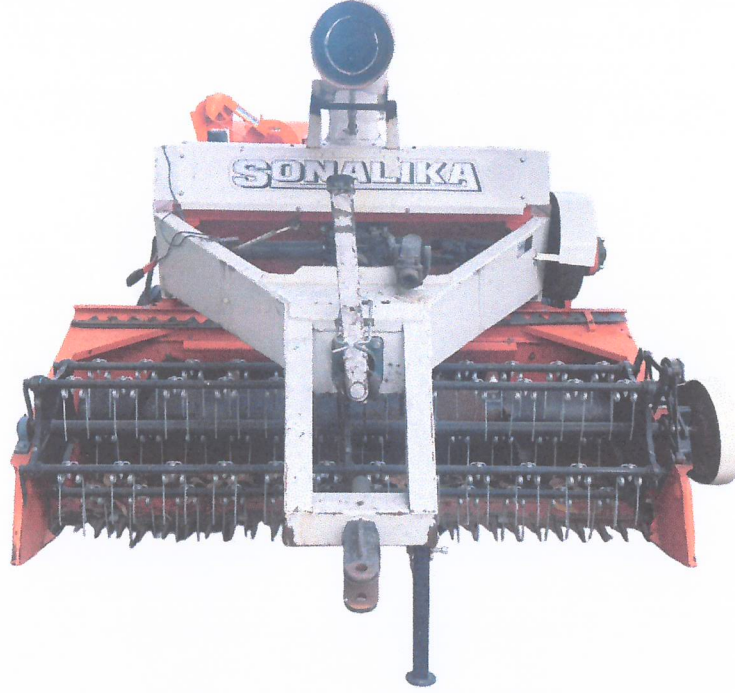


प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट
INITIAL COMMERCIAL TEST REPORT

संख्या/No. CSIR/CMERI/FMTTC/2024/067

माह/Month: OCTOBER, 2024

THIS TEST REPORT VALID UP TO : 30th SEPTEMBER, 2031



SONALIKA INDUSTRIES
(A Unit of International Cars & Motors Ltd.)
STRAW REAPER
(MODEL: SLSCSR-56)



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
महात्मा गांधी एवेन्यू, दुर्गापुर
Mahatma Gandhi Avenue, Durgapur
पश्चिम बंगाल - 713209
West Bengal - 713209
Website: <https://cmeri.res.in>

E-mail: fmttc.cmeri@gmail.com

Telephone: 9434592007 / 7001361295

Fax: +91-343-2546745

Name of Machine : TRACTOR OPERATED STRAW REAPER
Type : Tractor PTO operated
Make : SONALIKA INDUSTRIES
 (A Unit of International Cars & Motors Ltd.)
Model : SLSCSR-56
 SONALIKA INDUSTRIES
Name and address of Manufacturer : (A Unit of International Cars & Motors Ltd.)
 Village - Chak Gujran, Jalandhar Road, Hoshiarpur -146022
 (Punjab) INDIA
Name and address of Applicant : SONALIKA INDUSTRIES
 (A Unit of International Cars & Motors Ltd.)
 Village- Chak Gujran, Jalandhar Road, Hoshiarpur -146022
 (Punjab) INDIA
Test Conducted at : Farm Machinery Training and Testing Center, CSIR – Central
 Mechanical Engineering Research Institute, M.G. Avenue,
 Durgapur- 713209, West Bengal, INDIA, & CMERI- Centre of
 Excellence for Farm Machinery, Near GNE College, Gill
 Road, Ludhiana - 141006, Punjab, INDIA



THIS TEST REPORT VALID UP TO: 30th SEPTEMBER 2031
 [vide DAC&FW OM No. 13-22/2020- M&T (I&P) dated 12.12.2023]

Report No.: CSIR/CMERI/FMTTC/2024/067 Month: October Year: 2024

CSIR - Central Mechanical Engineering Research Institute,

Durgapur – 713209

Report prepared by

(W.B.), INDIA

Report verified by

Subrata Kr Mandal

Type of Test : Initial Commercial Test
 Period of Test : March 2024- September 2024
 Test Report No. : **CSIR/CMERI/FMTTC/2024/067**
 Month and Year : October 2024

- i. The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.
- ii. The data given in this report pertains to the particular machine submitted by the applicant for test.
- iii. The results presented in this report do not in any way attribute to durability of the machine.
- iv. The report should not be reproduced in part or full without prior permission of the Director, CSIR- Central Mechanical Engineering Research Institute, M G Avenue, Durgapur -713209 (West Bengal)
- v. **This test report is not covered under BIS certification. Therefore, the manufacturers cannot market the straw reaper with ISI mark, only on the strength of this report.**
- vi. This report cannot be used for legal purposes.

SELECTED CONVERSIONS

1. **Force**

1 kgf	= 9.80665 N
	= 2.20462 lbf
2. **Power**

1 HP	= 1.01387 Metric HP (Ps)
	= 745.7 W
1 Ps	= 735.5 W
3. **Pressure**

1 psi	= 6.895 kPa
1 kgf/sq.cm	= 98.067 kPa
	= 735.56 mm of Hg
1 bar	= 100 kPa
	= 10 N/sq.cm.
1 mm of Hg	= 1.3333 m-bar
4. **Area**

1 ha	= 10000m ²
	= 2.471 Acres

Report prepared by

[Signature]

Report verified by

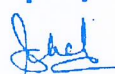
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CSIR/CMERI/FMTTC/2024/067	SONALIKA INDUSTRIES (A Unit of International Cars & Motors Ltd.) STRAW REAPER (MODEL : SLSCSR-56) (INITIAL COMMERCIAL TEST)
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10. CRITICAL TECHNICAL SPECIFICATION

Sr. No.	Parameters	Specifications	Observed	Remarks
1	Towing hook type	Clevis / Circular	Clevis	Conforms
2	Power input connection to Tractor PTO	Propeller shaft with Universal joint	Provided	Conforms
3	Cutting width, mm	1500 to 2500	2220	Conforms
4	Speed of chopping cylinder, rpm	800 to 1000	970	Conforms
5	Chopping cylinder dia., mm	700 to 900	736	Conforms
6	PTO drive shaft -Safety against overload -Guard on shaft	Compliant with BIS Code Must be provided Must be provided	Provided Provided	Conforms
7	Safety cover on all drives	Must be provided	Provided	Conforms
8	Chopping cylinder blade	Serrated	Serrated	Conforms
9	Material of blade and Ledger plate	High carbon steel EN 42J & EN 44	High carbon steel	Conforms
10	Hardness of blade and Ledger plate, HRC	36 and 45 (Min.)	60 and 60	Conforms
11	Provision for concave clearance adjustment	Must be provided	Provided	Conforms
12	Provision for grain recovery	Must be provided	Provided	Conforms
13	Reel type	Pickup tyne	Provided	Conforms
14	Diameter of tyne bar, mm	20 (Min.)	27	Conforms
15	Arrangement for forward and backward movement of reel	Must be provided	Provided	Conforms
16	Labeling of lubricating points	Must be provided	Provided	Conforms
17	Marking / labeling of machine	The labeling plate should be riveted on the body of machine having name & address of manufacturer, country of origin, make, model, year of manufacture, serial number, size, required size of prime mover (kW/HP)	Provided	Conforms
18	Literature	Operator manual, service manual & parts catalogue should be provided	Provided	Conforms

Report prepared by



Report verified by



CSIR/CMERI/FMTTC/2024/067	SONALIKA INDUSTRIES (A Unit of International Cars & Motors Ltd.) STRAW REAPER (MODEL : SLSCSR-56) (INITIAL COMMERCIAL TEST)
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11. COMMENTS AND RECOMMENDATIONS

- 11.1. No ingress of dust and water/ mud in primary and secondary reduction box and rotary axle bearing cap was observed.
- 11.2. Parking stand and safety device are provided.
- 11.3. No belt slippage was observed during field operation.

12. TECHNICAL LITERATURE

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

- a) User's manual book
- b) Parts' catalogue
- c) Service manual

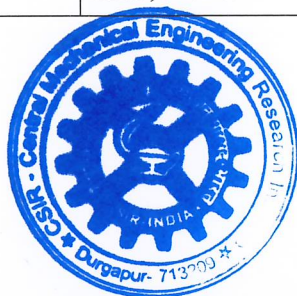
However, these manuals need to be updated as per IS: 8132-1999.

TESTING AUTHORITY

Report Verified by	CSIR-CMERI Farm Machinery Testing Centre	<i>[Signature]</i> 23/10/2024
Report Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	<i>Sudanta Kumar</i> 23.10.2024
Report Approved for release by	Head, Business Development Unit CSIR-CMERI, Durgapur	<i>Sudip Samanta</i> 23/10/24

13. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicants Comments
13	11.1 to 11.3	Agreed for comments and recommendations table no 11.1,11.2 & 11.3



Farm Machinery Training and Testing Centre, CSIR-Central Mechanical Engineering Research Institute, Durgapur THIS REPORT IS VALID UPTO: 30th SEPTEMBER 2031	23 of 25
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