व्यावसायिक परीक्षण रिपोर्ट

COMMERCIAL TEST REPORT

संख्या / No.: Imp. 240/315

माह / Month: Sept., 2018

THIS TEST REPORT VALID UPTO 30/09/2025

GREENSYSTEM ROTARY TILLER, Model: RT6012 (Gear Drive) (Tractor Operated)

सत्यमेव जयते

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

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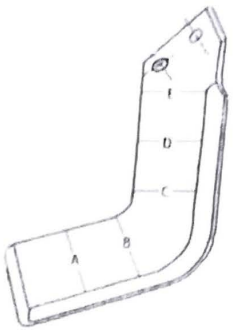


Fig 7 : DIMENSIONS FOR WEAR ANALYSIS

8. EASE OF OPERATION & ADJUSTMENTS

The operator can easily adjust and control the implement from operator's seat in the field as the adjustments are within the easy reach of operator. However the operator has to get down from the tractor in order to raise/lower the depth adjusting skids. No noticeable difficulty was observed during the operation and adjustment of Rotary tiller.

9. DEFECTS, BREAKDOWNS AND REPAIRS

No breakdown was occurred during 42 h of wet land and dry land operation.

10. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATIONS

10.1 The dimension of three point linkage (hitch pyramid) of the rotary tiller does not conform to Cat. I & Cat. II to IS: 4468-1997 (part-1). This should be looked into for corrective action for standardization.

10.2 Dimensions of PIC and PIC yoke bore of implement do not conform to IS: 4931-1995 and therefore, it should be looked into for corrective action.

10.3 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 0.300 and 1.058 % 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 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 provided as per requirement of Indian Standard.

10.4 The rate of work was recorded 0.283 to 0.384 ha/h at forward speed of 3.28 to 3.74 kmph in dry land operation.

10.5 The depth of operation in dry land operation was recorded as 8 to 9 cm with soil moisture content of 11.8 to 24.7% in sandy loam soil and considered on lower side. The depth of puddle was recorder as 23 to 27 cm which is considered as normal for wet land operation.

10.6 The hourly rate of wear of blade on mass basis in wet land & dry land operations was recorded as 0.04 to 0.05 % and 0.11 to 0.18 % respectively. The average wear of blade is considered as on higher side.

10.7 The hourly rate of wear of blade on dimensional basis in wet land & dry land operations was recorded as 0.00 to 0.15 % and as 0.02 to 1.01% respectively. The average wear of blade is considered as on higher side.

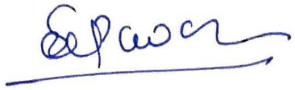
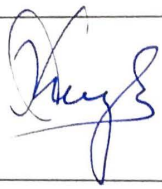
10.8 S. No., country of origin, Manufacturer's name provided on labeling plate. However, it is suggested that address & trademark (if any), size of implement, power requirement and year of manufacture should also be indicated on the labeling plate.

10.9 No ingress of mud and/or water was found in primary and secondary reduction boxes after 42 hr of field operations and the sealing provided on different subassemblies were found effective.

10.10 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

S. G. PAWAR **AGRICULTURAL ENGINEER**	
K.K. NAGLE **DIRECTOR**	

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