

व्यावसायिक परीक्षण रिपोर्ट  
COMMERCIAL TEST REPORT

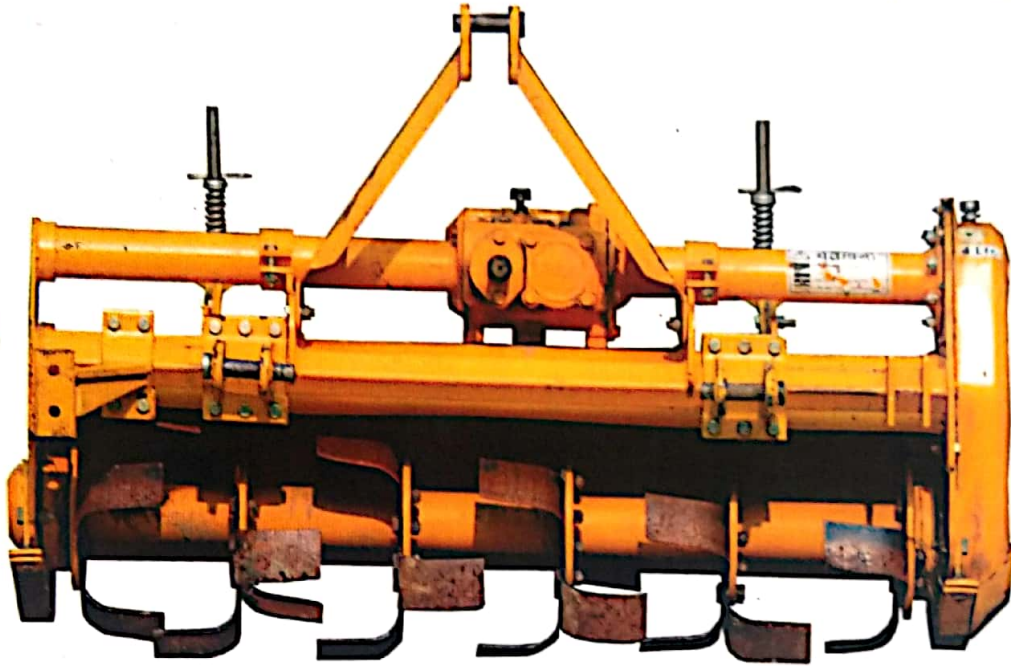


संख्या / No.: Imp. 209/281

माह / Month: May, 2017



AE-11



**NEW SWAN ROTAVATOR, Model: NSML DT 125 (Gear Drive)  
(Tractor Operated)**



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 चारिअली, जिला-विश्वनाथ (असम )

BISWANATH CHARIALI :: BISWANATH :: ASSAM, PIN - 784 176

Ph. No. 03715-222094

Website: <http://nerfmtti.nic.in>

Fax No: 03715-230358

E-Mail: [fmti-ner@nic.in](mailto:fmti-ner@nic.in)



### **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.

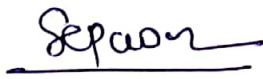


### **9. DEFECTS, BREAKDOWNS AND REPAIRS**

No breakdown was occurred during 41.3 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 0.259 to 0.307 ha/h with operation speed of 2.73 to 2.98 kmph.
- 10.5 The depth of operation in dry land operation was recorded as 8 to 9 cm with soil moisture content of 22.5 to 23.7 % in Sandy loam. The depth of puddle was recorded as 16 to 32 cm.
- 10.6 The hourly rate of wear of blade on mass basis in Dry land & Wet land operations was recorded as 0.08 to 0.13 % and 0.04 to 0.06 % respectively.
- 10.7 The hourly rate of wear of blade on dimensional basis in Dry land & Wet land operations was recorded as 0.02 to 0.20 % and as 0.01 to 0.15 % 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 41.3 h of Dry land and Wet land operations and the sealing provided on different subassemblies were found effective.
- 10.10 **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	
A.K. UPADHYAY SENOIR AGRICULTURAL ENGINEER	
K.K. NAGLE DIRECTOR	

Test conducted &amp; Report compiled by -

Sh. Rahul Prajapathi &amp; Sh. Vithato Keyho

**11. APPLICANT'S COMMENTS**

Para No.	Our reference	Applicant's Comments
11.1	10.1	For further production we shall take appropriate action to improve the same as per IS: 4931-1995 in future.
11.2	10.2	For further production we shall take appropriate action to improve the same as per IS: 4468-1997 in future.
11.3	10.3	Review the same ensure to comply the requirement of blade as per IS: 6690-1981 in future.
11.4	10.8	As per recommendation of size & power on labeling plate we implement this in future production.
11.5	10.10	Same is in process & we shall ensure to provide the same for further supplies both technical literature.
11.6	--	For future production we shall also take appropriate action to improve the same for nuts and bolts.