



व्यावसायिक परीक्षण रिपोर्ट
COMMERCIAL TEST REPORT

संख्या / No.: Imp. 218/290
माह / Month: October, 2017



LANDFORCE, THREE BOTTOM FIXED MOULD BOARD PLOUGH
Model :M-3FA (Tractor Mounted) [Commercial Test]



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T.R. No. 3085
Date- 02-11-17

भारत सरकार

GOVT OF INDIA

कृषि एवं किसान कल्याण मन्त्रालय

MINISTRY OF AGRICULTURE & FARMERS WELFARE

कृषि, सहकारिता एवं किसान कल्याण विभाग

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**8.5.2 On mass basis:****8.5.2.1 Share :**

S. No.	Initial mass of share (g)	Mass of share after 25.5 h of operation (g)	Difference (g)	Wear (%)	
				After 25.5 h	Per hour
1	345 (front)	315	30	9.52	0.37
2	335(middle)	315	20	6.35	0.25
3	345 (rear)	335	10	2.99	0.12

Remarks: The hourly percentage of wear on mass basis was observed as 0.12 to 0.37.

8.5.2.2 Share bar:

S.No.	Initial mass of share (g)	Mass of share after 25.5 h of operation (g)	Difference (g)	Wear (%)	
				After 25.5 h	Per hour
1	525 (front)	508	17	3.35	0.13
2	520(middle)	506	14	2.77	0.11
3	530 (rear)	520	10	1.92	0.08

Remarks: The hourly percentage of wear on mass basis was observed as 0.08 to 0.13.

9. EASE OF OPERATION AND ADJUSTMENTS

No noticeable difficulty was observed during the operation and adjustment of Three Bottom Fixed M.B plough.

10. DEFECTS, BREAKDOWNS AND REPAIRS

No breakdown was occurred during 25.5 h of field test of the Three Bottom Fixed M.B plough.

11. SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATIONS

- 11.1** The dimensions of the share and share bar of plough does not conforms to IS: 10691-1983. This should be looked into for corrective action for standardisation.
- 11.2** The dimension of three point linkage, hitch pyramid does not conform to IS: 4468-1997. Therefore, this should be looked into for corrective action.
- 11.3** The hardness of the share and share bar does not conform to IS: 10691-1983. This should be looked into for corrective action for standardization.
- 11.4** The carbon content in share bar was not within its range as per IS:10691-1983. This is recommended to looked into for corrective action of standardisation.
- 11.5** The size of sunk headed bolts fixing the share with frog was not as per IS: 10691-1983. This is recommended to looked, for corrective measures.
- 11.6 Labelling plate :**
Product, model, serial number and mfg. Year is indicated on the labelling plate. However, it is recommended to specify size and power requirement of the implement.

**11.7 Rate of work :**

- The area cover was recorded as 0.348 to 0.369 ha/h at the speed of operation from 4.00 to 4.12 km/h.
- The time required to cover one hectare area was recorded as 2.71 to 2.87 h.

11.8 Quality of work:

- The depth of cut was recorded as 22 to 24 cm.
- Average working width was observed as 99 to 109 cm.
- Field efficiency was observed as 80.3 to 89.1 %.

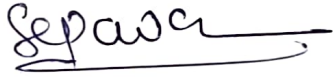
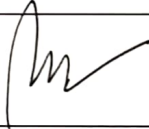

11.9 The hourly wear percentage of share on dimension basis was recorded as 0.16 to 0.26 and share bar was recorded as 0.05 to 3.06.

11.10 The hourly wear percentage of share on mass basis was recorded as 0.12 & 0.37 and share bar was recorded as 0.08 & 0.13.

11.11 Technical literature :

Operator manual, service manual, parts manual covered with English was submitted along with the implements. However, it is recommended to bring out the same covered with Hindi and other vernacular languages as per IS: 8132-1999

TESTING AUTHORITY

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

Test conducted & Report compiled by -

Sh. Rahul Prajapathi

12. APPLICANT'S COMMENTS

- 12.1 We agree with the report. However in respect of non-conformities, we will make the improvements in accordance to the relevant BIS Standards in next production line.