

प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट

संख्या/No. CSIR/CMERI/FMTTC/2024/037

INITIAL COMMERCIAL TEST REPORT

माह/Month: July, 2024

THIS TEST REPORT VALID UP TO

:

30th JUNE, 2031



SONALIKA INDUSTRIES
(A Unit of International Cars & Motors Ltd.)
SUPER SEEDER
(MODEL: SLSS - 9)



सत्यमेव जयते
Government Of India



कृषि मशीनरी प्रशिक्षण और परीक्षण केंद्र
Farm Machinery Training and Testing Centre
सीएसआईआर- केन्द्रीय यांत्रिक अभियांत्रिकी अनुसंधान संस्थान
CSIR - Central Mechanical Engineering Research Institute

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4. SPECIFICATION

4.1. General

Type of machine	:	Tractor Operated Super Seeder
Make	:	M/s Sonalika Industries (A Unit of International Cars & Motors Ltd.) International Tractors Limited, Vill.–Chak Gurjran, P.O.–Piplanwala, Jalandhar road Hoshiarpur, Punjab (India) – 146022
Model	:	SLSS–9
Serial No.	:	VQ381574
Name and Address of manufacturer	:	SONALIKA INDUSTRIES (A Unit of International Cars & Motors Ltd.) Village Chak Gurjran, Jalandhar Road, Hoshiarpur, Punjab
Year of manufacture	:	2024-25
Country of origin	:	INDIA
Type of blade	:	Hatchet (LJF –shape)
Working width, mm	:	2752
Recommended Prime mover size	:	65 hp and above

4.2. Details of prime mover

Tractor used during test	:	
Make	:	NEW HOLLAND
Model	:	9010 (12+12, 4WD)
Engine Sr. No.	:	195244D
Max. PTO power kW	:	67.11 kW (90 hp)
SFC (g/kW – hr)	:	194
*During testing 2WD mode was selected.		

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A.2. - Rotor speed				
Crop	Rotor speed			
	Observed Rotational speed (rpm)			
Paddy	180-280			
B. Seed Specification				
Variety	Bulk density gm/cc	No. of seeds in one kg. sample	Moisture content, %	Broken,%
RJ - 3077	0.800	24190	11.50	0.25

C. Fertilizer specification	
Type	Bulk density, g/cc
DAP	0.950



Fig.17 Testing of tractor operated super seeder

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Fig. 18 Measurement of components of super seeder

7. FIELD PERFORMANCE TEST

The field test of super seeder was conducted for 20.20 hours with 90 hp NEW HOLLAND 9010 as prime mover for operation of super seeder. The working of super seeder on field was observed satisfactory. The implement was used for sowing wheat in well prepared seed bed field. The detailed test results are given in annexure – II, III and IV and are summarized as under:-

Summary of field test result

Sl. No.	Parameters/operation	Observations
1.	Tractor used	NEW HOLLAND
2.	Gear used	L-3

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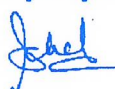
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11. COMMENTS AND RECOMMENDATIONS

- 11.1 The dimensions of three-point linkage does not confirm to IS: 4468-1997 up to 14.29 % . This should be provided according to relevant Indian Standard.
- 11.2 The dimensions of PIC of implement partially conformed as per IS: 4931-2004.
- 11.3 The dimensions of PTO drive shaft conforms as per IS: 4931-2004 both machine and tractor side respectively.
- 11.4 Hardness of rotor blades is conforming to relevant Indian Standards.
- 11.5 The average percentage wears of blades on hour bases during field operation 20.20 hours are 0.108 % - 0.132 % . This is considered to be normal.
- 11.6 Maneuverability of tractor with super seeder and quality of work were observed to be satisfactory.
- 11.7 The stickers should be put indicating the grade and change period of oil.
- 11.8 Variation of dropping seed and fertilizer at individual outlets is conforming to IS: 6813-2000.

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12. LITERATURE

The following literatures are provided by the applicant during the test along with the application form.

- User's manual book
- Parts' catalogue
- Service manual

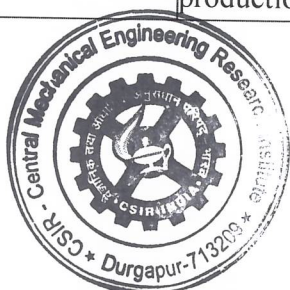
However, these manuals need to be updated as per IS: 8132-1999.

TESTING AUTHORITY

Report Prepared by	Senior Technical Officer CSIR-CMERI Farm Machinery Testing Centre	<i>Jeeb</i> 05/07/2024
Report Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	<i>Sudite Samanta</i> 05.07.2024
Report Approved for release by	Head, Business Development Unit, CSIR-CMERI, Durgapur	<i>Sudip Samanta</i> 05/7/24

13. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's Comments
13	11.1	The Dimension of three point linkage will be improve at Vender / production end
	11.2	The dimensions of PIC will be improved at vender / production end



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