

SRI VENKATESHWARA SVEW-4 FM FLAIL MOVER
(Tractor Mounted, PTO Operated)



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]

Website: <http://srfmtti.dacnet.nic.in/>

E-mail: fmti-sr@nic.in

Tele./FAX: 08551-286441

IMP-544/1170	SRI VENKATESHWARA SVEW-4 FM FLAIL MOVER (Tractor Mounted, PTO Operated)	COMMERCIAL (ICT)
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Manufacturer : M/s. Sri Venkateshwara Engineering Works,
Harihere Main Road, Gollarahalli,
Honnali – 577 217, Davanagere (Dist.),
Karnataka, **India**.

Applicant : The Manufacturer

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Report No. : IMP-544/1170

Month: June

Year: 2020



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7.1 Rate of work

- The rate of work was recorded as 0.423 to 0.453 ha/h and the corresponding forward speed as 4.38 to 4.55 kmph.
- The time required to cover one-hectare area was recorded as 2.21 to 2.36 h.

7.2 Quality of work

- The field efficiency was recorded as 75.33 to 81.04 %.
- The Stubble/stalk cutting efficiency was recorded as 88.3 to 90.3%

7.3 Labour requirement:

In all, two skilled operators are needed for continuous operation of machine for day long period.

7.4 Missing percentage was recorded as 9.7 to 11.7 %

7.5 Wear analysis of blades:

Sr. No.	Initial Mass (g)	Final Mass (g)	Loss of Mass (g)	Percentage of wear	
				After 26.0 h	Per hour
1	798.4	757.1	41.3	5.17	0.19
2	800.0	763.9	36.1	4.51	0.17
3	795.1	743.7	51.4	6.46	0.25
4	796.5	728.5	68.0	8.54	0.33
5	797.3	722.4	74.9	9.39	0.36
6	796.4	727.5	68.9	8.65	0.33
7	795.5	727.4	68.1	8.56	0.33
8	795.5	721.6	73.9	9.29	0.36

8. EASE OF OPERATION & ADJUSTMENTS

No difficulty was observed during the operation and adjustment of flail mover.

9. DEFECTS, BREAKDOWNS AND REPAIRS

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

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**10. SUMMARY OF OBSERVATIONS, COMMENTS AND
RECOMMENDATION**

- 10.1 Shaft of flap for arresting straw/stone should be properly locked to ensure the safety of the operator & its prime mover.
- 10.2 The specification of implement hitch is not conforming in full to the requirement of IS 4468 (Pt-I):1997. This should be looked into for corrective action.
- 10.3 Dimensions of PIC yoke is conforming to IS 4931:1995.
- 10.4 The hardness of blades conforms to the requirement of IS 6690:1981.
- 10.5 The chemical composition of rotary blades are not conforming to the requirement of IS 6690:1981. This should be looked into for corrective action.
- 10.6 Safety device in propeller shaft is provided.
- 10.7 The provided labeling plate should be as per the IS requirement

10.7 Adequacy of literature:

Operation, safety, general maintenance manual cum parts catalogue of the machine in English was provided in a single booklet form for reference during the test. However, this should 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	

11. APPLICANT'S COMMENTS

"All your suggestions are noted and they are very useful for us to improve our future products".