the observations are as under:

Sr. No.	Initial mass (g)	Mass after 26.91 hrs. (g)	Loss of mass (g)	Percent wear (%)	Percent wear per hour
1.	16,500	16,420	80.0	0.48	0.02

17. CONFORMITY TO INDIAN STANDARD

17.1 Table -X: Material for different components of leveler (As per IS: 9813-2002)			
Sr. No.	Components	Material(Requirements)	Observations
i.	Frame	Mild steel	Mild steel
ii.	Hitch	Mild steel	Mild steel
iii.	Hitch pin	Carbon steel	Carbon steel
iv.	Pin adjusting screw	Carbon steel	N.A.
v.	Drag bucket frame	Mild steel	Mild steel
vi.	Side plate	Mild steel	Mild steel
vii.	Drag bucket	Mild steel	Mild steel
viii.	Scarifier	Carbon steel	N.A.

17.2 Other requirements: (As per IS: 9813-2002)			
Sr. No.	REQUIREMENTS	Observations	Conformity
i.	The size of terracer shall be determined by length of blade plus the length of extension blade if any, in meters. The nominal size of the terracer may be between 1.5 to 3.5 meter.	The size of terracer blade is 2.11 m.	Conforms
ii.	The beveling shall be done on lower side of the blade. Both the upper and lower sides of the blade may be beveled to make it reversible.	Provided	Conforms
iii.	The blade shall be beveled. The length of beveling may be 10 mm. The thickness of the edge shall be as far as possible uniform and may be between 1.5 to 3 mm.	Provided	Conforms
iv.	The corners of the square holes shall be slightly rounded.	Round hole is provided	Conforms
v.	The holes of the blade shall be provided with counter-sunk bolts of 10-mm size. As far as possible, the bolts should conform to grade M10 of IS:2609-1964 'Specification for couch bolts (M6 to M24). The bolt head should flush with the blade surface.	The bolts of size 32×10×1.5 mm are provided & its heads are flushed with the blade surface.	--



20. COMMENTS & RECOMMENDATION**20.1 Rate of Work**

- i) The field capacity in sandy loam soil was recorded as 0.057 to 0.065 ha/h.
- ii) Total volume of cut 14.91 to 28.45 m³
- iii) Total volume of fill 5.03 to 33.37 m³
- iv) The time required to cover one hectare area was recorded as 15.38 to 17.54 h.

20.2 Quality of work

Leveling index before and after field operation was observed from 1.13 to 2.94 and 0.07 to 0.15 respectively.

20.3 Fuel Consumption:

- i) l/h : 3.48 to 3.98
- ii) l/ha : 55.20 to 67.72


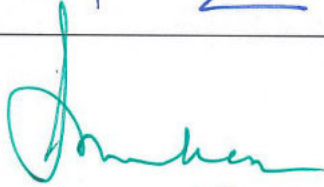
20.4 The safety warnings, signs and pictograms are not provided on the machine. It should be provided for safety of the users.**21. TECHNICAL LITERATURE**

Following literature were submitted by applicant for reference during test.

- (i) Operator manual
- (ii) Parts catalogue
- (iii) Service manual

However, the manuals need to be updated as per IS: 8132-1999.

TESTING AUTHORITY

Er. SANJAY KUMAR AGRICULTURAL ENGINEER	
Dr. MUKESH JAIN DIRECTOR	 29.07.2023

Test report is compiled by Sh. Deny Hasnu, Sr. Technician

22. APPLICANT'S COMMENTS

No specific comments received from the applicant.

