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

संख्या/No: IMP-526/1029 माह/ Month: June, 2019 Validity: 31.05.2026



S.L.V. TEW 9 TSC NINE TINE SPRING LOADED CULTIVATOR (Tractor Mounted)



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 संरथान

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IMP-526/1029

S.L.V. TEW 9 TSC NINE TINE SPRING LOADED CULTIVATOR (Tractor Mounted)

COMMERCIAL (ICT)

Manufacturer : M/s. S.L.V. Traders & Engineering Works,

Plot No. 2, Industrial Area, Somanahalli,

Maddur Tq., Mandya Dist., Karnataka - 571 429, **India.**

Name of Applicant : The Manufacturer

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Government of India

Ministry of Agriculture and Farmers Welfare Department of Agriculture, Cooperation and Farmers Welfare Southern Region Farm Machinery Training and Testing Institute Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

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6.4 Wear of Shovel

Sl.	Initial	Final Mass	Loss of Mass (g)	Percentag	e of wear
No.	Mass (g)	(g)		After 26.0 h	Per hour
1	1707.3	1521.6	185.7	10.88	0.42
2	1562.8	1421.6	141.2	9.04	0.35
3	1640.8	1479.6	161.2	9.82	0.38
4	1591.0	1410.3	180.7	11.36	0.44
5	1619.6	1483.5	136.1	8.40	0.32
6	1579.4	1477.6	101.8	6.45	0.25
7	1613.8	1477.0	136.8	8.48	0.33
8	1592.6	1470.2	122.4	7.69	0.30
9	1545.2	1398.4	146.8	9.50	0.37

Remark: - The hourly percentage wear of blades on mass basis was recorded as 0.25 to 0.44 %.

7. EASE OF OPERATION & ADJUSTMENTS

No difficulty was observed during the operation and adjustment of cultivator.

8. DEFECTS, BREAKDOWNS AND REPAIRS

No defect/breakdown and repair was occurred during entire period of field & lab tests.

9. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATION

- 9.1 The dimensions of spring parameters of the cultivator is not conforming, in full to the requirement of IS 6638:1972. This should be looked into for corrective action.
- 9.2 The material of construction of various components of cultivator conforms to IS 6638:1972.
- 9.3 The dimensions of tines does not conform fully with IS 7565 (Pt-I):1975 (Reaffirmed 1999). It should be looked into for corrective action.
- 9.4 The specification of implement hitch does not conform fully to the IS 4468 (Pt-I):1997 (Reaffirmed 2012). It is recommended that the same should be provided conforming to the relevant Indian Standards.

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- 9.5 The specification of reversible shovel does not conform fully to the IS 6813:2000. It is recommended that the same should be provided conforming to the relevant Indian Standards.
- 9.6 The bolt used for shovel is Hexagonal bolt, it is recommended to use the Counter sunk bolt as per IS 6813:2000.
- 9.7 The hardness of shovels conforms to the requirement of IS 6813:2000.
- 9.8 Except carbon and manganese contents, remaining other constituents of shovel conforms to IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.
- 9.9 The labeling plate should be provided as per the requirements of IS.

9.10 Adequacy of literature:

Operation manual, Service manual, Maintenance manual and Spare parts catalogue of nine tine spring loaded cultivator in English was provided in a single booklet form for reference during the test. However, this may be brought out in Hindi and other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY:

B.N. DIXIT AGRICULTURAL ENGINEER			Bl	
Dr. P.P. RAO DIRECTOR	_ <u>+</u> _	0.727	P-P. Rao	

10. APPLICANT'S COMMENTS

"We have noted your suggestions and we will make all possible necessary changes in future production".

A.