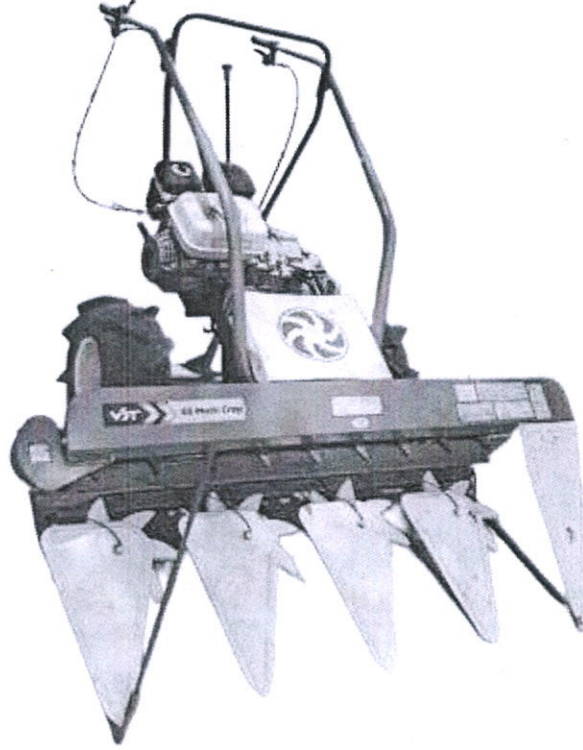


व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)
COMMERCIAL TEST REPORT
(INITIAL)

संख्या No: Machine-497/1507
माह/Month: June, 2023
Validity: 31.05.2028



VST, 55 MULTI CROP POWER REAPER



सत्यमेव जयते

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.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

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

E-mail: fmti-sr@nic.in

Tele. 08551-286441

Machine- 497/1507	VST, 55 MULTI CROP POWER REAPER	COMMERCIAL (ICT)
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Manufacturer : M/s VST Tillers Tractors Ltd.
Plot No. 222-224 & 229-232, 3rd Phase, KIADB
Industrial Area, Malur, Kolar Dist-563130
Karnataka.

Applicant : M/S V.S.T. TILLERS TRACTORS LTD.

VST, 55 MULTI CROP POWER REAPER

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17. SUMMARY OF OBSERVATIONS, COMMENTS & RECOMMENDATIONS

- 17.1 Engine maximum and rated power were observed as 3.77 kW against the declared values of 3.7 kW.
- 17.2 Back up torque of engine was observed as 7.51% only. This should be looked into corrective action.
- 17.3 Specific fuel consumption of engine corresponding to maximum power was recorded as 456 g/kWh. against the declaration value of 452 g/kWh
- 17.4 Max. Torque was observed as 21.47 Nm. Against declaration value of 22.5 Nm.
- 17.5 Max. Noise at operator's ear level was observed as 96 dB (A).
- 17.6 The amplitude of mechanical vibration on various assemblies of the Power Reaper was observed to the extent of 361 micron, which is on higher side. Therefore necessary action to reduce the vibration should be taken in future.
- 17.7 The dimension of Knife does not conform, in full, to IS: 6025-1982. This should be looked into for necessary corrective action.
- 17.8 Provided labeling plate should be as per the requirement of IS.
- 17.9 Field performance Test:
- 17.9.1 Rate of work and fuel consumption:
- The speed of harvesting ranged between 3.12 to 3.18 and 3.07 to 3.19 kmph for paddy and wheat crops respectively.
 - The area harvested by the machine was recorded as 0.251 to 0.286 and 0.237 to 0.251 ha/h.
 - The average hourly fuel consumption varied from 1.12 to 1.50 and 1.25 to 1.30 l/h for paddy and wheat crop respectively.
 - The fuel consumption per unit area harvested varied from 4.24 to 5.24 and 4.98 to 5.49 l/ha for paddy and wheat crop respectively.
- 17.9.2 **Quality of Work:**
- i) The post harvest loss was observed as 0.092 to 0.360 & 0.410 to 0.590 % for Paddy and wheat respectively.
 - ii) The stubble weight was recorded as 59 to 75 & 91 to 100 mm for Paddy and wheat respectively.
 - iii) Machine leaves the harvested crop in windrows.

Machine- 497/1507	VST, 55 MULTI CROP POWER REAPER	COMMERCIAL (ICT)	
23	Literature	Rpm & SFC Operator manual , service manual and parts catalogue should be provided	Provided

TESTING AUTHORITY:

D.C. MOULI AGRICULTURAL ENGINEER	
P. KAMALABAI SENIOR AGRICULTURAL ENGINEER DIRECTOR (I/C)	

19. APPLICANT COMMENTS

Sr.No	Page No./Clause No.	
01	Page. No. 32- 17.2 17.6 17.7 17.8 17.11 17.12	The necessary corrective action will be taken and will be incorporate in further production models.