

## ट्यावसायिक परीक्षण रिपोर्ट COMMERCIAL TEST REPORT

संख्या / No.: Imp-221/294 मात्र / Month: November 2017



# BRIGHT INDIA ROTAVATOR, Model BIC RT 125 (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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## & 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. DEFECTS, BREAKDOWNS AND REPAIRS

No breakdown was occurred during 41.0 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 dimension of three point linkage of the rotavator does not conform to IS: 4468–1997. Therefore, it is recommended to look into corrective action.
- 10.3 The hardness of blade was not within its desired range as per IS: 6690-1981. Therefore, it is recommended to look into corrective action for standardization.
- 10.4 The rate of work was recorded as 0.296 to 0.304 ha/h with operation speed of 3.07 to 3.22 kmph.
- The depth of operation in dry land operation was recorded as 6 to 7 cm with soil moisture content of 16.8 to 21.8 % in Sandy loam. The depth of puddle was recorded as 21 to 25 cm.
- The hourly rate of wear of blade on mass basis in Dry land & Wet land operations was recorded as 0.04 to 0.06 % and 0.03 to 0.04 % respectively.
- 10.7 The hourly rate of wear of blade on dimensional basis in Dry land & Wet land operations was recorded as 0.01 to 0.10 % and as 0.00 to 0.05 % respectively.
- 10.8 There is no any labeling plate on the implement. Therefore, it is recommended to provide a labeling plate along with necessary parameters.
- 10.9 Ingress of mud and/or water was found in secondary reduction box after 41 h of operation, the sealing provided on different subassemblies were found defective. Therefore, it is recommended to rectify the same in future production.

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10.10 Technical literature:

One instructional manual and parts list covered in English was submitted along with the implement. However, it is recommended to bring out the same, covered in Hindi and other vernacular languages.

### **TESTING AUTHORITY**

S. G. PAWAR AGRICULTURAL ENGINEER	Syava
A.K. UPADHYAY SENOIR AGRICULTURAL ENGINEER	h
K.K. NAGLE DIRECTOR	Jany &

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.

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