



THIS TEST REPORT IS VALID UPTO 31/01/2027



**GREENSYSTEM ROTARY TILLER, MODEL: RT5026J
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]

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------|---|------------|---|----|--------------|-----|
| v | Country of origin | Evaluative | Should be provided on rotary tiller (Rotavator) | -- | India | Yes |
| vi | Year of manufacture | | | -- | Not Provided | No |
| vii | Chassis Serial Number | | | -- | Not Provided | No |
| viii | Recommended PTO speed of Prime mover(rpm) | | | -- | Not Provided | No |
| ix | Maximum PTO power requirement, kW | | | -- | Not Provided | No |

| 8 Category of breakdowns/ defects | | | | | |
|-----------------------------------|------------------------|-------------------------------------|--|-------------|--|
| | Category of breakdowns | Category Evaluative/ Non Evaluative | Requirements | As Observed | Whether meets the requirements (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 |
| iii | 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 0.265 and 1.214, 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 Shank Portion & 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 8.53cm which does not meet the requirement of Indian Standard.

11.5 Techni
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Para No

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11.5 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. NAGLE)
DIRECTOR

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. |