ट्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक) COMMERCIAL TEST REPORT (Initial)



संख्या / No.: Imp. 273/352 आह / Month: January 2020

THIS TEST REPORT IS VALID UPTO 31/01/2027



GREENSYSTEM ROTARY TILLER (ROTAVATOR), MODEL: RT5126L MULTI SPEED, GEAR DRIVE, CENTRALLY MOUNTED



भारत सरकार GOVT OF INDIA

कृषि एवं किसान कल्याण मन्त्रालय

MINISTRY OF AGRICULTURE & FARMERS WELFARE

कृषि, सहकारिता एवं किसान कल्याण विभाग

DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE

उत्तर पूर्वी क्षेत्र कृषि यंत्र प्रशिक्षण एवं परीक्षण संस्थान

NORTH EASTERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE

विश्वनाथ चारिआलि, जिला-विश्वनाथ (असम)

BISWANATH CHARIALI: BISWANATH: ASSAM, PIN - 784 176

[AN ISO 9001:2015 CERTIFIED INSTITUTION]

Website: http://nerfmtti.nic.in

Ph. No. 03715-222094

Fax No: 03715-230358

E-Mail: fmti-ner@nic.in

Imp.273/352

GREENSYSTEM ROTARY TILLER (ROTAVATOR), Model: RT5126L MULTI SPEED, GEAR DRIVE, CENTRALLY MOUNTED -COMMERCIAL (Initial)

	2	3	4	5	6	7 Yes	
1 V	Country of origin				India		
vi vi	Year of manufacture		Should be provided on rotary tiller (Rotavator)		Not Provided	No	
vii	Chassis Serial Number	Evaluative			Provided	Yes	
viii	Recommended PTO speed of Prime mover(rpm)			A M	Not Provided	No	
ix	Maximum PTO power requirement, kW				Not Provided	No	
8	Category of breakdowns/ defects Whether						
	Category of breakdowns	Category Evaluative/ Non Evaluative	Requirements		As Observed	meets the requiremen ts (Yes/ No)	
i	Critical breakdowns	Evaluative	No critical breakdown		None	Yes	
ii	Major breakdown	Evaluative	Not more than one and neither of them should be repetitive in nature.		None	Yes	
201	Minor breakdowns	Evaluative	Not more than three and frequency of each should not be more than two.		None	Yes	
iv	Total breakdowns	Evaluative	In no case, the total no of breakdown should exceed four, i.e. (1 major + 3 minor) or 4 minor breakdowns		None	Yes	

11. COMMENTS AND RECOMMENDATIONS

- 11.1 The dimensions of three point linkage (hitch pyramid) of the rotary tiller (Rotavator) does not conform to IS: 4468-1997. This should be looked into for corrective action for standardization.
- 11.2 Dimensions of PIC of implement does not conform to IS: 4931-1995 and it should be looked into for corrective action.
- 11.3 Chemical composition of rotor blades does not conform to IS: 6690-2002. The percentage of carbon and manganese content in composition of rotary tiller blade material was recorded as 0.276 and 1.249, respectively. The carbon content was on lower side and manganese content was on higher side when compared with the relevant Indian Standard. Moreover, the hardness of edge portion of rotor blades also does not conform to relevant Indian Standard. It is therefore, recommended that the material of rotary tiller blade should be improved and shall be provided as per requirement of Indian Standard.
- 11.4 In dry land operation average depth of cut was recorded as 7.57 cm which does not meet the requirement of Indian Standard.
- 11.5 The labeling plate on machine should be provided as per IS17045:2018.

FARM MACHINERY TRAINING & TESTING INSTITUTE (NER), B. CHARIALI, ASSAM
[AN ISO 9001:2015 CERTIFIED INSTITUTION] (THIS TEST REPORT IS VALID UP TO 31" January 2027)

Page 18 of 22

Imp.273/352

GREENSYSTEM ROTARY TILLER (ROTAVATOR), Model: RT5126L MULTI SPEED, GEAR DRIVE, CENTRALLY MOUNTED -COMMERCIAL (Initial)

11.6 Technical literature:

Operator cum Service Manual & Parts Catalogue was provided along with the machine during the course of testing. It is further recommended to bring out these manuals in Hindi and other vernacular languages as per IS: 8132-1999

TESTING AUTHORITY

(M.R. PATIL)
AGRICULTURAL ENGINEER

J.P. MANDAL)
SENIOR AGRICULTURAL ENGINEER

(K.K. MAGLE)

Draft test report compiled by - Shri Khagendra Bora, STA

12. APPLICANT'S COMMENTS

Para No	Our Reference	Applicants Comments
12.1	11.1	Dimension of three-point linkage (Hitch Pyramid) will be modified to confirm IS 4468-1997.
12.2	11.2	The dimension of PIC of implements will be modified to confirm IS 4931-1995.
12.3	11.3	Shaktiman Rotary Tiller blade are made of "BORON" steel which is better than Carbon & Silicon Manganese steel Referred in IS 6690-2002. Chemical compositions and Hardness of Rotavator Blade are maintaining as per "BORON" steel.
12.4	11.4	We will take necessary action for increase of depth of operation.
12.5	11.5	We will take necessary action.
12.6	4.1	As per IS17045:2018, in report, you are mentioning centrally mounted but actually machine fitment to tractor as well as primary gear box of machine not exactly in centre.

FARM MACHINERY TRAINING & TESTING INSTITUTE (NER), B. CHARIALI, ASSAM [AN ISO 9001:2015 CERTIFIED INSTITUTION] (THIS TEST REPORT IS VALID UP TO 31st January 2027)

Page 19 of 22