

प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट

INITIAL COMMERCIAL TEST REPORT

संख्या/No. CSIR/CMERI/FMTTC/2024/013

माह/Month: April, 2024

THIS TEST REPORT VALID UP TO

:

31st MARCH, 2031



SONALIKA INDUSTRIES

(A Unit of International Cars & Motors Ltd.)

ROTAVATOR

(MODEL: SLHSSR – 1.05)



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

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Name of Machine : Rotavator
Type : Tractor Mounted
Make : SONALIKA INDUSTRIES
(A Unit of International Cars & Motors Ltd.)
Model : SLHSSSR-1.05
M/s. 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 : M/s. SONALIKA INDUSTRIES
(A Unit of International Cars & Motors Ltd.)
Village Chak Gujran, Jalandhar Road,
Hoshiarpur -146022 (Punjab) INDIA
Test Conducted at : Farm Machinery Training & Testing Centre,
CSIR - Central Mechanical Engineering
Research Institute, M G Avenue, Durgapur
713209, India & Centre of Excellence for
Farm Machinery, Near GNE College, Gill
Road, Ludhiana - 141006, Punjab, India

THIS TEST REPORT VALID UP TO : 31st MARCH, 2031
[vide DAC&FW OM No. 13-22/2020 - M&T (I&P) dated 12.12.2023]



Report No.: CSIR/CMERI/FMTTC/2024/013

Month: April

Year: 2024

CSIR - Central Mechanical Engineering Research Institute,
Durgapur - 713209
(W.B.), INDIA

Report prepared by

A handwritten signature in blue ink, appearing to be 'J. K. Singh'.

Report verified by

A handwritten signature in blue ink, appearing to be 'Subrata Kr Mandal'.

4. SPECIFICATION

4.1. General

Type of machine	:	Rotavator
Make	:	SONALIKA INDUSTRIES (A Unit of International Cars & Motors Ltd.)
Model	:	SLHSSSR-1.05
Serial No.	:	DS367285
Name and Address of manufacturer	:	M/s. SONALIKA INDUSTRIES (A Unit of International Cars & Motors Ltd.) Village- Chak Gujran, Jalandhar Road, Hoshiarpur - 146022 (Punjab), INDIA
Year of manufacture	:	2023-24
Country of origin	:	INDIA
Type of blade	:	C-TYPE
Working width, mm	:	1050
Recommended Prime mover size	:	20-30 hp



4.2. Details of prime mover

Tractor used during test		
Make	:	VST SHAKTI
Model	:	MT 270 VIRAAAT 4W*
Engine Sr. No.	:	E17E002815
Max. PTO power kW	:	16.40 kW; T-1651/2182/2022 & May, 2022
SFC (g/kW -hr)	:	360
*During testing only 2WD was used.		

Report prepared by

Report verified by

Subrata Kr Mandal

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	Parts Catalogue is provided



Report prepared by

[Signature]

Report verified by

[Signature]

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 devices are provided.
- 13.3 The implement hitch specifications confirm partially as per IS standard. Corrective action needs to be taken at production end.
- 13.4 The PIC dimensions of the rotavator confirm partially as per IS standard. Corrective action needs to be taken at vendor & 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	Senior Technical Officer CSIR-CMERI Farm Machinery Testing Centre	<i>Jehel</i> 15/04/2024
Report Verified & Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	<i>Subrata kr Mandal</i> 15/04/2024
Report Approved for release by	Head, Business Development Unit, CSIR-CMERI, Durgapur	<i>Ludip Samanta</i> 15/4/24

15. APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's Comments
15	13.3	The Dimensions of hitch will be improve in production end.
	13.4	The PIC dimensions of the rotavator will be improve at Vendor & Production end.

Report prepared by

Jehel

Report verified by

Subrata kr Mandal