

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

संख्या/No: Machine-503/1518
माह/Month: June, 2023
Validity: 31.05.2028



XYLEM SS -270 POWER WEEDER



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 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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Tele: 08551-286441

Machine-503/1518	XYLEM SS-270 POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer : M/s. Shivashakthi Xylem crop science private Ltd., 117/2, Railway station Street, Ayothiapattanam, Salem-636103, Tamil Nadu, **India.**

Applicant : M/s. Shivashakthi Xylem crop science private Ltd., 117/2, Railway station Street, Ayothiapattanam, Salem-636103, Tamil Nadu, **India.**

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17. COMMENTS & RECOMMENDATIONS

17.1 Engine Performance:

- 17.1.1 The maximum and rated power was observed as 3.80 kW under natural ambient condition against the declared value of 4.0 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power and at rated engine speed was recorded as 418 g/kWh against the declared value of 320 g/kWh.
- 17.1.3 Back up torque of engine was observed as 13.67 % against declared value of 10%. This should be looked into for corrective action.
- 17.1.4 Max. torque was observed as 11.72 Nm against the declared value of 12.5 Nm.

17.2 The amplitude of mechanical vibration on various assemblies of the Power Weeder was observed to the extent of 372 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

17.3 The hardness of rotor blades does not confirm against the requirement of $56 \pm 3\text{HRC}$. This maybe looked into for corrective action.



17.4 Chemical composition (waiting) of rotor blades except silicon & manganese content, meet the requirement of relevant code. Therefore this may be looked into for corrective action.

17.5 Technical literature:

User's manual cum parts catalogue is a single booklet was provided for reference during the test. It is however, recommended that same must be revised and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel in booklet form.

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TESTING AUTHORITY

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

18. Applicant Comments

Para No.	Our reference	Applicant Comments
17.1	17.1.1, 17.1.2, 17.1.3, 17.1.4,	Will be corrected as per requirement by sending comments to principle manufacturer.
17.1	17.2	We are working on reduction of vibration levels with the various level as per standard.
17.1	17.3 & 17.4	We will replace the blade in free of cost after wear also. We are looking R&D for better results as per IS 6690.1981.
17.1	17.5	Labeling plate will be introduced as per IS from next slot as per result of test report.

