

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

संख्याNo: Machine-402/1231
माहMonth: December, 2020
Validity: 30.11.2025



VST SHAKTI 5PR-WSC POWER REAPER



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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Tele./FAX: 08551-286441

Machine-402/1231	VST SHAKTI 5PR-WSC POWER REAPER	COMMERCIAL (ICT)
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Manufacturer : M/S V.S.T. Tillers Tractors Ltd.
Plot No 222-224 & 229-232,3rd Phase,
KIADB Industrial Area,
Malur, Kolar District-563130,
Karnataka, India.

Regd. & Head Office:
Plot No – 1, Dyavasandra Indl. Layout,
Whitefield Road, Mahadevapura Post,
Bangalore-48, Karnataka, India.

Applicant : The Manufacturer

VST SHAKTI 5PR-WSC POWER REAPER

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Machine-402/1231	VST SHAKTI 5PR-WSC POWER REAPER	COMMERCIAL (ICT)
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Type of test : INITIAL COMMERCIAL TEST (ICT)

Name of Machine : Power Reaper

Period of test : 12.03.2020 to 15.12.2020

Test Report No. : Machine-402/1231

Month / Year of release : December, 2020

- i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.
- ii) The data given in this report pertain to the particular machine submitted for test by the applicant.
- iii) The results presented in this report do not in any way attribute to the durability of the machine.
- iv) This Test Report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training & Testing Institute, Garladinne, Anantapur (A.P.).
- v) This is a report on Commercial Test of Power Reaper named "VST SHAKTI 5PR-WSC POWER REAPER". **This report is valid up to 30.11.2025, Vide Ministry's O.M. No. 13-24/2018-M&T (I&P) dated 19.09.2018.**

SELECTED CONVERSIONS

S. No	Units	Conversion Factor
1	Force	
	1 kgf	9.80665 N
		2.20462 lbf
2	Power	
	1 hp	1.01387 metric hp (Ps)
		745.7 W
	1 Ps	735.5 W
3	Pressure	
	1 psi	6.895 kPa
	1 kgf/cm ²	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm ²
	1 mm of Hg	1.3332 m-bar

Machine- 402/1231	VST SHAKTI 5PR-WSC POWER REAPER	COMMERCIAL (ICT)
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17.11 Wear of critical components:

i) The wear rate of cutter bar on mass basis was recorded as 0.009 % per hour.

ii) Hardness of movable & stationary blades at its hardened zone is conforming to BIS requirement. Whereas, at its remainder zone it is not conforming to IS 6025:1982 (reaffirmed 1999). Therefore, this should be looked into for corrective action. .

iii) Chemical composition of stationary blade is not as per the requirement of IS 6025:1982 (reaffirmed 1999). Therefore, this should be looked in to for corrective action.



17.12 Provision for safety:

A safety pin at driven sprocket of conveyor chain is provided to take of overloading of cutter bar.

17.13 Technical literature:

The operation manual and parts catalogue of reaper and engine in separate booklets were supplied with the reaper for reference during the test. It is however, recommended that same may be revised and bought 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 COMMENTS

Para No.	Our reference	Applicant's comments
18.1	17.5	Max. Noise at operator's ear level will be studied and measures will be taken to reduce the noise level in the production lot.
18.2	17.6	The amplitude of mechanical vibration will be studied, and possible measures will be taken to reduce the vibrations in the production lot.
18.3	17.7	Knife will be Manufactured as per IS standards.