व्यावसायिक परीक्षण रिपोर्ट COMMERCIAL TEST REPORT



संख्या / No.: Imp-220/293 माह / Month: November 2017



BRIGHT INDIA ROTAVATOR, Model: BIC RT 175 (Gear Drive) (Tractor Operated) [Commercial]



भारत सरकार

GOVT OF INDIA

कृषि एवं किसान कल्याण मन्त्रालय

MINISTRY OF AGRICULTURE& FARMERS WELFARE

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DEPARTMENT OF AGRICULTURE, COOPERATION & FARMERS WELFARE

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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 Rotavator.

9. <u>DEFECTS, BREAKDOWNS AND REPAIRS</u>

No breakdown was occurred during 41.1 h of dry land and wet land operation.

10. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATIONS

- 10.1 The dimensions of PIC yoke bore and PIC of the rotavator does not conform to IS:4931-1995. Hence, this should be looked into for corrective action for standardization.
- 10.2 The dimensions of three point linkage of the rotavator does not conform to IS: 4468–1997. Therefore, it is recommended to looked into corrective action.
- 10.3 The hardness of blade at edge portion is not within its desired range as per IS: 6690-1981. Therefore, it is recommended to looked into corrective action.
- 10.4 The rate of work was recorded as 0.392 to 0.416 ha/h with operation speed of 2.93 to 3.17 kmph.
- 10.5 The depth of operation in dry land operation was recorded as 5.0 to 6.0 cm with soil moisture content of 19.6 to 24.9 % in Sandy loam / Clay loam. The depth of puddle was recorded as 19 to 27 cm.
- 10.6 The hourly rate of wear of blade on mass basis in Wet land & Dry land operations was recorded as 0.02 % and 0.04 to 0.11 % respectively.
- 10.7 The hourly rate of wear of blade on dimensional basis in Wet land & Dry land operations was recorded as 0.01 to 0.05 % and as 0.01 to 0.11 % respectively.
- 10.8 Type, model, serial no. and year of manufacture was indicated on the labeling plate. However, it is recommended to specify size of implement and power requirement for the implement.
- 10.9 No ingress of mud and/or water was found in primary and secondary reduction boxes after 41.1 h of operation, the sealing provided on different subassemblies were found effective.

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Technical literature:

No literature such as Operators manual, Service manual, Parts Catalogue, etc. were provided along with the machine during the course of testing.

TESTING AUTHORITY

S. G. PAWAR AGRICULTURAL ENGINEER	Spara
A.K. UPADHYAY SENOIR AGRICULTURAL ENGINEER	h
K.K. NAGLE DIRECTOR	June

Test conducted & Report compiled by -

Sh. Rahul Prajapathi

11. APPLICANT'S COMMENTS

Para no.	Our reference	Applicant's Comments
11.1	10.1	Corrective actions for standardization of PIC YOKE According to IS 4931-1995 will be done
11.2	10.2	Corrective actions for standardization of 3 point linkage of Rotavator as per IS 4468-1997 will be done as per your recommendations.
11.3	10.3	The hardness of the blade will be done as per your recommendations to IS: 6690-1981 standard.
11.4	10.5	We will try to improve performance of rotavator in terms of depth
11.5	10.8	Labelling plate would be installed as per your recommendations.
11.6	10.10	Instructional/Operator Manual will be provided in Hindi & other regional languages.