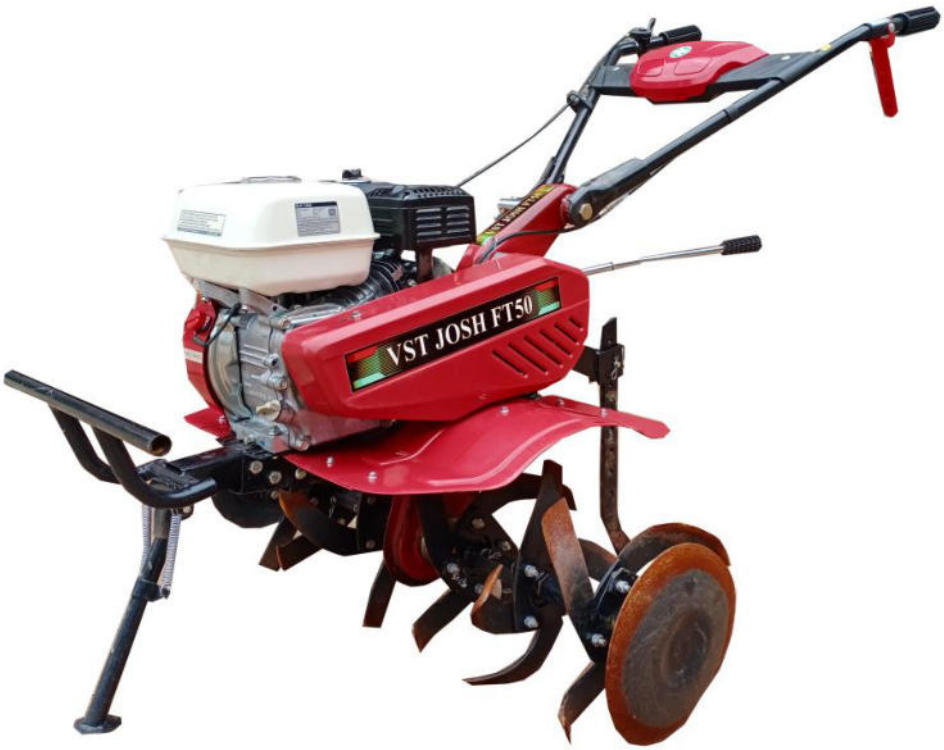
व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)
COMMERCIAL TEST REPORT
(INITIAL)

संख्या /No: Machine-391/1219
माह:/Month: October, 2020
Validity: 30.09.2025



VST SHAKTI VST JOSH FT50 POWER WEEDER

सत्यमेव जयते

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

Manufacturer : M/s. Chongqing Hwasdan Machinery Manufacturing Company Ltd., Xipeng Industry Zone, Jiulongpo Dist., Chongqing- 401 326, China

Applicant : M/s. V.S.T. Tillers Tractors Ltd, Plot No. 222-224 & 229-232, 3rd Phase, KIADB Industrial Area, Malur, Kolar Dist., Karnataka- 563 130, India.

Regd. Head Office:

Plot No.-1, Dyavasandra Indl. Layout, Whitefield Road, Mahadevapura Post, Bangalore- 560 048, Karnataka, India.

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Report No. : Machine-391/1219 Month: October Year: 2020

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17. COMMENTS & RECOMMENDATIONS

17.1 Engine performance:

17.1.1 The maximum power and rated power were observed as 2.9 kW respectively under natural ambient condition against the declared value of 3.6 & 2.9 kW respectively.

17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 379 g/kWh against the declared value of 400 g/kWh

17.1.3 Max. Torque was observed as 7.94 Nm against the declared value of 10.3 Nm.

17.1.4 Back up torque of engine was observed as 3.12 %.

17.1.5 **During varying speed test of engine at both natural & high ambient conditions after attaining max. torque at 7.94 Nm & 6.54 Nm respectively, while further loading, sudden drop of engine rpm was observed.**

17.2 Max. Noise at operator's ear level was observed as 85 dB (A).

17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed up to the maximum extent of 380 microns, which is higher than the limit of ILO microns. Therefore necessary action to dampen the vibration should be taken in to account.

17.4 The hardness of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).

17.5 Except the silicon content, remaining other the constituents of chemical analysis of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked in to for corrective action

17.6 The provided labeling plate should be as per the requirement IS.

17.7 Technical literature:

User's manual and parts catalogue of power weeder and engine in separate booklets were supplied with the test sample for reference during the test. It is however, recommended that same may be revised and brought out in Hindi & 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**	

18. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
18.1	17.1.5	We will take necessary action to improve & correct the engine speed at both natural & high ambient conditions after attaining max. torque with engine supplier for production batches.
18.2	17.3	We will take necessary action to reduce the vibration of various components in power weeder.
18.3	17.5	We will take necessary action to improve the chemical composition of rotor blades in production batches.
18.4	17.7	Operator's manual & parts catalogue of power weeder will be suitably modified in-line with IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel.