

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

संख्या /No: IMP-524/1026
माह /Month: June, 2019
Validity: 31.05.2026



**SRI VEL MURUGAN SVMT - 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 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 9001:2015 CERTIFIED INSTITUTE]

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IMP- 524/1026	SRI VEL MURUGAN SVMT - 9 TSC NINE TINE SPRING LOADED CULTIVATOR (Tractor Mounted)	COMMERCIAL (ICT)
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Manufacturer : M/s. Sri Vel Murugan Engineering Works,
5/86, Thiruchencode Road, Andagalore
Gate (P. O), Rasipuram (Tk), Namakkal
Dist., Tamil Nadu - 637 401, India.

Name of Applicant : The Manufacturer

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सत्यमेव जयते

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6.3 Power requirement:

The average draft requirement was ranged from 386.6 to 425.0 kgf and the average power requirement was calculated as 5.23 to 6.26 kW.

6.4 Wear of Shovel

Sl. No.	Initial Mass (g)	Final Mass (g)	Loss of Mass (g)	Percentage of wear	
				After 26.0 h	Per hour
1	2459	2296.4	162.6	6.61	0.25
2	2416	2358.9	57.1	2.36	0.09
3	2247	2181.2	66.0	2.94	0.12
4	2387	2177.2	209.8	8.79	0.33
5	2418	2354.8	63.2	2.61	0.10
6	2266	2220.1	45.9	2.03	0.08
7	2408	2366.0	42.0	1.74	0.07
8	2266	2221.9	44.1	1.95	0.08
9	2306	2239.1	66.9	2.90	0.11

Remark: - The hourly percentage wear of blades on mass basis was recorded as 0.07 to 0.33 %.

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 different parameters of spring cultivator conforms to the requirement of IS 6638:1972.
- 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.

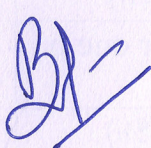

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- 9.4 The specification of implement hitch does not conform fully to the IS 4468 (Pt-I):1997 (Reaffirmed 2012). It is recommended that the same should be provided conforming to the relevant Indian Standards.
- 9.5 The specification of reversible shovel 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 does not meet, the requirement of IS 6813:2000. This should be looked into for corrective action.
- 9.8 Except carbon content all 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	
Dr. P.P. RAO DIRECTOR	

10. APPLICANT'S COMMENTS

"As per your recommendations, we will take all possible necessary corrective action in future production".