

प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट

INITIAL COMMERCIAL TEST REPORT

THIS TEST REPORT VALID UP TO

:

संख्या/No. CSIR/CMERI/FMTTC/2024/024

माह/Month: June, 2024

31st MAY, 2031



SONALIKA INDUSTRIES

(A Unit of International Cars & Motors Ltd.)

ROTAVATOR

(MODEL: SLHSSSR - 1.35)



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

CSIR/CMERI/FMTTC/2024/024	SONALIKA INDUSTRIES (A Unit of International Cars & Motors Ltd.) ROTAVATOR SLHSSSR-1.35 (INITIAL COMMERCIAL TEST)
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Name of Machine : Rotavator
Type : Tractor Mounted
Make : SONALIKA INDUSTRIES
(A Unit of International Cars & Motors Ltd.)
Model : SLHSSSR-1.35
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 : 31ST MAY 2031
[vide DAC&FW OM No. 13-22/2020-M&T (I&P) dated 12.12.2023]

Report No.: CSIR/CMERI/FMTTC/2024/024	Month: June	Year: 2024
CSIR - Central Mechanical Engineering Research Institute, Durgapur - 713209 (W.B.), INDIA		

Farm Machinery Training and Testing Centre, CSIR-Central Mechanical Engineering Research Institute, Durgapur THIS REPORT IS VALID UPTO: 31ST MAY 2031	1 of 26
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Report prepared by

[Signature]

Report verified by

[Signature]

CSIR/CMERI/FMTTC/2024/024	SONALIKA INDUSTRIES (A Unit of International Cars & Motors Ltd.) ROTAVATOR SLHSSSR-1.35 (INITIAL COMMERCIAL TEST)
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4. SPECIFICATION

4.1. General

Type of machine	:	Rotavator
Make	:	SONALIKA INDUSTRIES (A Unit of ICML)
Model	:	SLHSSSR-1.35
Serial No.	:	DS367304
Name and Address of manufacturer	:	SONALIKA INDUSTRIES (A Unit of International Cars & Motors Ltd.) Village Chak Gujran, Jalandhar Road, Hoshiarpur, Punjab
Year of manufacture	:	2023-24
Country of origin	:	INDIA
Type of blade	:	C-TYPE
Working width, mm	:	1350
Recommended Prime mover size	:	25-40hp

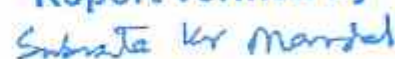
4.2. Details of prime mover

Tractor used during test	:	
Make	:	Mahindra
Model	:	275 DI
Engine Sr. No.	:	3044011R
Max. PTO power kW	:	28.7 kW
SFC (g/kW – hr)	:	256

Report prepared by



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12. CRITICAL TECHNICAL SPECIFICATIONS

(Vide Ministry's communication F.No. 9-1/2019 M&T (I&P) dated 20.08.2019)

Sr. No.	Parameters	Specification	Observation
1	Working width (mm)	1200 (Min.)	1340
2	Type of blade	C/L/J shape as per demand Hatchet Blade	C shape
3	Thickness of blade (mm)	7-8 (Min.)	6.52
4	No. of blades	30 (Min.)	42
5	Total number of flanges	5 (Min.)	7
6	Number of blades per flange	6 (Max.)	6
7	Outer Diameter of rotor shaft, mm	75-90	60.77
8	Rotor diameter, including flange and blade mounted on flange, mm	425 (Min.)	385
9	Side drive	Gear drive/chain drive (optional)	Gear drive
10	Depth control mechanism	Arc shaped skid on both side of rotavator	Provided
11	Material of blades	Boron (28MnCrB5)/High Carbon Steel of grade EN42/EN45/EN47	Boron steel
12	Hardness of blade material, HRC	38 (Min.)	54
13	Safety clutch/device (shear bolt) in PTO drive shaft	Must be provided	Provided
14	Rotavator stand	Must be provided	Provided
15	Guard over propeller shaft	Must be provided	Provided
16	Sheet metal	AS36/IS 2062	IS 2062
17	Marking/labeling of machine	The labeling plate should be riveted on the body of machine having Name and address of manufacturer, County of origin, Make, Model, Year of manufacture, Serial number, Type, Size, required size of prime mover (kW)	Provided
18	Literature	Operator manual, service manual and parts catalogue should be provided	Part Catalogue is provided

Subin

Subin K. Mandal



13. COMMENTS AND RECOMMENDATIONS

- 13.1. NO ingress of dust and water/mud in primary and secondary reduction box and rotary axle bearing cap was observed.
- 13.2. Parking stand and safety device are provided
- 13.3. The implement hitch specifications confirm partially as per IS standard. Corrective action needs to be taken at production end.

14. 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 Prepared by	Technical Officer CSIR-CMERI Farm Machinery Testing Centre	<i>[Signature]</i> 25/06/2024
Report Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	<i>[Signature]</i> 25.06.2024
Report Approved for release by	Head, Business Innovation and Skill Group, CSIR-CMERI, Durgapur	<i>[Signature]</i> 25/6/24

15. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's Comments
15	13.3	The implements of hitch specification will be improve at ender/production end